

FINPACK

Financial Analysis: Oper 18

Brown Family Farm

Sumter, SC

File: Brown Family Farm

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Prepared on: 12/29/2018

2018 Financial Analysis Executive Summary

Income Statement

Crop sales	7,858,695	
Crop inventory change	146,650	
Gross crop income		8,005,345
Livestock sales	-	
Livestock inventory change	-	
Gross livestock income		-
Government payments		1,500
Other cash farm income		73,000
Change in accounts receivable		140,600
Gain or loss on hedging accts		-
Change in other assets		-
Gain or loss on breeding lvst		-
Gross farm income		8,220,445
Cash operating expense	7,704,912	
Change in prepaid exp and supplies	-	
Change in growing crops	-	
Change in accounts payable	-	
Depreciation	350,800	
Total operating expense		8,055,712
Interest paid	286,807	
Change in accrued interest	-98,971	
Total interest expense		187,836
Total expenses		8,243,548
Net farm income		-23,103

Other Measures

Total crop acres		4,500
Change in earned net worth	-283,103	-21 %
Change in market value net worth	-381,520	-10 %

Financial Standards Measures

Liquidity	Beg	End
Current ratio	0.99	0.91
Working capital	-29,734	-270,645
Working capital to gross revenues	-0.4 %	-3.3 %
Solvency (market)	Beg	End
Debt to asset ratio	52 %	55 %
Debt to equity ratio	1.08	1.23
Profitability	Cost	Market
Net farm income	-23,103	-121,520
Rate of return on assets	-6.0 %	-4.8 %
Rate of return on equity	-39.6 %	-15.4 %
Operating profit margin	-3.6 %	-4.8 %
Repayment Capacity		
Term debt coverage ratio (farm only)		0.33
Replacement margin coverage ratio		0.18
Efficiency	Cost	Market
Asset turnover rate	166.0 %	100.7 %
Operating expense ratio		93.7 %
Depreciation expense ratio		4.3 %
Interest expense ratio		2.3 %
Net farm income ratio		-0.3 %
Other		
Term debt coverage (farm+personal)		0.33
Term debt to EBITDA		1.77

Information Accuracy

Cash discrepancy	0
Liability discrepancy	0
Cash discrepancy to gross revenue	0 %

Income Statement

Income	Quantity	Price	Amount	Expense	Amount
Cantaloupe, NC	687,500 cwt.	1.03/cwt.	708,125	Seed and plants	560,000
Corn, NC	100,000 bu.	4.35/bu.	435,000	Fertilizer	720,079
Corn, OC	109,583 bu.	4.62/bu.	506,000	Crop chemicals	890,000
Pkg Cucmbrs, NC	18,000 cwt.	17.21 /cwt.	309,780	Crop insurance	91,000
Soybeans, OC	56,000 bu.	10.19/bu.	570,640	Drying expense	310,000
Soybeans, NC	8,000 bu.	10.03/bu.	80,250	Irrigation energy	123,000
Summr Squash, NC	37,500 bu.	17.50/bu.	656,250	Crop Supplies	114,500
Swt Potatoes, OC	150,000 bu.	6.46/bu.	969,000	Crop Custom hire	68,000
FICr Tobacco, NC	540,000 lb.	1.88/lb.	1,015,200	Crop Hauling and trucking	125,000
Tomatoes, NC	125,000 crtn.	8.75/crtn.	1,093,750	Crop Consultants	50,000
Watermelon, NC	50,000 cwt.	16.50/cwt.	825,000	Crop Marketing	1,157,209
Swt Corn Dir, NC	285,000 doz.	2.42/doz.	689,700	Interest	286,807
Crop government payments			1,500	Fuel & oil	89,015
Custom work income			30,000	Repairs	179,634
Patronage dividends, cash			5,000	Hired labor	2,762,500
Crop insurance income			38,000	Land rent	252,000
				Personal property taxes	50,600
				Farm insurance	83,250
				Utilities	79,125
Gross cash income			7,933,195	Total cash expense	7,991,719
				Net cash income	-58,524

Inventory Changes	Beginning Inventory	Purchases	Sales	Ending Inventory	Inventory Change	
Prepays and supplies	56,000			56,000	-	
Accounts receivable	98,000			238,600	140,600	
Hedging gains or losses	10,000	-	-	10,000	-	
Crops and feed	2,150,000			2,296,650	146,650	
Other assets	58,500	-	-	58,500	-	
Accounts payable	126,000			126,000	-	
Accrued interest	237,030			138,060	98,971	
Total inventory change						386,221
Net operating profit						327,697

Depreciation	Beginning Inventory	Purchases	Sales	Ending Inventory	Depreciation	
Machinery and equipment	834,000	-	-	483,200	-350,800	
Titled vehicles	-	-	-	-	-	
Buildings and improvement	-	-	-	-	-	
Total depreciation						-350,800

Net farm income **-23,103**

Profitability Measures		Cost	Market	Statement of Owner's Equity		
(A)	Net farm income from operations	-23,103	-121,520	(a)	Beginning net worth	3,989,120
	Rate of return on assets (E/F)	-6.0 %	-4.8 %		Net farm income	-23,103
	Rate of return on equity (G/H)	-39.6 %	-15.4 %		Personal income (+)	-
	Operating profit margin (E/I)	-3.6 %	-4.8 %		Owner withdrawals (-)	260,000
	Asset turnover rate (I/F)	166.0 %	100.7 %		Income taxes accrued (-)	-
	EBITDA	515,533	417,117		Change in personal assets (+)	-
(B)	Change in market valuation	-	-98,416		Change in nonfarm accounts payable (+)	-
(C)	Interest expense	187,836	187,836	(b)	Total change in retained earnings (=)	-283,103
(D)	Value of unpaid oper labor & mgmt	462,092	462,092		Change in market value of capital assets	17,450
(E)	Return on farm assets (A+C-D)	-297,359	-395,775		Change in deferred liabilities -	115,866
(F)	Average farm assets	4,951,901	8,167,126	(d)	Total change in market valuation =	-98,416
(G)	Return on farm equity (A-D)	-485,195	-583,612	(e)	Total change in net worth (b+d)	-381,520
(H)	Average farm net worth	1,226,359	3,798,360		Ending net worth	3,607,600
(I)	Value of farm production	8,220,445	8,220,445			
Liquidity Measures		Begin	End	Statement of Cash Flows		
(J)	Current assets	2,780,000	2,849,602	(f)	Beginning cash balance (farm & personal)	466,000
(K)	Current liabilities	2,809,734	3,120,247		Gross cash farm income	7,933,195
	Current ratio (J/K)	0.99	0.91		Cash farm expenses (-)	7,991,719
	Working capital (J-K)	-29,734	-270,645	(g)	Cash provided by operating activities (=)	-58,524
	Change in working capital	-240,910			Sale of capital assets	-
	Working capital to gross revenues	-0.4 %	-3.3 %		Purchase of capital assets (-)	-
Solvency Measures (Market)		Begin	End	(h)	Cash provided by investing activities (=)	-
(L)	Total assets	8,299,000	8,035,252		Money borrowed	2,819,112
(M)	Total liabilities	4,309,880	4,427,652		Principal payments (-)	2,718,236
	Net worth (L-M)	3,989,120	3,607,600		Personal income (+)	-
	Net worth change	-381,520			Owner withdrawals (-)	260,000
	Current debt to assets (K/J)	101 %	109 %	(i)	Income taxes paid (-)	-
	Intermediate debt to assets	- %	- %		Cash provided by financing activities (=)	-159,124
	Long term debt to assets	42 %	28 %		Net change in cash (g+h+i)	-217,648
	Total debt to assets ratio (M/L)	52 %	55 %		Ending cash balance (farm and personal)	248,352
Repayment Capacity						
	Net farm income from operations		-23,103			
	Depreciation (+)		350,800			
	Personal income (+)		-			
	Owner withdrawals (-)		260,000			
	Income taxes accrued (-)		-			
	Interest on term debt (+)		70,737			
(N)	Capital debt repayment capacity (=)		138,434			
(O)	Scheduled term debt payments		417,441			
(P)	Capital debt repayment margin (N-O)		-279,007			
(Q)	Cash replacement allowance		333,350			
	Replacement margin (P-Q)		-612,357			
	Term debt coverage ratio (N/O)		0.33			
	Replacement coverage ratio (N/O+Q)		0.18			

Crop Summary

Total acres owned	500
Total crop acres	4,500
Crop acres owned	-
Crop acres cash rented	4,500
Crop acres share rented	-
Irrigated crop acres	1,800
Dryland crop acres	2,700
Percent crop acres owned	- %
Machinery investment/crop acre (cost)	146
Machinery investment/crop acre (market)	704

Crop Yields

	Acres	Yield
Corn, Irrigated	1,000.0	175.0 bu.
Soybeans, Dryland	2,000.0	32.0 bu.
Tobacco, Flue Cured, Dryland	300.0	1,800.0 lb.
Sweet Potatoes, Dryland	400.0	423.8 bu.
Pkg Cucumbers, Irrigated	150.0	120.0 cwt.
Summr Squash, Irrigated	150.0	250.0 bu.
Swt Corn Dir, Irrigated	150.0	1,900.0 doz.
Tomatoes, Irrigated	100.0	1,250.0 crtn.
Watermelon, Irrigated	125.0	400.0 cwt.
Cantaloupe, Irrigated	125.0	5,500.0 cwt.

Labor Summary

Total unpaid labor hours	6,000
Total hired labor hours	220,357
Total farm labor hours	226,357
Value of farm production per hour	36.32
Net farm income per unpaid hour	-3.85
Average hourly hired labor wage	12.54

Planned vs Actual**Income Statement**

Cash Farm Income	Unit	Planned Quantity	Planned Value	Actual Quantity	Actual Value
Cantaloupe	cwt.	750,000	750,000	687,500	708,125
Corn	bu.	209,583	935,998	209,583	941,000
Pkg Cucmbrs	cwt.	18,000	300,060	18,000	309,780
Soybeans	bu.	71,000	721,750	64,000	650,890
Summr Squash	bu.	37,500	660,000	37,500	656,250
Swt Potatoes	bu.	220,000	1,540,000	150,000	969,000
FICr Tobacco	lb.	720,000	1,404,000	540,000	1,015,200
Tomatoes	crtn.	150,000	1,275,000	125,000	1,093,750
Watermelon	cwt.	56,250	900,000	50,000	825,000
Swt Corn Dir	doz.	281,250	675,000	285,000	689,700
Crop government payments			60,000		1,500
Custom work income			38,000		30,000
Patronage dividends, cash			2,000		5,000
Crop insurance income			-		38,000
Gross cash farm income			9,261,808		7,933,195
Seed and plants			558,579		560,000
Fertilizer			470,888		720,079
Crop chemicals			890,882		890,000
Crop insurance			91,000		91,000
Drying expense			365,080		310,000
Irrigation energy			132,607		123,000
Supplies			120,920		114,500
Custom hire			71,379		68,000
Hired labor			2,750,999		2,762,500
Hauling and trucking			130,392		125,000
Marketing			1,367,209		1,157,209
			177,022		-
			98,079		-
Interest			360,146		286,807
Fuel & oil			100,000		89,015
Repairs			184,872		179,634
Land rent			252,000		252,000
Personal property taxes			50,455		50,600
Farm insurance			80,000		83,250
Utilities			80,000		79,125
Consultants			50,000		50,000
Total cash farm expense			8,382,508		7,991,719
Net cash farm income			879,300		-58,524
Inventory change			121,145		386,221
Depreciation			-350,800		-350,800
Net farm income			649,645		-23,103

Cash Flows

Cash Inflows	Planned	Actual
Beginning cash balance	466,000	466,000
Gross cash farm income	9,261,808	7,933,195
Personal income	-	-
Capital sales	-	-
Money borrowed	2,672,183	2,819,112
Total inflows	12,399,992	11,218,307

Cash Outflows

Cash farm expense	8,382,508	7,991,719
Owner withdrawals	260,000	260,000
Income taxes	-	-
Capital purchases	-	-
Principal payments	3,407,483	2,718,236
Ending cash balance	350,000	248,352
Total outflows	12,399,992	11,218,307

Ending Inventories

Corn	100,000	75,000
Soybeans	55,000	56,000
Swt Potatoes	156,000	169,500

Crop Production

Crop	Unit	Planned Acres	Planned Yield	Planned Production	Actual Acres	Actual Yield	Actual Production
Corn, Irrigated	bu.	1,000.0	200.0	200,000	1,000.0	175.0	175,000
Soybeans, Dryland	bu.	2,000.0	35.0	70,000	2,000.0	32.0	64,000
Tobacco, Flue Cured, Dryland	lb.	300.0	2,400.0	720,000	300.0	1,800.0	540,000
Sweet Potatoes, Dryland	bu.	400.0	565.0	226,000	400.0	423.8	169,500
Pkg Cucmbrs, Irrigated	cwt.	150.0	120.0	18,000	150.0	120.0	18,000
Summr Squash, Irrigated	bu.	150.0	250.0	37,500	150.0	250.0	37,500
Swt Corn Dir, Irrigated	doz.	150.0	1,875.0	281,250	150.0	1,900.0	285,000
Tomatoes, Irrigated	crtn.	100.0	1,500.0	150,000	100.0	1,250.0	125,000
Watermelon, Irrigated	cwt.	125.0	450.0	56,250	125.0	400.0	50,000
Cantaloupe, Irrigated	cwt.	125.0	6,000.0	750,000	125.0	5,500.0	687,500

Cash Accuracy Check

Beginning cash balance	466,000	Ending cash balance	248,352
Gross cash farm income	7,933,195	Total cash farm expense	7,991,719
Personal income	-	Owner withdrawals	260,000
Capital sales	-	Capital purchases	-
Money borrowed	2,819,112	Principal payments	2,718,236
Gifts and inheritances	-	Gifts given	-
Beginning personal savings	-	Ending personal savings	-
		Income taxes	-
Total inflows	11,218,307	Total outflows	11,218,307
		Discrepancy (inflows - outflows)	0

Liabilities Check

Beginning liabilities	4,309,880
Money borrowed	(+) 2,819,112
Principal payments	(-) 2,718,236
Change in accounts payable	(+) -98,971
Change in deferred liabilities	(+) 115,866
Ending liabilities calculated	(=) 4,427,652
Ending liabilities reported	(-) 4,427,652
Discrepancy	(=) 0

Crop & Feed Check

Crop	Corn	Soybeans	Swt Potatoes	FICr Tobacco	Pkkg Cucmbrs	Summr Squash	Swt Corn Dir
Beginning inventory	109,583	56,000	150,000	-	-	-	-
Produced	175,000	64,000	169,500	540,000	18,000	37,500	285,000
Purchased	-	-	-	-	-	-	-
Total sources	284,583	120,000	319,500	540,000	18,000	37,500	285,000
Sold	209,583	64,000	150,000	540,000	18,000	37,500	285,000
Ending inventory	75,000	56,000	169,500	-	-	-	-
Total uses	284,583	120,000	319,500	540,000	18,000	37,500	285,000
Difference (Fed)	0	0	0	0	0	0	0

Crop & Feed Check (continued)

Crop	Tomatoes	Watermelon	Cantaloupe
Beginning inventory	-	-	-
Produced	125,000	50,000	687,500
Purchased	-	-	-
Total sources	125,000	50,000	687,500
Sold	125,000	50,000	687,500
Ending inventory	-	-	-
Total uses	125,000	50,000	687,500
Difference (Fed)	0	0	0