Valuation Report
Farmer Brother Coffee Inc.

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BUSI 441

About Farmer Brothers Coffee

History

Every big dream starts small, and that is certainly true when it comes to Roy E. Farmers coffee business startup. In 1912, he started his dream of bringing coffee to the masses in the back of his brother's bike shop. From then until now, the company has grown through new business developments – such as their Spice Foods Company and Custom Coffee Plan – and through acquisitions of other companies in the same industry. Through these moves, Farmer Bros put their roots deep and could make a name for itself on the national stage as a wholesaler, manufacturer, and distributor of coffee and coffee products. 115 locations and 60,000 product options later, Farmer Bros has taken its strong and rightful place in the beverage industry in the United States.

Company Information

Michael Keown is now the CEO of Farmer Brothers, and has been working to stabilize and set up the company for future growth. He took over from the Farmer family who mostly recognized that they needed an experienced and seasoned executive team to keep the company in business. This transition happened in 2012, and since there has only been one small uprising by a certain Farmer sister to possibly get rid of Keown. This has failed and Keown has shown that he can and has made Farmer Brothers a better company. Before coming to Farmer Brothers, Keown worked for P&G and White Wave Foods. On analyst says that in the 80's and 90's Farmer Brothers wouldn't even talk to investors on the phone or hold conference calls. Needless to say, investor relations have greatly improved and now conference calls are regular and the company maintains a good level of transparency with investors.

Farmer Brothers has a good national presence to help with fast order fulfillment and customer service. Much of their coffee is roasted in their new facility in Texas, but they maintain roasting facilities in Portland and distribution throughout the United States.

Industry

The main industry in which Farmer Brothers operates is the coffee and tea industry, inside the consumer staples sector. Farmer Brothers sells mostly to hotel chains and restaurants and their product catalogue offers everything from the greasiest spoon diner blend to upscale hotel coffee packets. This industry is stable as chain hotels and chain restaurants also tend to be more stable than their independently owned counterparts. Companies in the consumer staples sector are less elastic than consumer discretionary because these products are usually deemed "necessary" for consumers and therefore no matter the income level of an area, these products will always sell. The sector is very competitive because of this, and firms are always battling for market share over one another. Especially in the case of coffee, there are always substitutes.

Main Competitors

Coffee Holding Company (JVA) is a publicly traded group of companies, all with some arm in the coffee industry. Similar to Farmer Brothers, JVA sells to restaurants and hotels and offers their roasted coffee in specially branded packaging, specific to the customer. Unlike Farmer Brothers, JVA also has a retail presence with their coffee. Many of their brands are quite popular in the US, and are household names, such as Don Manuel Coffee. JVA has stepped up in it's marketing to the Hispanic demographic, as they believe the increasing immigration could be a potentially big source of growth.

JAB Holding Company is a privately held investment group that maintains a portfolio of exciting and diverse companies. There are 6 holding groups under the consolidated JAB Holding name. 3 of those groups (Acorn Holdings, JAB Beech, and JAB Coffee Holdings) have interest in coffee companies ranging from retail boutique coffee shops like Intelligentsia and Stumptown Coffee Roasters to major industrial operations such as Keurig and Tassimo. JAB poses a major threat to all coffee competitors in the US, but with more than $750 million in cash assets as of July 2017, it is more likely for them to buy the competition rather than try to beat them.

Competitive Advantages

As one can see by the companies listed above, Farmer Bros is not actually facing encroachment on all sides by competitors, but is just growing smaller relative the ever-increasing coffee conglomerate of JAB Holdings. Farmer Bro's seems to still be holding their own, as penetration into new markets (specifically China) continues to deepen. Farmer Bro's addition of specialty coffees is late but will hopefully add to their success. Farmer Bros has tried and failed to effectively integrate several acquisitions in the early 2000's. The company knows that they are in the middle of a turnaround and knows that they need to work hard but are confident they can rally against JAB. Their Q3 earnings call was realistic in their challenges (like the failed spice wholesaling side-business) but remained optimistic that the core business was still profitable and ready for growth.

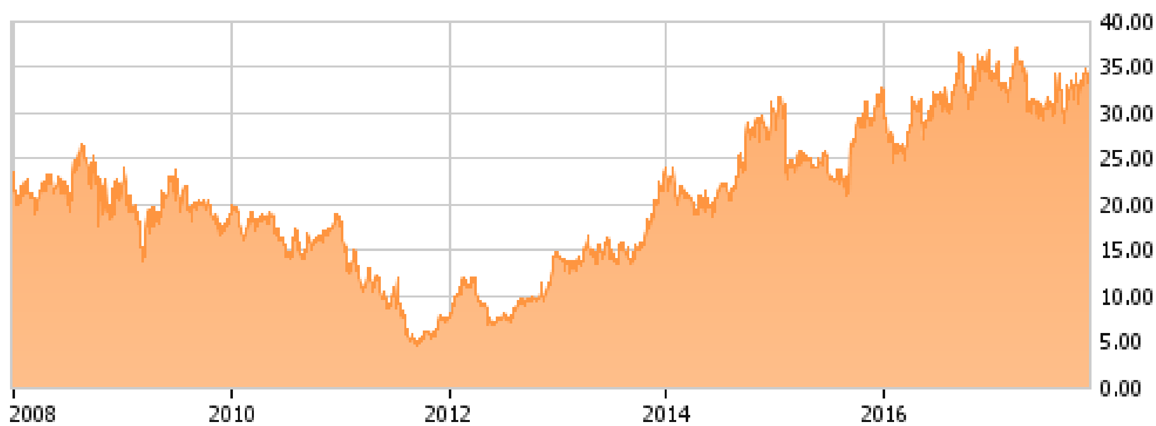
Economic Moat

The economic moat of Farmer Bros is small. While they claim that their specialty coffees set them apart from the competition, that is also what the other companies have said in corporate slideshows and reports. In most ways, they are just a coffee company looking to gain market share through low cost options to customers.

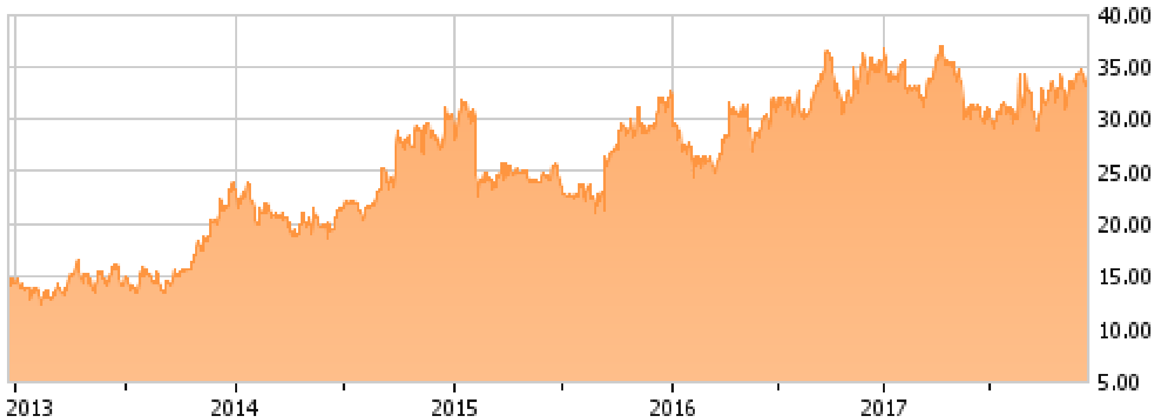
Policy Change Effects

Trump's protectionist agenda may seem like a blessing for a US born and bred company like Farmer Bros. And it's true, many of the corporate tax breaks would benefit the company, as well as increased focus on getting Americans in jobs. But that is about where the benefits end. Farmer Bros has no option but to import all its product from outside the US (save for Hawaiian coffee). Imports from South America, Mexico, Asia, and Africa are vital to the well-being of Farmer Bros. Increased tariffs or reduced free trade agreements would negatively affect the bottom line of Farmer Bros. Beyond the increased cost of their product, under Trump's plan, there would be less immigration. Because Farmer Bros mostly supplies goods to customers like restaurants and hotels, less expansion of these companies means less expansion for Farmer Bros. They can only sell as much coffee as people are drinking, and less immigrants means less coffee drinkers.

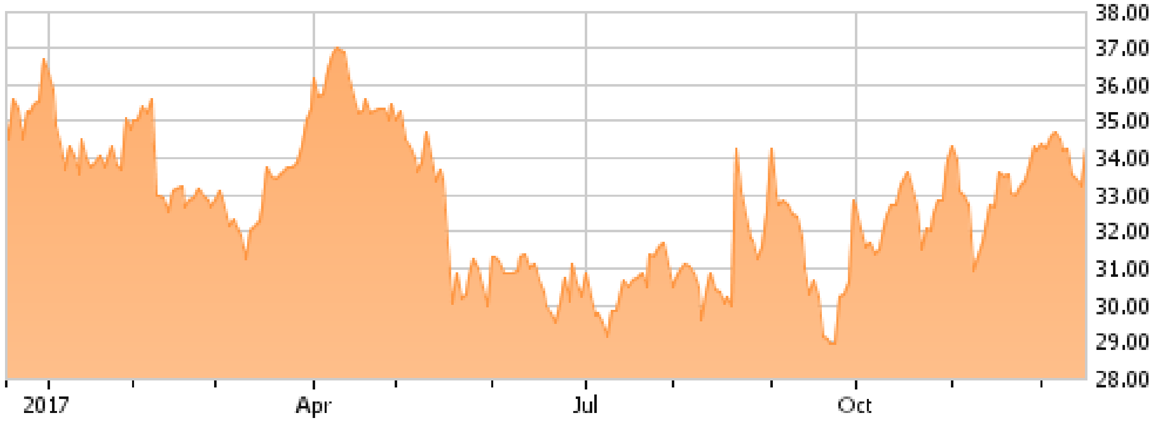
Stock History



The ten year graph shows some of the struggles of Farmer Brothers and how new executives and a renewed vigor have helped lift the company up out of the pits. With the family management being replaced with Mike Keown and the new executive team, Farmer Brothers has trended strongly upward. We can also see from this chart that while the financial crisis of 2008 may not have sunk the company, there was a flat-lining of the share until mid 2009, when bad acquisitions and low market confidence started the swing into single-digit share prices.

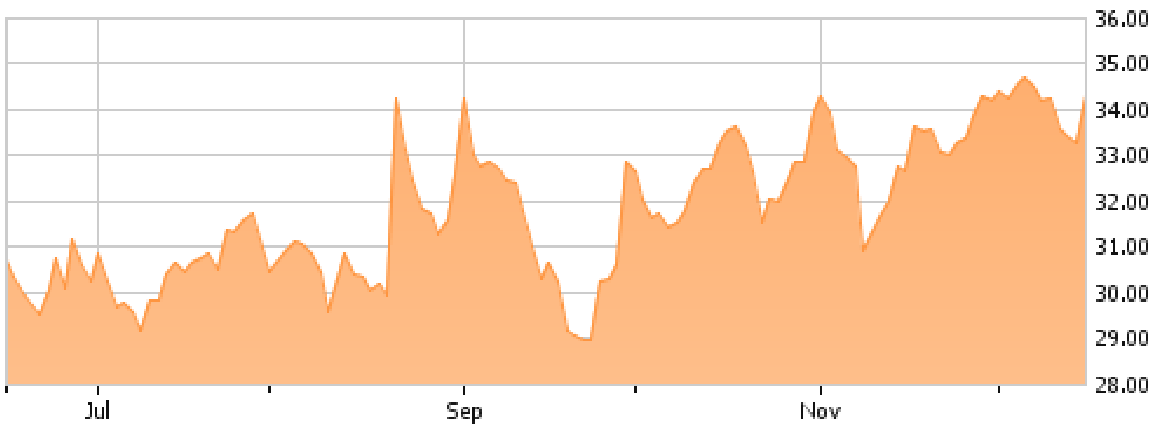


The five year chart gives a better look at the rebirth of Farmer Brothers as we know it today. The biggest trend that is obvious right off the bat is the surge in price at the end of every



year followed by a large drop. It is worth noting that it seems as though this drop has become less and less predominant and stock price has hovered mostly between $30 and $37. One expectation of this could be that earnings have historically been disappointing, but with the transparency and new direction of the company, they are not as big a shock anymore. Certainly, having a CEO who is willing to say to investors that there is a turnaround and to stick it out helps.

The last year saw huge shifts for Farmer Brothers. Around May they finished their new production and distribution facility, as well as new headquarters in Texas, a move that was much anticipated and regarded as an indicator for a strong financial future. The chart shows that prior to the May earnings reports, spirits were high, but something about the report put off investors. August saw almost no change which is surprising considering they announced their acquisition of Boyd Coffee three quarters of the way through the month. Boyd is a big name in specialty coffee and the purchase was to help Farmer Brothers break into the growing specialty coffee trend. The deal was closed in early October, where the chart shows an uptick and overall the expected year-end rally.



The six month snapshot shows the impact of the Boyd Acquisition better. Late August saw a spike and when the deal was closed in October there was another climb. The 10Q was released in late September and along with the conference call, it seemed to buoy confidence. The last half of the year – and the last quarter – have definitely trended upwards. It will be interesting to see of the completion of their new facility, the acquisition of Boyd, and the softened reaction last year to the 10K means a positive outlook through the first quarter of 2018. That being said, from an investment standpoint, if the stock drops as it has in the new year, there may be value to be found in the uptick and certainly short-term traders might want to load up as the tide rises for Farmer Brothers. With a base case value of around $35, and the share not immune to mid-20s prices, a keen investor may want to watch closely over the next 6 months.

VALUATION

Beta

I used a beta of 0.902 in valuing Farmer Brothers Coffee. This is a 1-year unlevered beta to reflect the amount of upcoming debt obligations the company has on its balance sheet. The company currently has $30 million in short term debt and less than $200,000 in long term debt. Although technically not factored into the unlevered beta, Farmer Brothers also has $45 million in accounts payable. I used a time period of 1 year because 5 years ago the firm was just starting its turnaround process and Mike Keown had just taken control. 3 years ago, Farmer Brothers was well into their transition plan but had just started building their new plant. In the last year, they have fully completed construction, bought China Mist (tea company) and purchased Boyd Coffee in Portland.

WACC

The WACC I came up with was 6.285% which is in the ball park of what I would have expected. There was no credit rating listed with Moody’s for Farmer brothers and so a synthetic credit rating of A3 was determined through the interest coverage ratio which is at a healthy 3.37. The tax rate for Farmer Brothers is just 33 basis points higher than the corporate tax rate in the united states. I would expect this to drop over the coming years as the new machinery, roasters, and facility are written off in depreciation and amortization.

The cost of equity of 6.51% reflects the beta of 0.902 – just below market – and implied equity risk premium of 4.63% as reported by Damodaran. The cost of debt capital is fairly low because of a solid synthetic credit rating. Even though actual credit scores were not available, I believe that a rating of A3 is not unreasonable and a default spread of 1.25% is well within expectations for a mature company in a historically stable industry.

WACC Calculations	
Risk free rate	2.33%
Equity Risk Premium (ERP)	4.63%
Beta Used	0.902
Interest Coverage Ratio	3.369
Synthetic Credit Rating	A3
Default Spread	1.25%
Tax Rate (Tc)	35.33%
Book Value (Debt)	$31.02
Market Value (Equity)	$559.09
Cost of Equity	6.51%
Cost of Debt Capital	3.58%
Rb(10Tc)	2.32%
Debt %	5.26%
Equity %	94.74%
WACC	6.29%

Value Drivers

The arithmetic annual growth rate for Farmer Brothers is 1.53%. All methods of calculating growth rate (geometric, linear regression, log linear regression) returned rates with only around 5 basis points in variation. That being said, the last 5 years have seen annual revenue drop, but that could be because of the company moving all their production half way across the country. I expect with the completed facility and some new customers in the pipeline, Farmer Brothers can begin to grow again.

The current pre-tax operating margin for Farmer Brothers is 7.5% and due to a new direct to store delivery program as well as completion of the new facility should help lower costs and increase margins. The new DSD program took quite a bit of investment as it involved new inventory systems and delivery management systems. These will probably pay off in the coming years and the pre-tax operating margin in year 10 should be around industry average which is 13.67%.

The sales to capital ratio for Farmer Brothers was 2.23 in the latest financial report. The base case assumes that this will lower to 1.67 over the course of the next 10 years to align to industry average.

The value drivers below:	Base Case
Annual Revenue growth rate, next 5 years =	1.53%
Pre-tax operating margin in year 10 =	13.67%
Sales to capital ratio(start) =	2.23
Sales to capital ratio(end) =	1.67

Terminal Value

See appendix 'A', 'B', and 'C' for terminal value calculations.

Relative Valuations

There are not many companies available to do comparable analysis with because so many coffee companies are privately owned by JAB Holdings. The two comparables that were used were JVA Holdings and Smuckers. Both of these are food processing companies with wide reaches throughout the US market. Through those valuations (available in Appendix D) one can see that the average price for comparables is about $30 a share. This is only a few dollars off from my own DCF valuation and gives weight to the original DCF valuation. The industry average value was approximately $56. I think that this is inflated because most other companies in the industry are probably not on the tail end of a turnaround and therefore valued less than the industry might be. The average of these two (comparables and industry) is around $44 a share. I think that this points towards a company that is undervalued relative to its peers. This suggests two things: (1) that a Farmer Brothers valuation of $35 is reasonable and that (2) Farmer Brothers could be a good buy right now.

Scenario Analysis

There are not many risks associated with the food and beverage industry. One big one is always that the tides could turn on a particular product that was previously considered trendy, popular, or healthy. This may be a problem for companies that sell soft drinks or energy drinks, but for a product like coffee or tea, there is considerably less risk. Many people drink coffee or tea every single day and the people who do drink these beverages are usually adamant about getting their daily dose.

Another risk that exists specifically for Farmer Brothers and the coffee industry is emerging trends. In the early 2010's third wave coffee came onto the scene. This coffee trend focused on high quality ingredients hand prepared for each customer. The beans are expected to be locally roasted and sourced with a high degree of transparency in sourcing. Farmer Brothers missed out big time on this trend and it cost them dearly. While JAB was acquiring Stumptown and Intelligentsia Coffee – leaders of the third eave trend – Farmer Brothers was in the midst of a turnaround. Hopefully for Farmer Brothers, their investment over the last few years and acquisition of Boyd Coffee will make them quicker to adopt new trends.

Right now, the United States are in a state of economic optimism, pessimism, doubt, and surety as Donald Trump continues to shake things up in the executive office. The biggest boon for Farmer Brothers could be the lowered corporate tax rate. Although recent investment will surely carry with it large tax shields for the firm, a lower top end for tax could benefit them seeing as they paid around 35% in the last 12 reported months.

Analyst Opinions

The professional opinions on Farmer Brothers are few and far between, and when they are available, they are usually only a buy, hold, or sell rating. Website TipRanks had one recommendation on the FARM stock, and that was that the stock was a moderate buy and would see $38.50 by next year. That would be an increase of just over 12%.[1] Reuters has a few more recommendations than TipRanks. Currently, they have a weight of 2 for outperform and a 1 for buy rating.[2] This creates an average of 1.67 in the buy direction, or in other words a moderate buy. Finally, on Markets.Co, Kara Anderson is quoted as setting a target price for Farmer

[1] (Analyst Ratings & Price Targets on Farmer Brothers)
[2] (Farmer Bros. Co: ANALYST RECOMMENDATIONS AND REVISIONS)

Brothers at $38.50 which is up from her previous target of $32.75.[3] These opinions mesh well with my own DCF Valuation which places Farmer Brothers in a similar position.

VALUATION ENHANCEMENT

There are several ways in which Farmer Brothers Coffee can enhance their value. First, as has been discussed at length, a new facility should help the firm enhance value greatly. It will provide better return on invested capital because new machinery is more efficient than old machinery. The new plant, property and equipment will provide depreciation to shield against taxes as well. The new facilities were also built in Texas, a move from California. There Farmer Brothers will enjoy a lower state corporate tax rate.

Farmer Brothers also has created a new direct to store distribution service which will further cut costs associated with transportation and customer satisfaction. If they are going to try and sell more premium products, they will need to deliver fresh coffee all around the country. Farmer Brothers can also enhance value by lowering the amount of debt kept on the balance sheet. This will have the effect of a higher calculated value of equity and therefore a higher value per share. In fact, if they got rid of most of their debt, they could enhance value by almost $2 a share. But every company should be leveraging their assets for debt to increase investment. But getting rid of debt also makes a company more attractive to potential purchases. Especially if the company is undervalued, they would be a prime target for a buyout from JVA or JAB.

RECOMMENDATION

Through this valuation process, there were 3 main values that come up. The first is the comparable valuation. This come through with an average per share value of $30.60. This value puts the market value of Farmer Brothers' share as overvalued. The first reason this value is so low is because only two comparables were available. One of them is certainly a coffee company (JVA) but Smuckers has many other product lines other than coffee. The second value that came up was from the industry averages. The value here was $56.85 per share. This value is a little

[3] (ANALYSTS' OPINIONS ARE MIXED ON THESE CONSUMER GOODS STOCKS)

more than $20 more than the current value of Farmer Brothers. The first reason for this is that Farmer Brothers has been in the middle of a turnaround and has only recently gotten into full operating mode. Second, this industry covers more than just coffee, as it is a general food processing industry. This means that there are companies with a variety of backgrounds and financial structures that may not relate to coffee or Farmer Brothers. Together, these comparable and industry values give a value of $43.72, but given that the comparables are more coffee oriented than the general industry valuation, I gave a three quarters weighting to the comparables valuation and 1 quarter to the industry valuations and came up with a value of $37.16. This is very close to my own DCF valuation and I believe represents Farmer Brothers well.

My own DCF valuation gave Farmer Brothers Coffee a value of $34.36 which is almost exactly the same as the current price of Farmer Brothers ($34.30). My best case scenario saw lots of value added and a valuation of $66.12 which is 193% of the current price. My worst case scenario saw a value of $18.03, but because of the analyst recommendations and comparables valuations I believe a worst case is unlikely. For more information on these valuations see appendixes ‘A’, ‘B’, and ‘C’.

Finally, my recommendation for Farmer Brothers (FARM) is issued as SOFT BUY. I am optimistic about the potential value creation in this company and believe that the share could very well outperform the market. The years taken to create a solid base will finally pay off and a fresh company with high potential has come out of it. I would issue a BUY rating at $28, a HOLD at $35, and a SELL at $45.

These recommendations are for a long-term investment of a year or more. For short term investment I would hold out to see a drop in price to around $25 and invest until mid-December of 2018.

Appendix A: Base Case DCF Valuation Output

	Base year	*1*	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	Terminal year
Revenue growth%		1.53%	1.53%	1.53%	1.53%	1.53%	1.69%	1.85%	2.01%	2.17%	2.33%	2.33%
Revenues	$534	$542	$551	$559	$568	$576	$586	$597	$609	$622	$637	$651
Operating margin	1.38%	2.61%	3.84%	5.07%	6.29%	7.52%	8.75%	9.98%	11.21%	12.44%	13.67%	13.67%
EBIT (Operating income)	$7	$14	$21	$28	$36	$43	$51	$60	$68	$77	$87	$89
Tax rate	35.33%	35.33%	35.33%	35.33%	35.33%	35.33%	35.26%	35.20%	35.13%	35.07%	35.00%	35.00%
EBIT(1-t)	$5	$9	$14	$18	$23	$28	$33	$39	$44	$50	$57	$58
- Reinvestment	$8	$4	$4	$4	$4	$4	$5	$6	$7	$8	$9	$21
FCFF	$38	$5	$10	$14	$19	$24	$28	$33	$38	$43	$48	$36
Terminal Value											$810	
Cost of capital (WACC)		6.29%	6.29%	6.29%	6.29%	6.29%	6.39%	6.50%	6.61%	6.72%	6.83%	6.83%
Cumulated discount factor		0.9409	0.8852	0.8329	0.7836	0.7373	0.6930	0.6507	0.6103	0.5719	0.5353	
PV(FCFF)		$5	$9	$12	$15	$17	$19	$21	$23	$24	$459	
Implied variables												After year 10
Sales to capital ratio	2.23	2.17	2.11	2.06	2.00	1.95	1.89	1.83	1.78	1.72	1.67	
Invested capital	$239.88	$244	$248	$252	$256	$260	$266	$271	$278	$286	$295	
ROIC	1.98%	3.75%	5.52%	7.28%	9.03%	10.77%	12.51%	14.22%	15.92%	17.58%	19.20%	6.29%

Number of shares	16.30
Estimated value /share	$34.36
Price	$34.30
Price as % of value	99.83%

Appendix B: Best Case DCF Valuation Output

	Base year	1	2	3	4	5	6	7	8	9	10	Terminal year
Revenue growth%		9.91%	9.91%	9.91%	9.91%	9.91%	8.39%	6.88%	5.36%	3.85%	2.33%	2.33%
Revenues	$534	$587	$645	$709	$779	$857	$929	$992	$1,046	$1,086	$1,111	$1,137
Operating margin	-0.23%	1.29%	2.82%	4.34%	5.86%	7.39%	8.91%	10.43%	11.95%	13.48%	15.00%	15.00%
EBIT (Operating income)	$7	$8	$18	$31	$46	$63	$83	$104	$125	$146	$167	$171
Tax rate	35.33%	35.33%	35.33%	35.33%	35.33%	35.33%	35.26%	35.20%	35.13%	35.07%	35.00%	35.00%
EBIT(1-t)	$5	$5	$12	$20	$30	$41	$54	$67	$81	$95	$108	$111
- Reinvestment		$14	$11	$10	$9	$8	$6	$5	$4	$3	$1	$41
FCFF		$(9)	$1	$10	$21	$33	$47	$62	$77	$92	$107	$70
Terminal Value											$1,550	
Cost of capital (WACC)		6.29%	6.29%	6.29%	6.29%	6.29%	6.39%	6.50%	6.61%	6.72%	6.83%	6.83%
Cumulated discount factor		0.9409	0.8852	0.8329	0.7836	0.7373	0.6930	0.6507	0.6103	0.5719	0.5353	
PV(FCFF)		$(9)	$1	$9	$16	$24	$33	$40	$47	$53	$887	
Implied variables												After year 10
Sales to capital ratio	2.23	3.71	5.20	6.69	8.18	9.67	11.15	12.64	14.13	15.62	17.11	
Invested capital	$239.88	$254	$265	$275	$283	$291	$298	$303	$307	$309	$311	
ROIC	1.98%	1.93%	4.43%	7.24%	10.43%	14.04%	17.98%	22.14%	26.44%	30.72%	34.86%	6.29%

Number of shares	16.30
Estimated value /share	$66.12
Price	$34.30
Price as % of value	51.88%

Appendix C: Worst Case DCF Valuation Output

	Base year	1	2	3	4	5	6	7	8	9	10	Terminal year
Revenue growth%		1.48%	1.48%	1.48%	1.48%	1.48%	1.65%	1.82%	1.99%	2.16%	2.33%	2.33%
Revenues	$534	$542	$550	$558	$567	$575	$584	$595	$607	$620	$634	$649
Operating margin	-0.23%	0.54%	1.31%	2.08%	2.84%	3.61%	4.38%	5.15%	5.92%	6.68%	7.45%	7.45%
EBIT (Operating income)	$7	$3	$7	$12	$16	$21	$26	$31	$36	$41	$47	$48
Tax rate	35.33%	35.33 %	35.33 %	35.33 %	35.33 %	35.33 %	35.26 %	35.20 %	35.13 %	35.07 %	35.00 %	35.00%
EBIT(1-t)	$5	$2	$5	$7	$10	$13	$17	$20	$23	$27	$31	$31
- Reinvestment		$3	$3	$3	$2	$2	$2	$2	$3	$3	$3	$12
FCFF		$(1)	$2	$5	$8	$11	$14	$17	$21	$24	$28	$20
Terminal Value											$440	
Cost of capital (WACC)		6.29%	6.29%	6.29%	6.29%	6.29%	6.39%	6.50%	6.61%	6.72%	6.83%	6.83%
Cumulated discount factor		0.9409	0.8852	0.8329	0.7836	0.7373	0.6930	0.6507	0.6103	0.5719	0.5353	
PV(FCFF)		$(1)	$2	$4	$6	$8	$10	$11	$13	$14	$250	
Implied variables												After year 10
Sales to capital ratio	2.23	2.53	2.84	3.14	3.45	3.75	4.06	4.36	4.67	4.97	5.28	
Invested capital	$239.8 8	$243	$246	$248	$251	$253	$255	$258	$260	$263	$266	
ROIC	1.98%	0.78%	1.89%	3.02%	4.15%	5.31%	6.49%	7.70%	8.94%	10.23 %	11.56 %	6.29%

Number of shares	16.30
Estimated value /share	$18.03
Price	$34.30
Price as % of value	190.26 %

Appendix D: Comparables and Industry Fundamental Valuations

	FARM	JVA	SJM	Comparable Average	Industry Average
Price per share	$34.30	$4.17	$106.05		
Number of shares	16.55	6.14	115.36		
Earnings per share	$(0.54)	$0.36	$5.11		
Book value per share	$12.96	$4.23	$59.38		
Total Revenue	$534.19	$78.94	$7,390.00		
Book Value of Debt	$31.02	$6.95	$5,393.00		
Market Value of Equity	$573.23	$25.60	$12,233.93		
Cash & Mkt Sec.	$7.66	$3.22	$166.80		
Enterprise Value (EV)	$558.82	$29.33	$17,460.13		
EBITDA	$32.50	$4.33	$1,457.10		
Trailing PE	-63.52	11.58	20.75	**16.17**	**36.05**
Price/Book	2.65	0.98	1.79	**1.39**	**3.08**
Price/Sales	1.06	0.32	1.66	**0.99**	**1.92**
EV/EBITDA	17.19	6.77	11.98	**9.38**	**13.64**
EV/Sales	1.05	0.37	2.36	**1.37**	**2.38**

	Comparables	**Industry Average**
price (based on PE)	23.60583333	$52.63
price (based on PB)	17.8344669	$39.60
price (based on PS)	32.38902022	$62.82
Price (based on EV/EBITDA)	$35.78	$52.65
Price (based on EV/sales)	$43.39	$76.53
Average	**$30.60**	**$56.85**