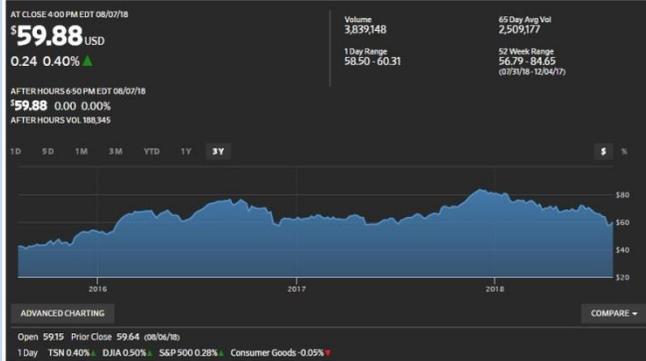


TYSON FOODS, INC. (TSN)



Market Data

Market Cap (intraday)	22.03B
Enterprise Value (8/13/18)	42.63B
Enterprise Value/EBITDA	10.68

Financial Summary (8/18)

Revenues	40.2B
EBITDA	3.99B
Net Income	3.34B

Financial Analysis

Solvency Ratios

LTD/Total Capitalization	55.2%
EBITDA/ Interest (Coverage)	8.46x
LTD/EBITDA	3.35x

Profitability Ratios

Gross Margin	38.5%
EBITDA Margin	13.7%
EBIT Margin	7.7%
Return on Assets (ROA)	4.8%
Gross Return on Assets	8.1%
Return on Equity (ROA)	15.8%

\$59.88 – BUY

Valuation Methodology

Method #1	\$ 59.88
Method #2	\$ 88.52
Method #3	\$ 92.85
Average of Methods	\$ 80.42



Profile

Tyson Foods, Inc., together with its subsidiaries, operates as a food company worldwide. It operates through four segments: Chicken, Beef, Pork, and Prepared Foods. The company raises and processes chickens into fresh, frozen, and value-added chicken products; processes live fed cattle and live market hogs; and fabricates dressed beef and pork carcasses into primal and sub-primal meat cuts, as well as case ready beef and pork, and fully-cooked meats. Tyson Foods, Inc. offers its products primarily under the Tyson, Jimmy Dean, Hillshire Farm, Ball Park, Wright, State Fair, ibp, Van's, Sara Lee, Chef Pierre, Aidells, Gallo Salame, and Golden Island brands. The company sells its products through its sales staff to grocery retailers, grocery wholesalers, meat distributors, warehouse club stores, military commissaries, industrial food processing companies, chain restaurants or their distributors, live markets, international export companies, and domestic distributors, as well as through independent brokers and trading companies. Tyson Foods, Inc. was founded in 1935 and is headquartered in Springdale, Arkansas.

Financial Analysis

FY 17 vs. FY 16

Operations:

- Net sales for FY17 are \$38.15B an increase of 3.15% compared to \$36.95B in FY16. The increase is due to continuously expending business and investments into new opportunity.
- COGS slightly increased from 32.2B in FY16 by 2% to 32.95 in FY17. This increase is in line with the expansion as this is a food business and is relying on purchase and sale.
- Operating Expenses increased as well by 3.76% from \$1.86B in FY16 to \$1.93B in FY17 as new sites and equipment had to be purchased to accommodate the growing business.
- Because of the above, Operating income increased from \$2.87B in FY16 to \$3.22B in FY17
- Tyson Foods Inc EBITDA grew while Revenue increased by 2.84 %, this led to improvement in Company's EBITDA Margin to 10.45 %.

Cash Flows:

- OCF Increased in FY17 due to increased income in FY17 as described above.
- Capex totaled \$1.07B in FY17 which is 60% higher than observed in FY16.
- With new investments Financing Activities in FY17 used up more cash than in FY16. The change in significant going from \$.6B in FY16 to \$4.2B in FY17.
- As a result of the above, change in cash outflow decreased and even though stayed negative at -\$31 in FY17 it had a positive change from -\$339 in FY16

Leverage:

- The total debt increased from \$12.5B in FY16 to \$19.5B in FY17 and leverage increased from 3.50x to 4.96x due to higher debt and more or sell flat EBITDA
- Interest coverage ratio slightly increased to 18.20x in FY17 from 15.11x in FY16 due to lowered interest expense and increased EBITDA in FY17
- Total Debt/Capitalization increased from 56.6% in FY16 to 64.9% in FY17 and is by roughly 10% higher than historical number.

Ratio Analysis

Tyson Foods, Inc.

Ratio Analysis

PERIOD ENDING	8 Year Average	30-Jun-18	30-Sep-17	31-Dec-07	31-Dec-06	30-Jun-18	31-Mar-18	30-Dec-17	30-Sep-17
EBITDA (Operating Income + Depreciation+Non Rec. Exp)		3,987,000	3,932,000	1,140,000	1,170,000	1,052,000	813,000	1,172,000	
Liquidity Ratios									
Current Ratio	0.88x	0.49x	0.50x	0.87x	0.74x				
Accounts Receivable Turnover	16.15x	24.61x	23.79x	9.99x	10.08x				
Solvency Ratios									
LTD / Total Capitalization	55.2%	60.5%	64.9%	63.4%	46.7%				
EBITDA / Interest (Interest Coverage)	8.46x	41.10x	18.20x	6.79x	4.80x				
LTD / EBITDA	3.35x	4.77x	4.96x	3.15x	2.25x				
Profitability Ratios									
Gross Margin	38.5%	12.9%	13.6%	28.1%	27.3%				
EBITDA Margin	13.7%	9.9%	10.3%	18.5%	19.6%				
EBIT Margin	8.0%	7.8%	8.4%	14.6%	11.1%				
Return on Assets (ROA)	4.8%	12.4%	8.6%	5.7%	8.4%				
Gross Return on Assets	8.1%	12.2%	12.8%	9.5%	14.4%				
Return on Equity (ROE)	15.8%	30.2%	21.6%	21.3%	26.0%				
Trend Analysis Ratios									
Revenue Growth	61.9%	5.1%	3.7%	2.9%					
REVPAR Growth									

Projection Analysis

Income Statement	Projections						
	LTM	10-year Average	Operating Assumpt. Input	30-Sep-18	30-Sep-19	29-Sep-20	29-Sep-21
PERIOD ENDING	30-Jun-18			30-Sep-18	30-Sep-19	29-Sep-20	29-Sep-21
Total Revenue	40,198,000			39,407,800	42,560,424	45,539,654	47,816,636
Cost of Revenue	35,011,000			25,615,070	27,664,276	29,600,775	31,080,814
Gross Profit	5,187,000			13,792,730	14,896,148	15,938,879	16,735,823
Total Operating Expenses	2,067,000			11,034,184	11,916,919	12,751,103	13,388,658
EBIT	3,120,000			2,758,546	2,979,230	3,187,776	3,347,165
Interest Expense	97,000			329,080	320,651	303,774	286,898
EBT	3,023,000			2,429,466	2,658,579	2,884,001	3,060,267
Income Tax Expense	(317,000)			655,956	717,816	778,680	826,272
Net Income	3,340,000			1,773,510	1,940,763	2,105,321	2,233,995
Income Statement Assumptions							
Revenue Growth	5.07%	56.22%		3.00%	8.00%	7.00%	5.00%
Gross Margin	12.90%	35.13%	35.00%	35.00%	35.00%	35.00%	35.00%
Operating Exp as % of Revenue	5.14%	25.46%	28.00%	28.00%	28.00%	28.00%	28.00%
Tax as % of EBT	-10.49%	6.43%	27.00%	27.00%	27.00%	27.00%	27.00%
Other Assumptions % of Revenue							
Depreciation	867,000			1,576,312	1,702,417	1,821,586	1,912,665
Capex	1,174,000			1,970,390	2,128,021	2,276,983	2,390,832
Depreciation	2.16%	3.18%	4.00%	4.00%	4.00%	4.00%	4.00%
Capital Expenditures	2.92%	4.56%	5.00%	5.00%	5.00%	5.00%	5.00%
Debt Schedule							
Short Term Debt	10,160,000						
Long Term Debt	8,852,000						
Total Debt Outstanding	19,012,000			18,525,000	17,550,000	16,575,000	15,600,000
Increase/Decease			5.00%	(975,000)	(975,000)	(975,000)	(975,000)
Interest Payment			1.73%	329,080	320,651	303,774	286,898
Ratio Analysis - Assumptions							
	30-Jun-18			30-Sep-18	30-Sep-19	29-Sep-20	29-Sep-21
EBITDA	3,987,000			4,334,858	4,681,647	5,009,362	5,259,830
Trend Analysis							
Revenue Growth	5.07%			3.00%	8.00%	7.00%	5.00%
Solvency Ratios (Leverage Management Ratios)							
Total Debt / EBITDA (Incl. CPLTD)	4.77x			4.27x	3.75x	3.31x	2.97x
EBITDA / Interest Coverage Ratio	41.10x			13.17x	14.60x	16.49x	18.33x
EBIT / Interest Coverage Ratio	32.16x			8.38x	9.29x	10.49x	11.67x
Profitability Ratios							
Gross Margin %	12.90%			35.00%	35.00%	35.00%	35.00%
EBITDA Margin %	9.92%			11.00%	11.00%	11.00%	11.00%
EBIT Margin %	7.76%			7.00%	7.00%	7.00%	7.00%

Projection Analysis Assumptions

Revenue:

- Total revenue growth ranges from 3.7% to 7.076% from FY06 to FY17 with average annual growth of 5.06% within the same timeframe. Projecting total revenue growth to stay at over 3% in upcoming years.

EBITDA:

EBITDA margin will improve from 9.92% to 11% due to all the positive changes within the Tyson Food and its subsidiaries which will in turn cause margin improvement. Base case assumes flat gross margin at 11% over the tenor.

- Operating expenses to grow at 5.07% from 2017. Projections conservatively forecast \$10 -12 MM of cost savings over time for Tyson foods over the other food industries that deal within the same realm.

Other Assumptions:

Capital expenditures are bit higher but overall within historical levels at around 5.2% of sales with moderate working capital requirements.

Results:

- Even though I have learned a whole lot from this class, I certainly do not feel that the knowledge that we received over the past 4 weeks is sufficient enough to be able to draw conclusions in such a sophisticated way. I strongly believe that more time and practice in addition to your ability and teaching style would shape us into real analysts.

- Financial analysis is not an easy task and if given enough effort and thorough understanding is a great tool in every situation and must be in the arsenal of every business major student.

- After running the analysis and looking at the results I strongly believe that Tyson Foods has strong financials and a boundless upcoming, and I would suggest buying the stock as it is showing growth and will do even better in the future.

METHOD #1 - Stock Price

Tyson Foods, Inc.

Calculations	→	SP	SO	SP * SO = EQ	D	C	EQ + D - C = EV
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Company	Symbol	Stock Price (as of 8/13/18)	Stocks Outstanding (\$000)	Equity Value (\$000)	Debt (ST<) (\$000)	Cash (\$000)	Enterprise Value (\$000)
Tyson Foods, Inc.	TSN	\$ 59.88	295,920	17,719,690	19,012,000	170,000	36,561,690

Tyson Food's EV 36,561,690

METHOD #2 - EBITDA Multiples

Tyson Foods, Inc.

Company	Symbol	Stock Price (as of 8/13/18)	Stocks Outstanding (\$000)	Equity Value (\$000)	Debt (ST<) (\$000)	Cash (\$000)	Enterprise Value (\$000)	EBITDA (\$000)	EBITDA Multiple	Beta	Leverage
B&G Foods Inc	BGS	\$ 31.00	65,930	2,043,830	2,070,000	62,840	4,050,990	325,580	12.44x	0.50x	6.36x
Cal-Maine Foods Inc	CALM	\$ 49.68	43,830	2,177,474	6,090	331,020	1,852,544	237,920	7.79x	-0.22x	0.03x
Calavo Growers Inc	CVGW	\$ 101.90	17,570	1,790,383	21,500	2,380	1,809,593	74,030	24.44x	0.56x	0.29x
Campbell Soup Co	CPB	\$ 41.75	300,650	12,552,138	9,840,000	199,000	22,193,138	1,980,000	11.21x	-0.04x	4.97x
Conagra Brands Inc	CAG	\$ 36.87	391,640	14,439,767	3,820,000	128,000	18,131,767	1,500,000	12.09x	0.53x	2.55x
Dean Foods Co	DF	\$ 8.68	91,350	792,918	858,960	25,430	1,624,448	303,660	5.35x	0.07x	2.82x
General Mills Inc	GIS	\$ 45.80	593,370	27,176,346	15,820,000	399,000	42,597,346	3,340,000	12.75x	0.77x	4.74x
Kellogg Co	K	\$ 71.51	346,670	24,790,372	9,070,000	257,000	33,603,372	3,010,000	11.16x	0.29x	3.01x
Kraft Heinz Co	KHC	\$ 59.52	1,220,000	72,614,400	34,170,000	3,370,000	103,414,400	8,120,000	12.74x	0.73x	4.21x
Tyson Foods, Inc.	TSN	\$ 59.88	295,920	17,719,690	19,012,000	170,000	36,561,690	3,932,000	9.30x	0.93x	4.84x

EBITDA * Average Multiple	3,932,000	11.45x						Average	12.22x	0.41x	
								Excl. Outlier	11.45x		
								(taken out the high and low)			

Tyson's EV 45,037,503

METHOD #4 - Discount Cash Flow Valuation Analysis

Calculating WACC

	Amount	% Cap	Return/Inter	After Tax	WACC
Market Value of Equity (Trading)	17,719,690	48.2%	10.02%	10.02%	4.83%
Total Debt	19,012,000	51.8%	1.73%	1.26%	0.65%
Total Capital	36,731,690	100.0%			5.49%
6-year Treasury Note =		1.65% (given)			
Historical Market Premium =		9.00% (given)			
Company Beta =		0.93x			
Historical Tax Rate =		27.00%			

Tyson Foods, Inc.

	year (n) =	1	2	3	4	5	6	
Discount Cash Flow Valuation Analysis	Projected (yr1-yr Assumptions)	Input Actual	30-Sep-18	30-Sep-19	29-Sep-20	29-Sep-21	EXIT YEAR 30-Sep-22	
Revenues	40,198,000	41,403,940	42,646,058	43,925,440	45,243,203	46,600,499	48,646,352	
Revenue Growth Assumptions		3.0%	3.0%	3.0%	3.0%	3.0%	4.4%	
Cost of Revenues (CoGS)	65.0%	(35,011,000)	(26,912,561)	(27,719,938)	(28,551,536)	(29,408,082)	(30,290,325)	(31,620,129)
Operating Expenses	28.0%	(2,067,000)	(11,593,103)	(11,940,896)	(12,299,123)	(12,668,097)	(13,048,140)	(13,620,979)
EBIT		3,120,000	2,898,276	2,985,224	3,074,781	3,167,024	3,262,035	3,405,245
Less Taxes / % of EBIT	27.0%	(842,400)	(782,534)	(806,010)	(830,191)	(855,097)	(880,749)	(919,416)
Plus Depreciation	4.0%	867,000	1,656,158	1,705,842	1,757,018	1,809,728	1,864,020	1,945,854
Less Capex	5.0%	(1,174,000)	(2,070,197)	(2,132,303)	(2,196,272)	(2,262,160)	(2,330,025)	(2,432,318)
Cash Flow		1,970,600	1,701,702	1,752,753	1,805,336	1,859,496	1,915,281	1,999,365
EBITDA		3,932,000	4,554,433	4,691,066	4,831,798	4,976,752	5,126,055	5,351,099
Terminal Value	Assumptions							
EBITDA Multiple Method	11.45x						58,714,322	
Perpetuity Method	5.49%						36,433,273	
Average							47,573,797	
Less Debt Outstanding (at Exit)							(14,259,000)	
Plus Cash (at Exit)							-	
Equity Value at Terminal							33,314,797	
Equity Cash Flows							35,230,678	
PV Table							0.62036	
Present Value of Equity			1,701,702	1,448,030	1,355,636	1,269,137	21,855,231	
Total Present Value of Equity			0.90893	0.82615	0.75091	0.68252		
+ PV of Debt =								19,012,000
- Less Cash =								(170,000)
Tyson Foods' EV								46,316,754

ENTREPRISE VALUATION ANALYSIS

Tyson Foods Inc.

	EV	Debt	Cash	Eq Value	Shares Outs	Stock Price
Method #1 - Current Market Price	36,561,690	19,012,000	170,000	17,719,690	295,920	\$ 59.88
Method #2	45,037,503	19,012,000	170,000	26,195,503	295,920	\$ 88.52
Method #4	46,316,754	19,012,000	170,000	27,474,754	295,920	\$ 92.85
Avg of other methods	42,638,649	19,012,000	170,000	23,796,649		\$ 80.42