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Studies in Applied Finance

INVESTMENT THESIS FOR PILGRIM'S PRIDE, CORP. (NYSE: PPC)

Charles Bushnell

Johns Hopkins Institute for Applied Economics,
Global Health, and the Study of Business Enterprise

Investment Thesis for Pilgrim's Pride, Corp. (NYSE:PPC)

By Charles Bushnell

About the Series

The Studies in Applied Finance series is under the general direction of Professor Steve H. Hanke, Co- Director of the Johns Hopkins Institute for Applied Economics, Global Health, and Study of Business Enterprise (hanke@jhu.edu) and Dr. Hesam Motlagh (hnekoor1@jhu.edu), a Fellow at the Johns Hopkins Institute for Applied Economics, Global Health, and Study of Business Enterprise.

This working paper is one in a series on applied financial economics, which focuses on company valuations. The authors are mainly students at the Johns Hopkins University in Baltimore who have conducted their work at the Institute as undergraduate researchers.

About the Author

Charles Bushnell (cbushnell@jhu.edu) is a rising senior at Johns Hopkins and a Fixed Income Summer Analyst at Morgan Stanley. He conducted the research for this paper while serving as Prof. Hanke's research assistant at the Institute for Applied Economics, Global Health, and Student of Business Enterprise during the Spring of 2016. Charles is graduating in May of 2017 with a B.A. in Economics and a minor in Financial Economics.

Summary

This working paper is an in-depth analysis of Pilgrim's Pride, Corp. (PPC). Our analysis examines the chicken cycle, commodity prices, and the economic factors that impact Pilgrim's Pride's underlying business. We combine our economic analysis with our proprietary, Hanke-Guttridge Discounted Cash Flow (HG-DCF) model to assess PPC's financial position. Instead of obtaining a single and static valuation of PPC, Monte-Carlo simulations are used alongside our HG-DCF model to reveal the distribution of probable free cash flows and future earnings. Management compensation is also analyzed in depth to evaluate whether or not management is incentivized to act in the best interest of the shareholders. Our goal is to foster reasonable investment decisions by allowing readers to understand Pilgrim's Pride's business plan and financial health.

Acknowledgements

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Keywords: Financial Modeling, Pilgrim's Pride, Discounted Cash Flow, Free Cash Flow, Monte-Carlo Simulation, Investment Thesis, Management Compensation.

JEL codes: C63, G11

Investment Thesis for Pilgrim's Pride, Corp. (NYSE:PPC) by Charles Bushnell

Rating –Buy – Avg. Free Cash Flow per Share: $27.93

Company Name	Pilgrim's Pride Corp.
Date	March 29,2016
Fiscal year ends (current period)	Dec. 27, 2015 (2015)
Current Price	$24.54
52 week high (date)	27.35 (05/26/15)
52 week low (date)	17.39 (10/29/15)
Market Cap	6.253 B
Enterprise Value	6.830 B
Total Debt	1.014 B
Cash	439.6 M
Net Debt/Enterprise Value	0.1622
Dividend	$0.00
Diluted Shares Outstanding	255.47 M
Current P/E	9.78
2017 P/E (EPS)	12.45 (1.97)
2016 P/E (EPS)	12.11 (2.03)
2015 EPS	2.6
2014 EPS	2.86

*Future EPS estimates are consensus as of the time of this writing

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Executive Summary:

Pilgrim's Pride, Corp. (NASDAQ: PPC) is one of the largest chicken producers in the world, with $8.2 billion of revenue in 2015. Using a Hanke-Guttridge Discounted Cash Flow and Monte Carlo Simulation (HG-DCF-MC), we have determined that the probable free cash flow (FCF) per share in the long run for PPC is $27.93. This estimation of long-run FCF per share utilizes conservative revenue growth projections and accounts for the likelihood of increasing feed costs in the future, due to the cyclical nature of PPC's business. The current share price is $24.54 (March 29, 2016) and PPC has traded in a range of $24-$26 since March. Analysis of management compensation reveals that incentives are in place to drive pretax profitability and profitability per processed pound relative to PPC's peers. Chicken prices peaked in 2014 and evidence suggests that prices may be approaching a trough. We expect increasing chicken prices in the future, the acquisition of Tyson Mexico, the reopening of export markets, and the recently announced venture into the organic chicken market to drive growth and help return long term asset turnover (LTAT) to its historic upward growth trend. Thus, we are rating PPC a buy.

Catalysts and Risks:

- Growing chicken demand due to affordability, health conscious consumers, and versatility.[1]
- PPC has more diverse product offerings than many competitors, and they have many blue chip clients.[2]
- PPC announced in the Q1 2016 earnings call that they are converting a plant to produce certified organic chicken by 2017. This market is growing with a 31% compounded annual growth rate, and PPC will account for roughly 20% of total US certified organic production.
- JBS S.A., the largest meat processing company in the world, owns a 76% stake in Pilgrim's Pride. PPC seeks to leverage JBS's international network to fuel growth in emerging countries.
- JBS is based out of Brazil, and its stake in PPC presents the risk that it may choose sell shares if unfavorable conditions force them to raise capital quickly. Additionally, JBS's stake means that only 59 million of 255 million shares are float.
- PPC's profitability will be highly dependent on commodity prices. Feed costs represents roughly 30% of cost of goods sold. Corn represents 46% of feed costs and soybean represents roughly 35% of feed costs.
- PPC has large-scale operations in Mexico and will be subject to foreign currency risk.

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[1] In 2015, PPC produced 7.9 billion pounds of chicken products. They currently have the capacity to produce more than 10.8 billion pounds annually.

[2] They sell large birds, small birds, fresh, cooked, and processed chicken. The prepared foods business is noted as their most profitable. They claim to be one of only two national suppliers that can act as single-source supplier for large name US companies.

- Poultry diseases may interfere with operations. Mexico, Canada, China, Angola and South Korea either partially or fully banned the importation of poultry from the U.S. because of the HPAI H5 avian influenza in 2015.
- The loss of one or more large customer would be very adverse to business because the two largest customers accounted for 14% of net sales in 2015.

Company Description and Performance:

PPC is one of the largest producers and sellers of chicken products, with $8.2 billion of net sales in 2015. Pilgrim's Pride has operations in the US, Mexico, and Puerto Rico, and also markets its products across 90 countries and to over 5,000 customers. In 2014, PPC had 17% market-share for ready to cook production in the USA. Pilgrim's Pride was founded in 1968 in Texas and was reincorporated in 1986 in Delaware. JBS S.A., the largest meat processing company in the world, owns 76.7% of PPC's outstanding common stock. Pilgrim's Pride emphasizes that the operation is vertically integrated to help PPC control safety, quality, and margins. In 2012, PPC sold its commercial egg hatchery operations to Cal-Main Foods and other idled processing plants for $29.4 million. In June of 2015, PPC acquired Tyson's Mexico operations for $575 million. Pilgrim's Pride filed for bankruptcy in December of 2008, but emerged from bankruptcy in December 2009 with a deal from JBS and a $1.75 billion credit facility.[3] PPC issued $500 million of long term debt in March of 2015 to help fund the Tyson Mexico deal, and is currently rated BB+ with stable outlook by S&P. PPC is currently contained in 29 ETFs including a 3.84% weighting in FXG, the First Trust Consumer Staples Alpha DEX Fund.[4] PPC currently has short interest of 20,496,234 shares and days to cover of 16.24.[5] Both of these values are down from short interest of 41,930,525 and days to cover of 35.835 on September 30th, 2015.[6] However, days to cover increased from its value of 12.94 at the last settlement date. This is the first increase in days to cover since January 29th, 2016.

Major Business Segments:

Pilgrim's Pride operates with only one reportable business segment. They offer several product types, including fresh chicken products, prepared chicken products, and value-added export chicken products. Sales to Wal-Mart, Sysco, ConAgra Foods, Yum! Brands, and Costco represent 9.28%, 6.41%, 3.49%, 2.88%, and 2.09% of PPC's total revenue, respectively. (For a more detailed supply chain analysis, see Figure 17 in the Bloomberg Screenshots section.) Fresh chicken products consists of uncooked chicken products that can be purchased in a store, such as breasts and tenders, and are sold subject to varying terms such as minimum and maximum prices. Prepared chicken products include cooked and ready to cook nuggets, wings, strips, and other products that provide better margin than fresh chicken products. Prepared chicken products also include other value added brands, such as Pierce Chicken, which also sells chicken bacon and pulled

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[3] http://www.reuters.com/article/us-pilgrimspride-idUSTRE5BR2O820091228
[4] Source: etfchannel.com.
[5] Data as of 3/31/2016 from NASDAQ.com.
[6] Source: NASDAQ.com; Days to Cover = Short Interest / Average Daily Trading Volume.

chicken. In 2015, fresh chicken sales were 69.8% of total sales, prepared chicken sales were 24.9% of total sales, and exports were 5.3% of total sales. They expect that worldwide demand for higher margin prepared chicken products will increase over the coming years, and that PPC's strategy of value added export growth will help drive the business.

	2015	2014	2013	2012	2011
Fresh chicken	69.8	66.2	59.9	54.0	51.7
Prepared chicken	24.9	25.1	29.7	33.7	35.0
Export and other chicken	5.3	8.7	10.4	12.3	13.3
Total U.S. chicken	100.0	100.0	100.0	100.0	100.0

Figure 1. Pilgrim's Pride Production Summary.
(Source: PPC 10-K filed 2/2/16. Page 6.)

Major Customers:

Chick-fil-A., Sysco, US Foods, Yum!, Kroger, Wal-Mart, Costco, Publix, Albertsons, Sam's Club, and ConAgra Foods.

Biggest *Competitors:*

Sanderson Farms, Tyson Foods, and Hormel Foods.

PPC recently announced entry into the Certified Organic Chicken Market, beginning in 2017. According to management, the market is very fragmented and consists of many small suppliers. PPC expects to immediately gain 20% market share and Certified Organic Products will represent 4% of PPC's total production.

Historical Performance:

Pilgrim's Pride peaked at over $35 per share in 2014, but declined significantly to a low of $18 at the end of 2015. Generally, PPC's stock performance has been positive when chicken prices are rising, and negative when chicken prices are falling. Currently, PPC is trading below its 52 week high of $27.35. Long Term Asset Turnover (LTAT) has increased since 2005, but declined in 2015 (See Figure 2 below). Useful Life (UL) has decreased since 2005, but increased in 2015. The decrease in LTAT during 2015 is likely attributed to the acquisition of Tyson's Mexico Operations. In the future LTAT may continue to grow as it did during the 2006-2014 period. Mean reversion of LTAT could help PPC generate more value for shareholders and drive up the stock price. We would expect this to occur because as Tyson Mexico's assets are more fully integrated into PPC's operations, they should begin to operate more efficiently.

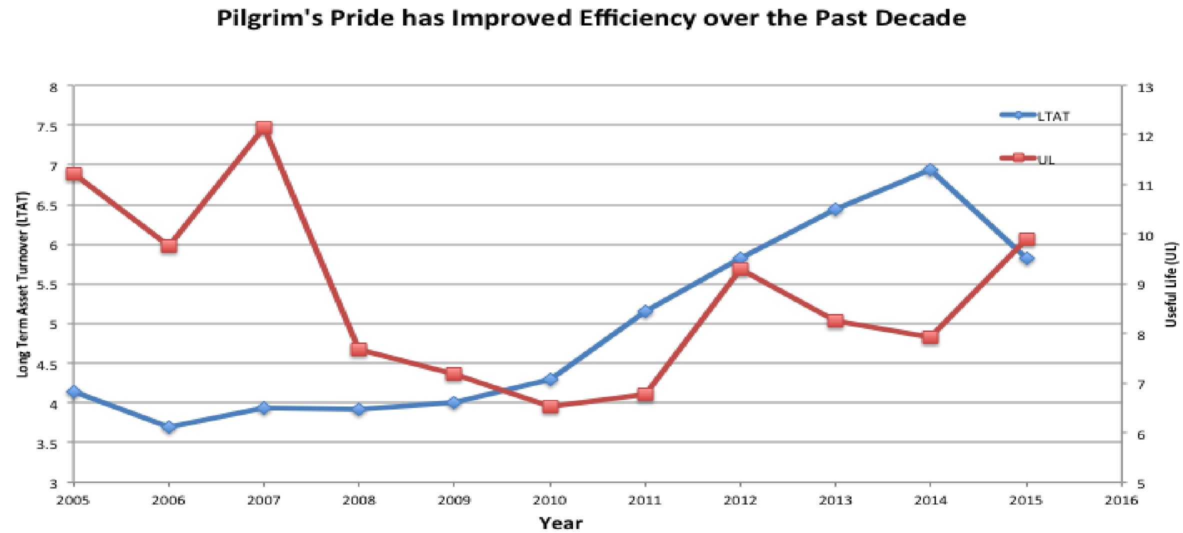
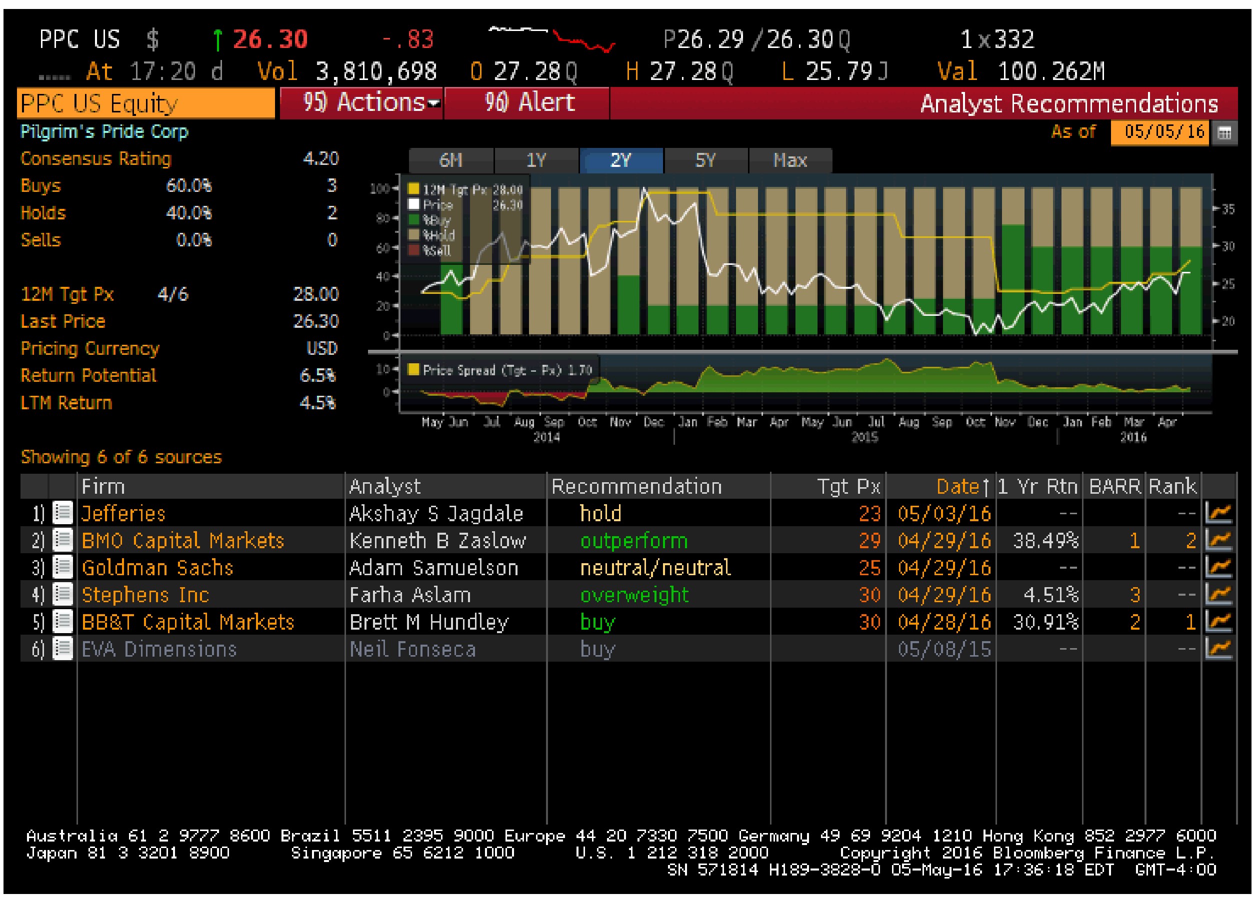


Figure 2. PPC 's Long Term Asset Turnover and Useful Life.
LTAT=Revenue/Average Long Term Assets UL=Long Term Assets/ D&A
Source: PPC's SEC 10-K filings.

Currently, three analysts rate PPC a buy, two analysts rate PPC a hold, and none rate PPC a sell (Figure 3). The low number of analysts following PPC indicates that the broader market may not be very tuned into everything happening at Pilgrim's Pride. In Figure 3 we can see that the target price has followed the actual share price down since the peak in 2014. The recent increase in target price may represent a favorable opportunity for investing in PPC.



	Firm	Analyst	Recommendation	Tgt Px	Date	1 Yr Rtn	BARR	Rank
1)	Jefferies	Akshay S Jagdale	hold	23	05/03/16	--		--
2)	BMO Capital Markets	Kenneth B Zaslow	outperform	29	04/29/16	38.49%	1	2
3)	Goldman Sachs	Adam Samuelson	neutral/neutral	25	04/29/16	--		--
4)	Stephens Inc	Farha Aslam	overweight	30	04/29/16	4.51%	3	--
5)	BB&T Capital Markets	Brett M Hundley	buy	30	04/28/16	30.91%	2	1
6)	EVA Dimensions	Neil Fonseca	buy		05/08/15	--		--

Figure 3. PPC Analyst Recommendations from a Bloomberg Terminal.
The highest target price is $20. Target price picked up after Q1 2016 earnings.
Source: Bloomberg Terminal. Command: <ANR>. Accessed 05/05/2016

Chicken Market Overview:

The so-called "chicken cycle" serves as a great indication of chicken producer performance on a short-term basis.[7] Proponents of the chicken cycle believe that the success of chicken producers is driven by supply and not demand. Stocks of chicken producers represent a good investment opportunity when there is oversupply and profits are weakening. At the top of the cycle, undersupply causes high profits and profitability. At the bottom of the cycle, an oversupply causes prices to be low and profitability to fall. Upon inspection of Figure 4, clearly the market is not at the top of the cycle. The top of the cycle was in 2014, which Mr. Sandri described as one of the best ever years in the industry during PPC's February 11th, 2016 earnings call.

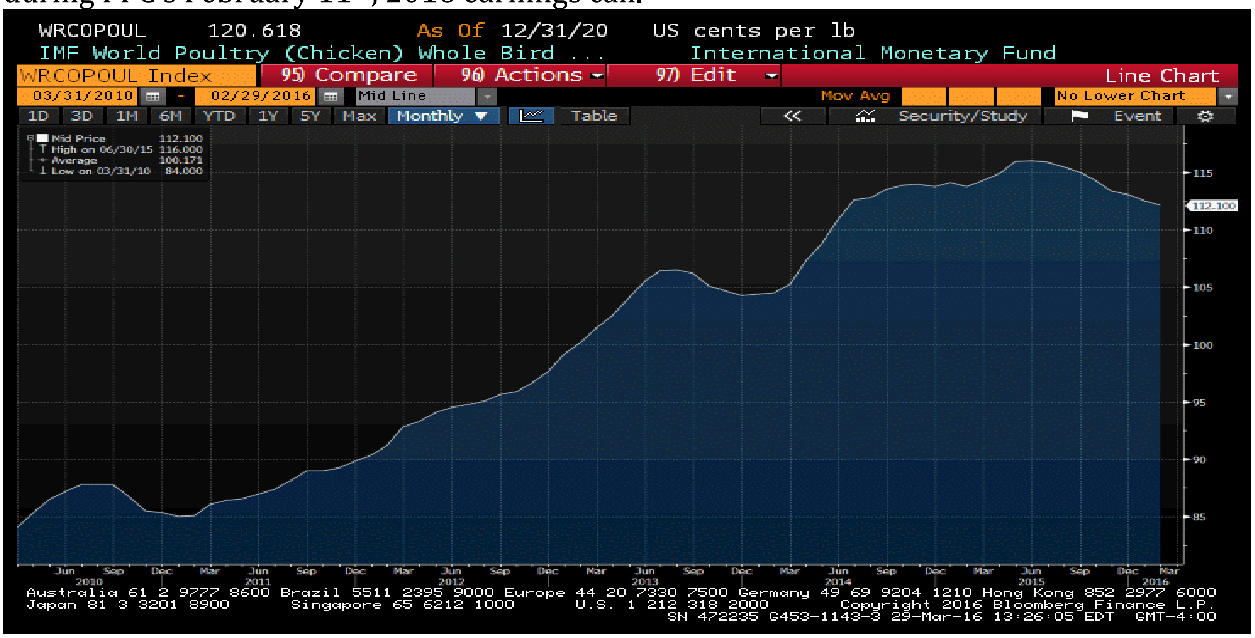


Figure 4. Whole Bird Spot Prices from a Bloomberg Terminal.
Chicken prices surged in 2014, but were weak last year. Despite this, EBITDA only decreased from 15.56% to 14.49%.
Source: Bloomberg Terminal. Command: <GP>. Accessed 03/29/2016.

In Figure 5 we can see poultry processing data from the St. Louis Fed for the last 10 years. Poultry Processing peaks in June of 2013 and August of 2015. Whole bird spot prices in Figure 4 also appear to peak around June of 2013 and August of 2015. This is consistent with the idea that oversupply leads to the peak of chicken prices and the chicken cycle. However, the chicken cycle is fast because the gestation period for chicken is much shorter

[7] Value Investors Club/ PPC. (2014, October 21). Retrieved April 30, 2016 from *https://www.valueinvestorsclub.com/idea/PILGRIMS_PRIDE_CORP/131998*

than for cattle or hogs. Thus, it would not be surprising for the industry to experience a situation of undersupply within the next few months.

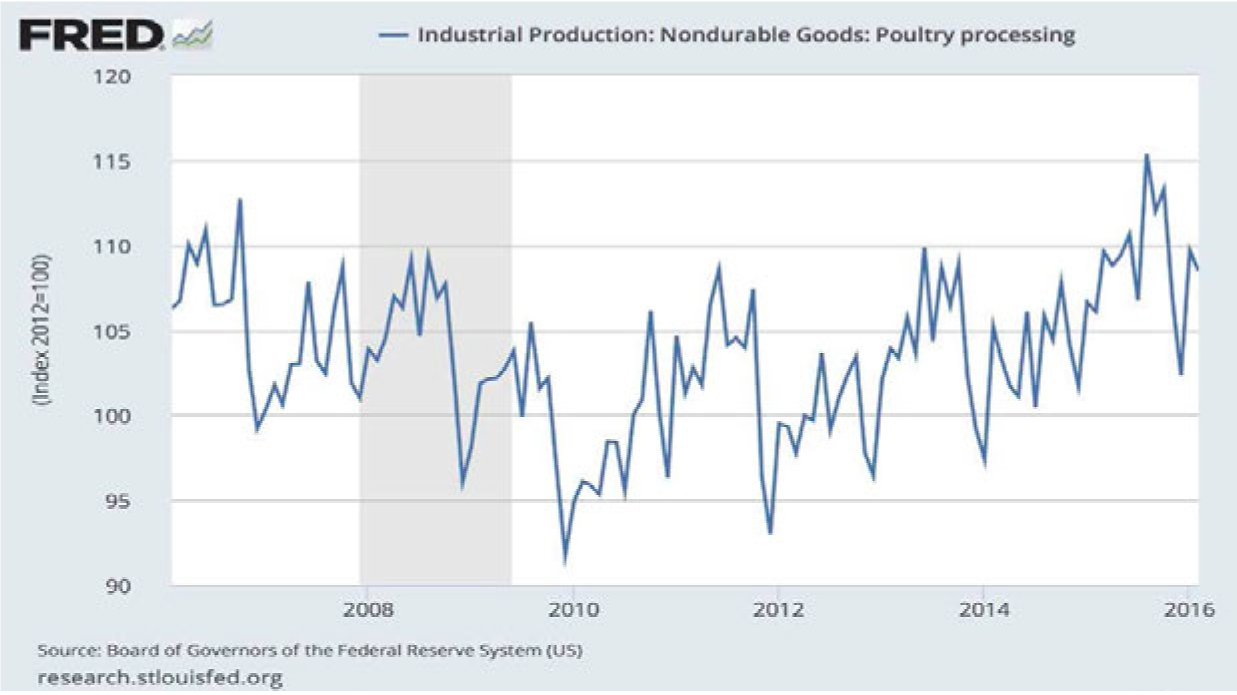


Figure 5. Monthly Poultry Processing data Feb. 2006 through Feb. 2016.
According to the USDA, Poultry Processing describes, "the conversion of live poultry into raw poultry products fit for human consumption."

Model Assumptions:

The HG-DCF-MC model for Pilgrim's Pride was built using financial statements from PPC's 10-Ks and information from PPC's investor relations webpage. Historical averages are usually employed to project revenues, cost margins, capital expenditures (CAPEX), change in working capital, and depreciation & amortization (D&A). Long term asset turnover (LTAT) and useful life (UL) trends are also utilized to determine the feasibility of model assumptions. Significant deviation of asset turns projected in the model from historical values may indicate that we are projecting unrealistic efficiency. Consideration of management guidance from earnings calls and investor presentations cause some assumptions to deviate from historical averages.

PPC technically operates only one business segment, but they also break revenues down into U.S. Prepared Chicken, U.S. Fresh Chicken, Export and Other Chicken By-products, and Mexico Chicken. We initially projected revenue by growing each segment at its 5 year historic CAGR and adding each segment to produce total revenue for the years 2016-2025. This resulted in projected revenue having a CAGR of 7.37% and a standard deviation of 1.51%. However, revenue only grew by more than 3.57% in one year since 2011 and projection of revenues by segment resulted in LTAT doubling and UL being cut in half. This seemed unrealistic, so we decided to project revenues by using the CAGR of 2.07% and a standard deviation of 5.18%. Higher volatility of revenue growth is a more realistic projection, because the industry is very subject to commodity price swings, global economic outlook, and unpredictable global health concerns. Additionally, under this assumption, LTAT increased by a more realistic 13% and UL decreased by 20% over the ten years of the model yielding more reliable results.

Balance Sheet and Income Statement Trends

These results are contained in the 'Balance Sheet' and 'Income Statement' tabs of the accompanying spreadsheet.

Management made a point to acknowledge the fact that PPC reduced long-term debt from $1.4 billion in 2011 to $3.98 million in 2014. This was an important step because, as previously mentioned, the company filed for bankruptcy in 2008 and received a $1.75 billion credit facility to help recover. On March 11, 2015, PPC sold $500 million of 5.75% senior notes to help finance the Tyson Mexico deal. In 2013, cash and cash equivalents increased from $68 million to $508 million. This was primarily because cash from operating activity increased from $200 million to $900 million due to higher net income and reduced inventories.

Total revenue was lower in 2015 than in 2014 and 2013. This can be primarily attributed to the cyclicality of the industry and export restrictions during 2015 because of Avian Influenza. Earnings per share increased in every year from 2011(-$2.21) to 2014 ($2.75). Since chicken prices peaked in 2014 (Figure 4), it is not surprising that earnings per share decreased to $2.50 in 2015. In 2014 and 2015, PPC had $27.579 million and $25.940 million of foreign currency transaction losses, representing .33% and .32% of net sales. With operations in Mexico expanding and the export market becoming more important, the value of the peso and other currencies will be material for PPC's net income.

Value Drivers Tab

These results are contained in the 'Value Drivers' tab of the accompanying spreadsheet.

Forecasting future free cash flow is heavily dependent on cost margin and value drivers assumptions. Cost of Sales net D&A has decreased from 99.10% of revenue in 2011 to 82.72% in 2015. This improvement can be attributed to management's cost savings initiatives as well as lower feed costs (see Figure 8). These improvements have resulted in much better earnings before interest and taxes (EBITDA), which have increased from -2.23% in 2011 to 14.49% in 2015. Income taxes have increased substantially since 2011, but were 29.27% and 29.25% of EBITDA in 2014 and 2015. Management expects a tax rate similar to 2015 moving forward. Foreign currency transaction costs became much more significant in 2014 and 2015. This is primarily because PPC operates in Mexico and the

Mexican peso depreciated significantly in 2014 and 2015.[8] Capital expenditures were less than D&A in every year except 2015. The acquisition of Tyson Mexico in the summer of 2015 caused CAPEX to increase from 1.71% of revenue in 2014 to 6.08% of revenue in 2015. However, when goodwill and deferred tax assets are taken out of long-term assets, CAPEX was 4.18% of revenue in 2015. Management indicated during the Q4 2015 earnings call that PPC will continue to take advantage of opportunities to grow through acquisitions, so we can expect long-term assets and CAPEX to continue to be higher than in the years before 2015. Assumptions about CAPEX, change in working capital, and cost margins that appear to be deviating from historical averages are key for the HG-DCF.

Results and Discussion of the Model:

These results are contained in the 'HG-DCF' and the 'Monte Carlo' tabs of the accompanying spreadsheet.

The average values and standard deviations for all cost margins and value drivers were linked to the HG-DCF tab in order to project future free cash flow. However, the average values were not used for every line item. Cost of Sales was assumed to be 82.50% because it has been consistently declining and last year's margin on revenue was 82.75%. This value was also assumed to start increasing and eventually reach 85.50% by year 10 because of the possibility that feed costs rise in the future. All other components of the cost structure have been very stable over time, so they were assumed to be the historical averages. Change in Working Capital had a negative average margin and would unrealistically add free cash flow in each year because change in working capital is subtracted in our calculation. For the sake of being conservative, change in working capital was zeroed out. Capital Expenditures were 4.16% of revenue in 2015, but were assumed to be the average value of 2.06% moving forward because this was above the pre 2015 trend, but not so high as to suggest a major acquisition in each year.

The base case result for our model, using the assumptions discussed above, yields a stock price of $27.93. Even if revenue growth is zero in each year, the model yields a stock price of $24.34. This demonstrates that cost structure assumptions are vital for estimating the fundamental value of PPC. The model predicts declining EBITDA over the next ten years because we increase Cost of Sales over time to account for the risk of increasing feed costs. However, if we set Cost of Sales equal to 82.70% (2015's value) for the entirety of the model, we get an estimated stock price of $32.43. This may not be an unrealistic assumption, because Bloomberg reports a "super bearish" outlook for corn and soybean prices based on the highest stockpiles in 5 years.[9] The general conclusion is clear: PPC is most likely undervalued and the model output is very sensitive to the assumed margin structure.

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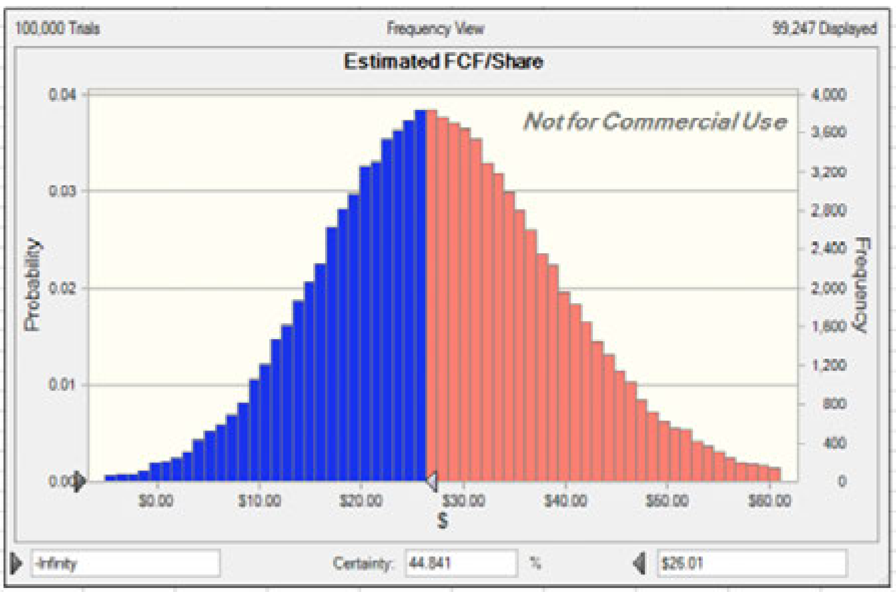
[8] According to xe.com, on 12/31/13 the exchange rate was 13.04 pesos per US dollar and on 12/31/15 the exchange rate was 17.21 pesos per US dollar.

[9] http://www.bloomberg.com/news/articles/2016-01-10/unwanted-piles-of-corn-soy-spur-most-bearish-crop-outlook-ever

To ascertain how well-determined our valuation estimates are, we performed a Monte-Carlo (MC) simulation. Using our base assumptions and revenue growth of 2.07%, we get a probability distribution seen in Figure 6. The stock's 52-weeek high is \$27.35 and it has been trading in a range of \$21 to \$26 since February of 2016. The 30th percentile of the MC simulation for PPC is a share price of \$21.60. At any price below \$21.60, we would certainly buy PPC. Given the volatility of the stock over the past year, we think that the likelihood of this occurring in the short run is fairly high.

Additionally, we ran a MC simulation for the case of segmented revenue growth. This simulation gave a base case of \$38.42 per share and a 30th percentile of \$29.13 per share. In this scenario LTAT increases to a new high of 11.14 in the final year and UL decline to 4.44. The decline in useful life would indicate a reversion back to the historical low since 2005. The segmented revenue growth can be seen in the Addendum. The average of the 30th percentile for both Monte Carlo's is \$25.30. With all of these considerations in mind, we are bullish on PPC's stock and believe it is currently trading below its fundamental value.



Forecast: Estimated FCF/Share	
Statistic	**Forecast values**
Trials	100,000
Base Case	\$27.93
Mean	\$27.93
Median	\$27.47
Standard Deviation	\$11.82
Variance	\$139.66
Skewness	0.2249
Kurtosis	3.33
Coeff. of Variation	0.4231
Minimum	-\$29.63
Maximum	\$94.09
Mean Std. Error	\$0.04

Forecast: Estimated FCF/Share	
Percentile	**Forecast values**
0.1	\$13.3
0.2	\$18.1
0.3	\$21.6
0.4	\$24.6
0.5	\$27.5
0.6	\$30.4
0.7	\$33.6
0.8	\$37.5
0.9	\$43.1
1	\$94.1

Figure 6: Monte Carlo Simulation Results from Pilgrim's Pride Hanke-Guttridge Discounted Cash Flow model.
These are the results from 100,000 Monte-Carlo trials of PPC's HG-DCF model. Probability is on the veridical axis and estimated share price is on the horizontal axis. The blue portion indicates the probability that the long term fundamental value of PPC's stock is below \$26. The results suggest more upside than downside. 40 percent of the outcomes resulted in share prices above \$30.40 and 40 percent resulted in share prices below \$24.6.

Proxy Findings:

Management Compensation

These results are based on an in-depth analysis of the proxy statement: SEC Filing DEF-14A

Management holds the ability to make decisions about capital allocation and strategic initiatives for the company. Analysis of management compensation allows us to determine if management is incentivized to make decisions consistent with the assumptions of our model. Ideally, we want management to drive shareholder value through greater return on invested capital (ROIC) and total shareholder return (TSR). The NEO's for PPC include William Lovette (CEO) and Fabio Sandri (CFO). Mr. Lovette's and Mr. Sandri's compensation structures provide us with insight about what they are motivated to do. Long-term shareholder value is not obtained on a quarterly basis. As a result, we look for compensation to emphasize long-term goals and for the majority of compensation to be at risk and not come from base salary. Overall, both the CEO and CFO have approximately 65 percent of their total annual target compensation at risk. It is worth noting that Mr. Lovette's son serves as Head of Operations – Prepared Foods and received cash compensation of $454,928 in 2015.

Overall compensation from previous years can be seen below:

Summary Compensation Table

The table below summarizes compensation paid to or earned by our Named Executive Officers for 2015, 2014, and 2013, comprised of our Chief Executive Officer and our Chief Financial Officer, who were serving at December 27, 2015.

Name and Principal Position	Year	Salary ($)	Bonus (1) ($)	Stock Awards (2) ($)	Non-Equity Incentive Plan Compensation (3) ($)	All Other Compensation (4) ($)	Total ($)
William W. Lovette	2015	1,038,462	—	—	4,537,000	977,875	6,553,337
Chief Executive Officer and President	2014	1,000,000	—	2,019,347	6,263,742	2,989	9,286,078
	2013	1,000,000	—	1,783,762	2,361,506	3,050	5,148,318
Fabio Sandri	2015	415,385	420,150	—	800,000	377,010	2,012,545
Chief Financial Officer	2014	399,700	500,000	757,262	776,000	1,020	2,433,982
	2013	377,885	—	689,971	548,625	1,533	1,618,014

(Source: PPC Proxy Statement filed 3/25/16. Page 26.)

Base Salary

The compensation committee determines base salary by taking into consideration individual contributions to PPC's performance, compensation for comparable positions, tenure of the NEO, and the recommendations of the CEO. Mr. Lovette's (CEO) and Mr. Sandri's (CFO) annual base salaries were not increased during 2015. Mr. Lovette receives a base salary of $1,000,000 in a 52-week fiscal year and $1,038,462 in a 53-week year. Mr. Sandri receives an annual base salary of $400,000 during a 52-week fiscal year and $415,385 during a 53-week fiscal year. Interestingly, the company notes that limitations on the deductibility for federal income tax is subject to limitations for compensation over $1,000,000 paid to an NEO in a taxable year. Compensation above $1,000,000 may only be considered tax deductible if it is performance based.

Annual Cash Incentive Compensation

Annual cash incentives awards are granted under PPC's Short Term Management Incentive Plan ("STIP"). The STIP can be structured in a way that enables tax deductibility under the Code. The Compensation Committee may make objectively determinable adjustments to one or more of the performance goals under the STIP. Annual cash bonuses may also be granted on a discretionary basis. In order to obtain STIP awards, the executive must meet predetermined performance goals. The performance metric for STIP was established as "PBT Margin". PBT Margin is defined by PPC as net income before taxes as a percentage of net revenues. The company believes that PBT has a higher correlation than

EBITDA with cash flows and is more relevant to operating efficiency. During analysis of PPC's value drivers, we noted that EBITDA has been increasing since 2011.

Annual Cash Incentive Compensation to Mr. Lovette is shown below:

2015 PBT Margin	Bonus Amount
1% (Threshold)	$250,000
2%	$500,000
3%	$750,000
4% (Target)	$1,000,000
5%	$1,250,000
6%	$1,500,000
7%	$2,000,000
Greater than 7% up to 10%	$2,000,000 plus 0.5% of the excess PBT above 7%
Greater than 10%	$2,000,000 plus 0.5% of the excess PBT above 7% up to 10% plus 0.75% of the excess PBT above 10%

(Source: PPC Proxy Statement filed 3/25/16. Page 22.)

Mr. Lovette's maximum potential bonus was $10,000,000 during 2015. The PBT margin in 2015 was 12.136%. As a result, Mr. Lovette's STIP cash bonus was $4,537,000 for 2015.

Annual Cash Incentive Compensation to Mr. Sandri is shown below:

2015 PBT Margin	Bonus as % of Base Salary
1% (Threshold)	25%
2%	50%
3%	75%
4% (Target)	100%
5%	125%
6%	150%
7%	200%
Greater than 7%	200% plus 0.1% of the excess PBT above 7%

(Source: PPC Proxy Statement filed 3/25/16. Page 24.)

Mr. Sandri was granted an award of $800,000 as a result of PBT exceeding 7% in 2015. He was also given $420,150 at the discretion of the Compensation Committee because the Committee reserves the right to grant additional bonuses if PBT Margin exceeds the maximum threshold. PBT margin seems like a good metric to use in theory because it emphasizes consistently keeping COGS and SG&A low, but the target goals seem to be way too easy to achieve. Additionally, the STIP seems to account for a very large proportion of overall annual compensation, but is not long term orientated.

Long Term Incentive Compensation

Equity awards including, "incentive stock options," nonqualified stock options, stock appreciation rights, restricted stock awards, restricted stock units (RSUs), and other stock based awards may be granted under the long term incentive plan (LTIP). In the case of a "change in control" where the participant's awards are not converted, assumed, or replaced by a successor entity, the LTIP awards will become fully exercisable and all forfeiture restrictions on the awards will lapse. PPC does not have any formal stock ownership guidelines for its executives. The Compensation Committee determined that equity awards consisting of restricted stock and RSUs best align the incentives for the executives with company success. In February of 2015, PPC declared a $1.5 billion special cash dividend. As a result, the Compensation Committee granted Mr. Lovette and Mr. Sandri RSUs valued on the date of grant at $964,801 (34,359 RSUs) and $374,082 (13,322 RSUs).

The 2015 Program aims to provide additional incentives to improve PPC's profitability relative to its peers in the Bank of America's Monthly Profitability Survey. Under the program, target awards are equal to a specified percentage of base salary and are converted to RSUs upon achievement of the performance goals. To receive any awards, PPC needs to meet two initial minimum thresholds as well as a minimum payout threshold. The minimum requirements to obtain any awards for 2015 are as follows:

1. At least a two percent PBT margin.
2. An EBIT delta greater than that of the fifth best performing company in the BoA survey.
3. An EBIT delta above 2.6 cents per processed pound.

Unfortunately, PPC is quite vague about how EBIT delta is actually calculated and they only described it as a measurement of profitability relative to its peers. The description suggests that EBIT delta to average company is equal to the difference in profitability per processed pound between PPC and the average peer group company (measured in cents).

Payout (as a percentage of award target)	50%	75%	100%	125%	150%
EBIT delta to average company [a]	+2.6	+2.8	+3.0	+3.2	+3.4

(a) Cents per processed pound.

(Source: PPC Proxy Statement filed 3/25/16. Page 21.)

Long term Incentive Compensation to Mr. Lovette and Mr. Sandri:

PPC achieved the second threshold because the EBIT delta exceeded the EBIT delta of the fifth best performing company in BoA's survey. However, the EBIT delta of 2.26% was less than the minimum required threshold. Failing to meet this minimum threshold meant that Mr. Lovette and Mr. Sandri did not earn any RSUs in 2015.

Payments Upon Termination or Change in Control:

Executive Officer / Element of Compensation	Termination due to Death or Disability ($)	Termination Other than for Cause, Death or Disability ($)	Change-in-Control ($)
William W. Lovette			
Severance payment [a]	—	2,000,000	—
Self-insured payments [b][c]	346,154	—	—
Immediate vesting of RSUs [d]	—	—	3,974,613
Total for Mr. Lovette	346,154	2,000,000	3,974,613
Fabio Sandri			
Severance payment [a]	—	153,846	—
Self-insured payments [b]	138,462	—	—
Immediate vesting of RSUs [d]	—	—	1,548,302
Total for Mr. Sandri	138,462	153,846	1,548,302

(Source: PPC Proxy Statement filed 3/25/16. Page 32.)

Current Compensation Committee

Name	***Age***	***Position***
Wesley Medonça Batista	45	Chairman of Compensation Committee (PPC) / President and CEO of JBS.
Michael Cooper	66	Director and Chairman of Audit Committee (PPC) / Managing Director and Vice Chairman Emeritus of Kincannon & Reed
Wallim Cruz de Vasconcellos Junior	58	Director (PPC) / Member of the Board of Santos Brasil S.A.

(*Note: the Compensation Committee does not have a charter. The other committees include the Audit Committee and the Special Nominating Committees.)*

Dividend and Share History:

PPC does not currently pay dividends to shareholders. In February of 2015 the company granted a $1.5 billion special cash dividend, which amounted to $5.77 per share, to all stockholders. PPC will also pay a special dividend of $2.75 on May 18, 2016, amounting to a total of $700 million. Currently, JBS USA Holding, which is controlled by the Batista family, owns 76.70% of outstanding common stock. During FY 2015, PPC repurchased 4.9 million shares of its common stock at an average price of $20.41 for a total cost of $99.2 million. On February 10th, 2016, the share repurchase program was expanded to allow up to $300 million of purchases and to expire on Feb. 9th, 2017. Management has mentioned that they are open to instituting quarterly dividends in the future.

Figure 7. Diluted Weighted Average Shares from a Bloomberg Terminal.
Source: Bloomberg. Command: <GF>. Accessed 03/29/2016.

Management Guidance[10]:

Pilgrim's Pride is currently investing in improving the operational efficiency of the business. They are spending $25 million to add a new fully cooked chicken line at the Moorefield, WV prepared foods plant to help meet the growing demands for the Pierce brand. In Nashville, Arkansas, PPC is spending $35 million to construct a new feed mill that is projected to lower feed costs and improve feed conversion. Overall, they are forecasting $185 million of operation improvement in 2016. Operating margin will also be helped by the fact that the large supply of corn and soybean in South America should help keep feed costs low in 2016.

10 The information in this section is sourced from PPC's earnings calls and investor presentations.

Figure 8. Corn (white) and Soybean (green) futures prices from a Bloomberg Terminal.

Feed costs have been low since the start of 2014, but represent 30% of PPC's COGS.
Source: Bloomberg Terminal. Command: <GP>. Accessed 03/29/2016.

Much of management's guidance is focused on exports and foreign markets. In June of 2015, PPC acquired Tyson Mexico for $575 million in an all cash deal. Last year, chicken supplies grew 6% in Mexico and the peso depreciated significantly against the US Dollar (USD). The result was lower chicken prices, higher feed prices, and lost profit when converting back to the USD. Management claims that the chicken supply in Mexico should only increase 2%-3% this year. PPC was also hurt by export restrictions following outbreaks of Avian Influenza last year. This led to export revenues declining by 42% and overall revenues declining by 4.7% during 2015. Management has stressed that all production complexes are on high biosecurity alert, team members are undergoing improved training, and they have developed a new response plan to deal with the Avian Flu. They project significant improvement in exports this year and commented that the South African market has been reopened. Management also stated that the business is open to growing through more acquisitions.

Q1 2016 earnings beat expectations, but adjusted earnings per share was down to $.46 from $.82 in the same quarter last year. This is consistent with our theory that the chicken industry is in the state of lower profitability that leads to lower production. Undersupply in the coming months will likely cause chicken prices to rise and boost profitability. Management emphasized that the reopening of export markets and strong seasonal summer demand will drive performance for PPC in 2016. Importantly, Pilgrim's Pride is currently converting one of its production facilities to produce certified organic chicken. They estimated by 2017, PPC will account for 20% of total organic production in the United States. This will represent 3%-4% of PPC's total production. Additionally, management forecasts that anti-biotic free chicken products will become over 25% of PPC's total production by 2018. Certified organic and anti-biotic free production represents great opportunities for PPC because most competitors in this area are small and do not have the same scale as Pilgrim's Pride. As a large company, PPC can more effectively meet the needs of large nationwide customers seeking organic products because they can source solely from PPC instead of through multiple smaller suppliers.

Multiples:

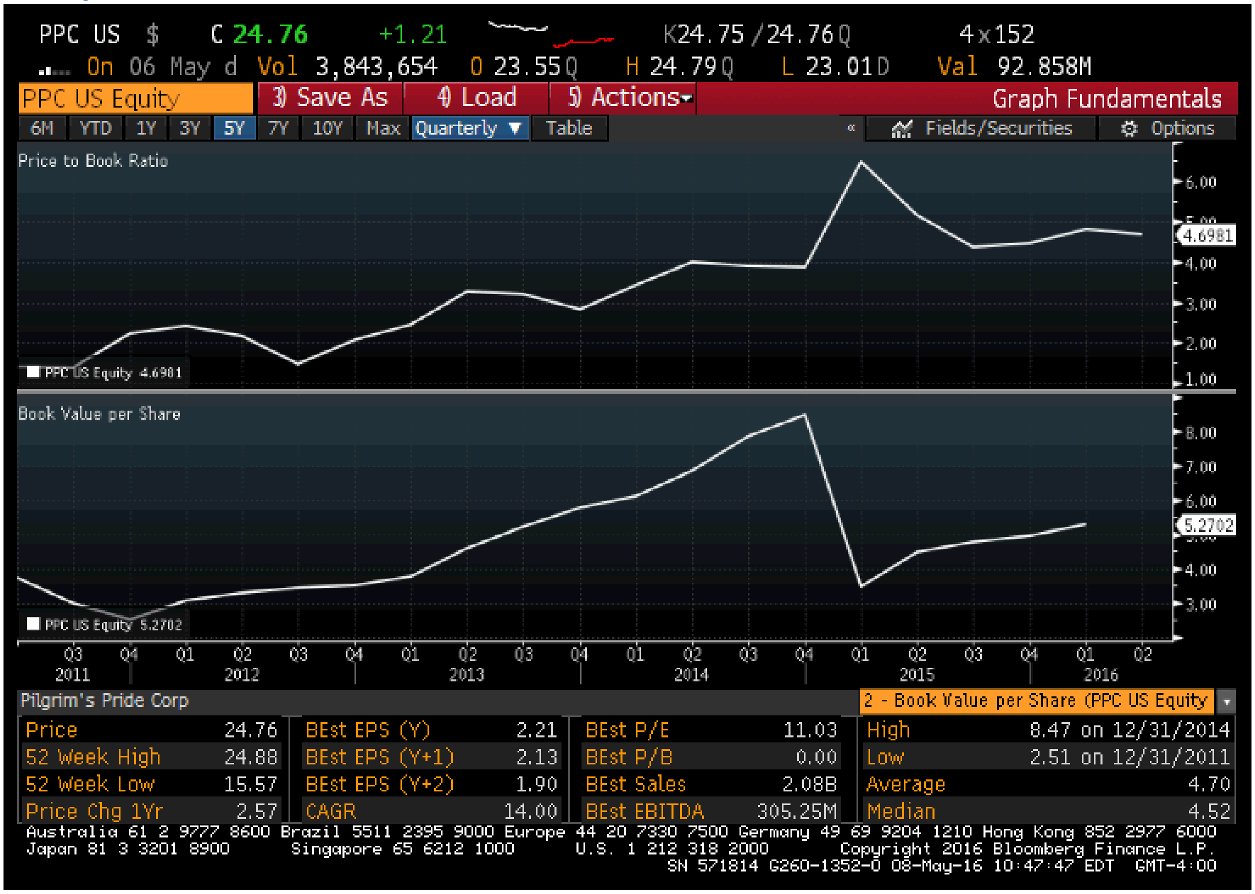


Figure 9. PPC's Price to Book Ratio and Book Value per Share from 2011 to 2016.
The spike in Q1 2015 P/B and decline in Book Value per Share coincides with the $1.5 billion special cash dividend.
Source: Bloomberg Terminal. Command: <GF>. Accessed 05/05/2016

Our analysis thus far has been focused on projecting Pilgrim's Pride's future cash flows and investigating management compensation. This process is in depth and time consuming. Often, investors simply use "multiples" to value a company and establish target prices given how much time it can save. Figure 9 demonstrates that PPC's price to book (P/B) ratio has trended upwards since 2012, but declined in the middle of 2015. The average P/B ratio over the previous five years has been 3.34. The average book value per share (MRQ) has been 4.70 over the past five years. These historical average multiples imply that PPC should be valued at $15.698 per share. This shows that PPC is overvalued at its current price. However, if we use PPC's current P/B and the average book value per share, the implied valuation is a $22.04 share price. This is still below the current share price, but clearly book value per share has been trending upwards since the end of 2011. If we use a value of 6 for book value per share and the current P/B the implied value of PPC's stock is $28.14. The multiples analysis demonstrates some of the limitations and uncertainties associated with multiples. This point is also demonstrated by valuation of PPC using price to earnings ratios (P/E) and earnings per share (EPS).

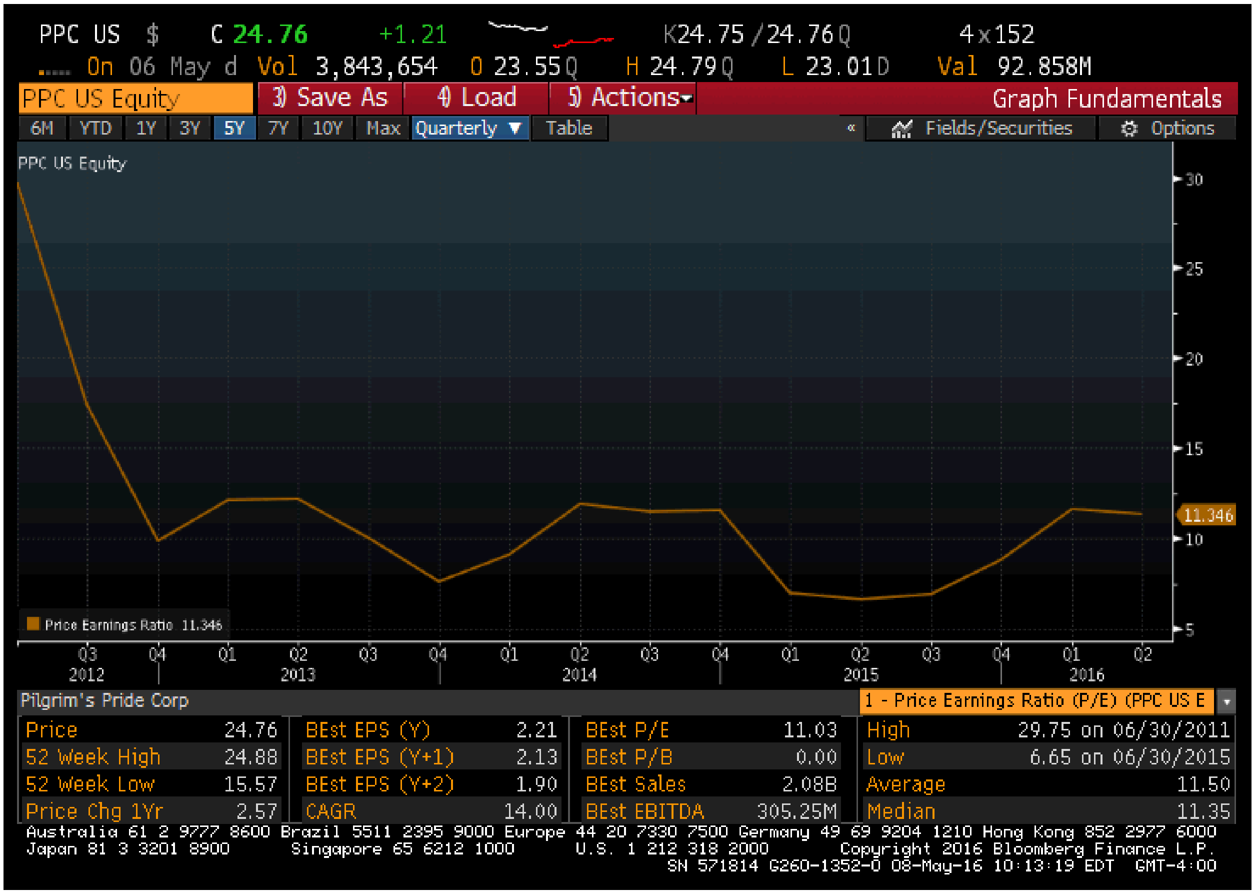


Figure 10. PPC's P/E ratio from 2011 to 2016.
The P/E ratio has risen since mid 2015 because eps for Q3 and Q4 2015 was much lower than for the same quarter during 2014. This is because 2014 was a peak for chicken prices. *Source: Bloomberg Terminal. Command: <GF>. Accessed 05/05/2016*

The current P/E ratio of 11.346 is in line with the historical five-year average of 11.50. The historical average of earnings per share since 2012 through 2015 is $2.08. If we based valuation on these historical averages, Pilgrim's Pride would be valued at $23.92. This is in line with the current share price of slightly more than $24 and suggests that investors are currently valuing PPC with these multiples in mind. However, multiples analysis has several important shortcomings. Firstly, valuing PPC based solely on historical price and earnings does not consider the fundamental value of the company and ignores the clear bias caused by significantly lower earnings in 2012 and 2013. Secondly, solely looking at broad earnings per share completely ignores the fact that earnings in the past few quarters have been compressed due to Avian Influenza and export restrictions. Higher average earnings per share data would yield a higher estimated stock price. Finally, we believe that the addition of the certified organic segment in the future will be attractive to investors and cause PPC to be valued at a higher than average P/E multiple.

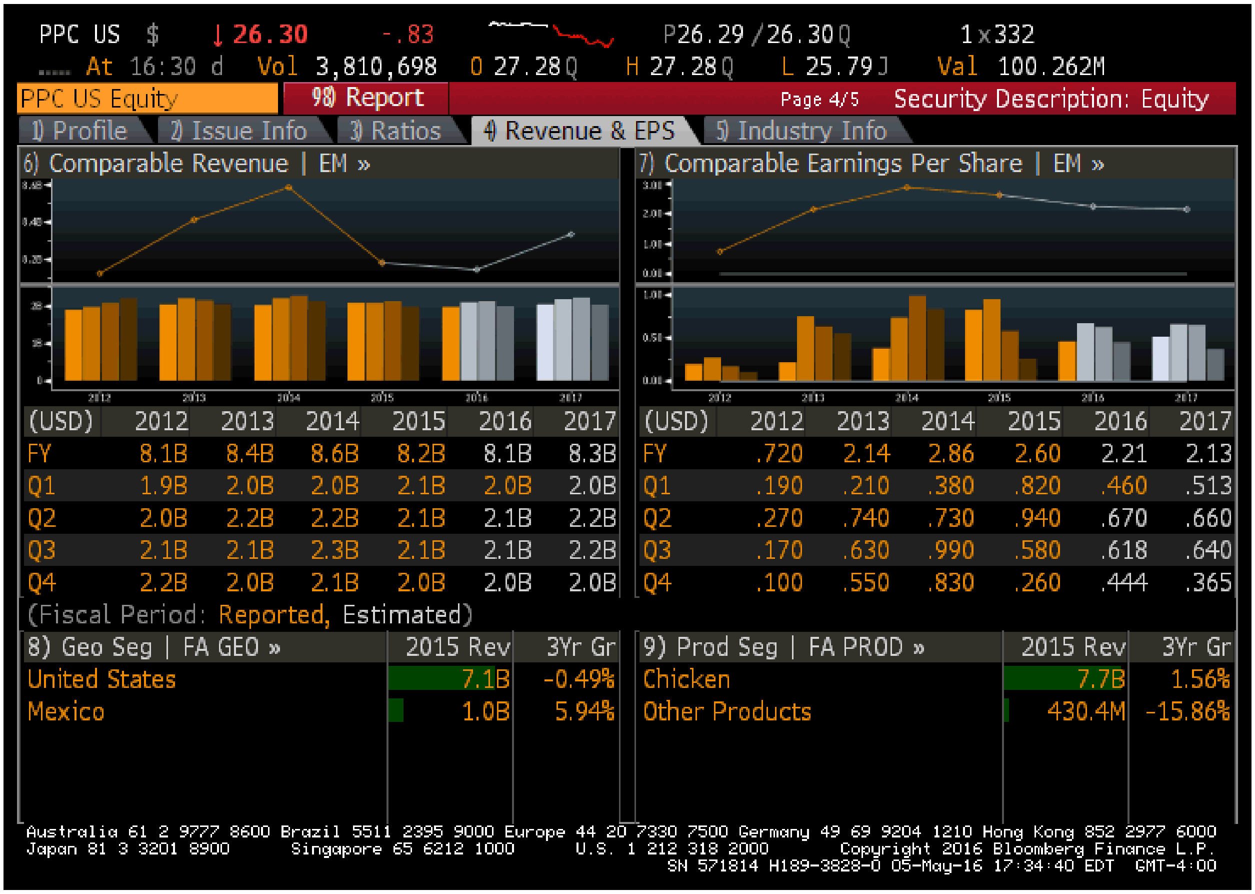
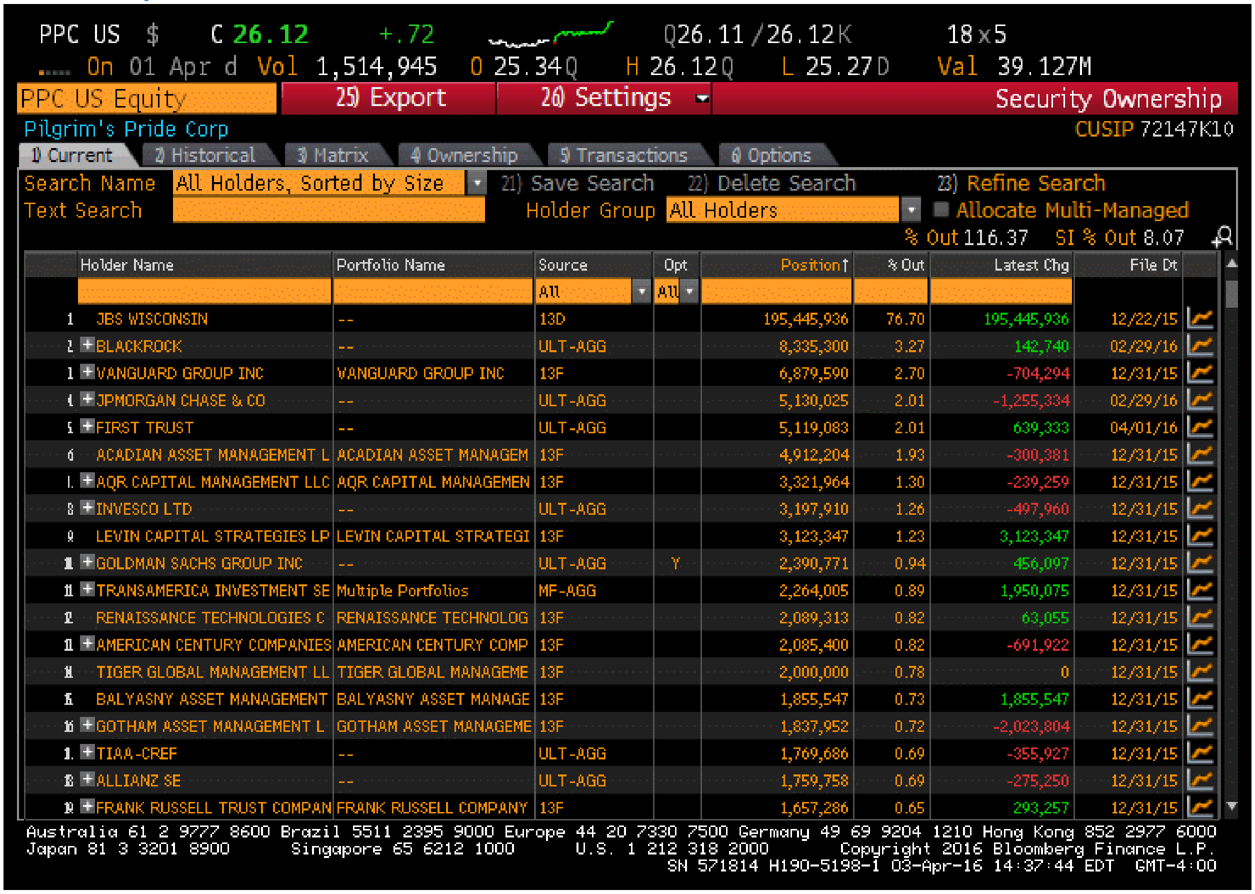


Figure 11. PPC's revenue and earnings per share (EPS) from 2012 to 2017.
Quarterly fluctuations of EPS show the cyclicality of the industry.
Source: Bloomberg Terminal. Command: <DES>. Accessed 05/05/2016

Ownership Information:


PPC US $ C 26.12 +.72 Q26.11 / 26.12K 18 x 5

On 01 Apr d Vol 1,514,945 O 25.34Q H 26.12Q L 25.27D Val 39.127M

PPC US Equity | 25) Export | 26) Settings | Security Ownership

Pilgrim's Pride Corp — CUSIP 72147K10

1) Current | 2) Historical | 3) Matrix | 4) Ownership | 5) Transactions | 6) Options

Search Name: All Holders, Sorted by Size | 21) Save Search | 22) Delete Search | 23) Refine Search

Text Search | Holder Group: All Holders | Allocate Multi-Managed

% Out 116.37 SI % Out 8.07

	Holder Name	Portfolio Name	Source	Opt	Position	% Out	Latest Chg	File Dt
			All	All				
1	JBS WISCONSIN	--	13D		195,445,936	76.70	195,445,936	12/22/15
2	BLACKROCK	--	ULT-AGG		8,335,300	3.27	142,740	02/29/16
3	VANGUARD GROUP INC	VANGUARD GROUP INC	13F		6,879,590	2.70	-704,294	12/31/15
4	JPMORGAN CHASE & CO	--	ULT-AGG		5,130,025	2.01	-1,255,334	02/29/16
5	FIRST TRUST	--	ULT-AGG		5,119,083	2.01	639,333	04/01/16
6	ACADIAN ASSET MANAGEMENT L	ACADIAN ASSET MANAGEM	13F		4,912,204	1.93	-300,381	12/31/15
7	AQR CAPITAL MANAGEMENT LLC	AQR CAPITAL MANAGEMEN	13F		3,321,964	1.30	-239,259	12/31/15
8	INVESCO LTD	--	ULT-AGG		3,197,910	1.26	-497,960	12/31/15
9	LEVIN CAPITAL STRATEGIES LP	LEVIN CAPITAL STRATEGI	13F		3,123,347	1.23	3,123,347	12/31/15
10	GOLDMAN SACHS GROUP INC	--	ULT-AGG	Y	2,390,771	0.94	456,097	12/31/15
11	TRANSAMERICA INVESTMENT SE	Multiple Portfolios	MF-AGG		2,264,005	0.89	1,950,075	12/31/15
12	RENAISSANCE TECHNOLOGIES C	RENAISSANCE TECHNOLOG	13F		2,089,313	0.82	63,055	12/31/15
13	AMERICAN CENTURY COMPANIES	AMERICAN CENTURY COMP	13F		2,085,400	0.82	-691,922	12/31/15
14	TIGER GLOBAL MANAGEMENT LL	TIGER GLOBAL MANAGEME	13F		2,000,000	0.78	0	12/31/15
15	BALYASNY ASSET MANAGEMENT	BALYASNY ASSET MANAGE	13F		1,855,547	0.73	1,855,547	12/31/15
16	GOTHAM ASSET MANAGEMENT L	GOTHAM ASSET MANAGEME	13F		1,837,952	0.72	-2,023,804	12/31/15
17	TIAA-CREF	--	ULT-AGG		1,769,686	0.69	-355,927	12/31/15
18	ALLIANZ SE	--	ULT-AGG		1,759,758	0.69	-275,250	12/31/15
19	FRANK RUSSELL TRUST COMPAN	FRANK RUSSELL COMPANY	13F		1,657,286	0.65	293,257	12/31/15

Australia 61 2 9777 8600 Brazil 5511 2395 9000 Europe 44 20 7330 7500 Germany 49 69 9204 1210 Hong Kong 852 2977 6000
Japan 81 3 3201 8900 Singapore 65 6212 1000 U.S. 1 212 318 2000 Copyright 2016 Bloomberg Finance L.P.
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Figure 12. PPC Security Ownership Summary from a Bloomberg Terminal.

JBS owns 76.70% of shares outstanding. The other largest holders are Blackrock and Vanguard.

Source: Bloomberg Terminal. Command: <OWN>. Accessed 04/03/2016

It is worth noting that the CEO and CFO both did a significant amount of selling at prices around the 52-week high on the open market. This can be seen in Figure 13. This may indicate that insiders feel \$27.50 is a valuation for PPC. Our model yielded a similar result.

Insider	Relation	Last Date ▼	Transaction Type	OwnerType	Shares Traded	Last Price	Shares Held
SANDRI FABIO	Officer	02/23/2015	Sell	direct	25,400	27.5455	68,630
LOVETTE WILLIAM W	Officer	02/20/2015	Sell	direct	90,690	27.5649	302,993
SANDRI FABIO	Officer	02/20/2015	Sell	direct	30,657	27.5666	94,030
SANDRI FABIO	Officer	12/31/2014	Option Execute	direct	77,612		124,687
LOVETTE WILLIAM W	Officer	12/31/2014	Option Execute	direct	206,933		393,683
LOVETTE WILLIAM W	Officer	11/04/2014	Sell	direct	24,250	30.2977	186,750
SANDRI FABIO	Officer	08/06/2014	Sell	direct	30,000	29.0155	47,075

Figure 13. Insider transaction information from NASDAQ.
Mr, Lovette and Mr. Sandri sold a significant amount of shares near PPC's 52 week high.
Source: Nasdaq.com. PPC Inside Activity (SEC form 4). Accessed 04/03/2016

Short Interest:

For the last twelve months there has been a significant short position against Pilgrim's Pride. This is illustrated in Figure 14. The cyclical highs for the chicken industry that were reached at the end of 2014 and beginning of 2015 most likely encouraged traders to bet that PPC's value was peaking. Since the beginning of 2016, short interest and the short interest ratio have declined significantly. However, 20 million of 59 million floating shares were still short as of April 4, 2016. There are still many investors that will need to cover their short positions in the future. If PPC continues to perform well, they may choose to do so sooner rather than later. This could cause the share price to appreciate significantly as a result of a short squeeze.

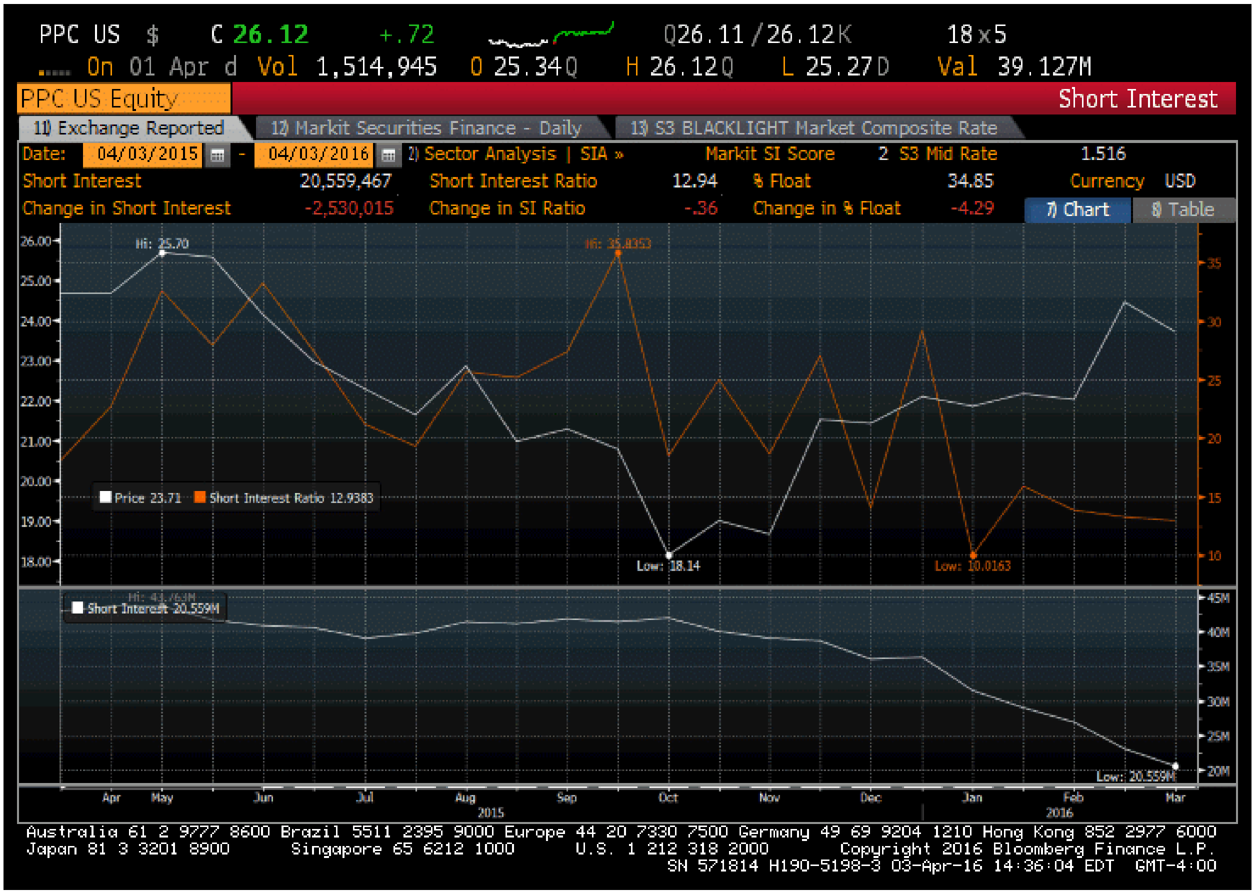

Figure 14. PPC's share price (top-white), short interest ratio (orange), and short interest (bottom-white) from a Bloomberg Terminal.

The short interest ratio is the short interest divided by shares float. Short interest has tapered off since December of 2015, and the stock has gained value.

Source: Bloomberg Terminal. Command: <GF>. Accessed 04/03/2016.

Conclusions:

PPC is currently trading around the 45th percentile of the base case Monte Carlo distribution, and below the 30th percentile of the bull case Monte Carlo distribution. The most important factors affecting PPC's growth and profitability going forward are chicken prices, feed costs, and the export market. Corn and soybean prices, which constitute the majority of feed costs, are forecasted to remain low in 2016. PPC's relationship with JBS should be useful for penetrating international markets, but it also represents a risk if JBS unloads shares. On a long-term horizon, PPC's entry into the certified organic market presents an opportunity to take advantage of a fragmented market and demand from health conscious consumers. Management compensation encourages COGS and SG&A improvements because it emphasizes the PBT Margin. The long-term incentives based off of EBIT Delta for cents per processed pound relative to peers also suggests a focus on being more efficient with product sales than competitors. The deviation of long-term asset turnover growth from its historical trend after the Tyson Mexico acquisition suggests that a mean reversion of LTAT could occur and generate significant value for the company. Finally, a large short position has been established on Pilgrim's Pride's stock. Positive news for the company could cause a short squeeze and PPC's price to appreciate significantly. With these factors in mind, we rate PPC a buy. Our target price to buy is $25.31 (the average 30th percentile of the bull and base case MC) or anything below this value. We also suggest selling at any price above $35 because this is close to the cyclical high reached during the chicken market peak in 2014.

Addendum:

PPC Stock Price and Russell 2000:

Figure 15. PPC share price (white) versus Russell 2000 Index (green) from a Bloomberg Terminal.

Source: Bloomberg Terminal. Command: <GP>. Accessed 03/29/2016

Chicken Prices and PPC Stock Price:

Figure 16. PPC's share (white) and chicken prices (green) from a Bloomberg Terminal.

PPC performs best when chicken prices are rising. Chicken prices peaked in mid 2015. Source: Bloomberg Terminal. Command: <GP>. Accessed 04/08/2016

Investment Thesis for Pilgrim’s Pride, Corp. (NYSE:PPC) by Charles Bushnell

Supply Chain Analysis:

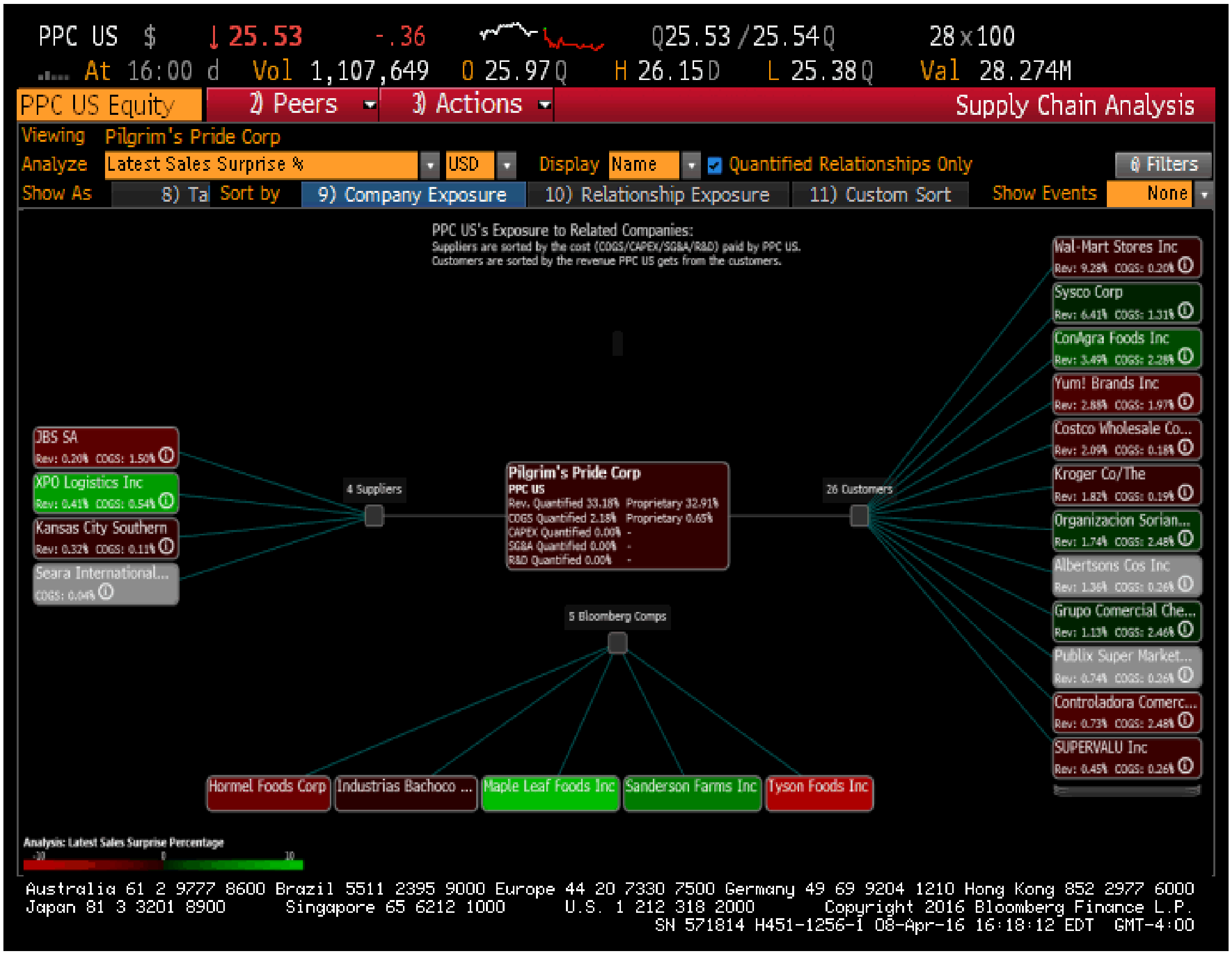

Figure 17: Supply Chain Analysis for Pilgrim’s Pride from a Bloomberg Terminal
As of 04/08/2016, JBS is PPC’s biggest supplier and Wal-Mart is PPC’s biggest customer. Bloomberg Terminal Command: <SPLC>. Accessed 04/08/2016

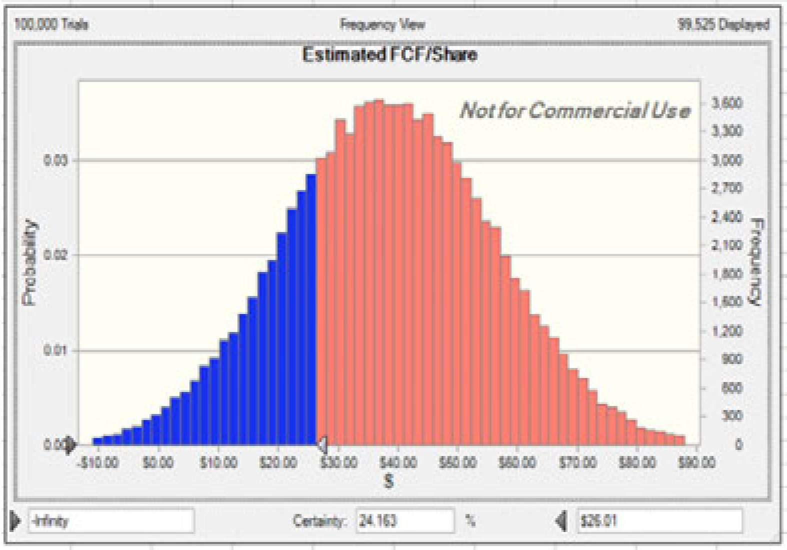

Figure 18: Monte Carlo Simulation Results from Pilgrim's Pride Hanke-Guttridge Discounted Cash Flow model with segmented revenue.
These are the results from 100,000 Monte-Carlo trials of PPC's HG-DCF model. Probability is on the veridical axis and estimated share price is on the horizontal axis. The blue portion indicates the probability that the long term fundamental value of PPC's stock is below $26. This MC distribution shows that under the "bull" scenario 75% of outcomes were above $26. This suggests a large margin of safety.

Forecast: Estimated FCF/Share	
Statistic	**Forecast values**
Trials	100,000
Base Case	$38.42
Mean	$38.43
Median	$38.36
Mode	'---
Standard Deviation	$17.64
Variance	311.25
Skewness	0.0048
Kurtosis	2.98
Coeff. of Variation	$0.46
Minimum	'-$36.57
Maximum	$112.55

Forecast: Estimated FCF/Share	
Percentile	Forecast values
0.1	$15.9
0.2	$23.6
0.3	$29.1
0.4	$33.9
0.5	$38.4
0.6	$42.9
0.7	$47.7
0.8	$53.3
0.9	$61.1
1	$112.55