

Economics of a Small Premium Winery

Esendugue Greg Fonsah
Assistant Professor and Extension Economist
University of Georgia
Tifton, GA 31793

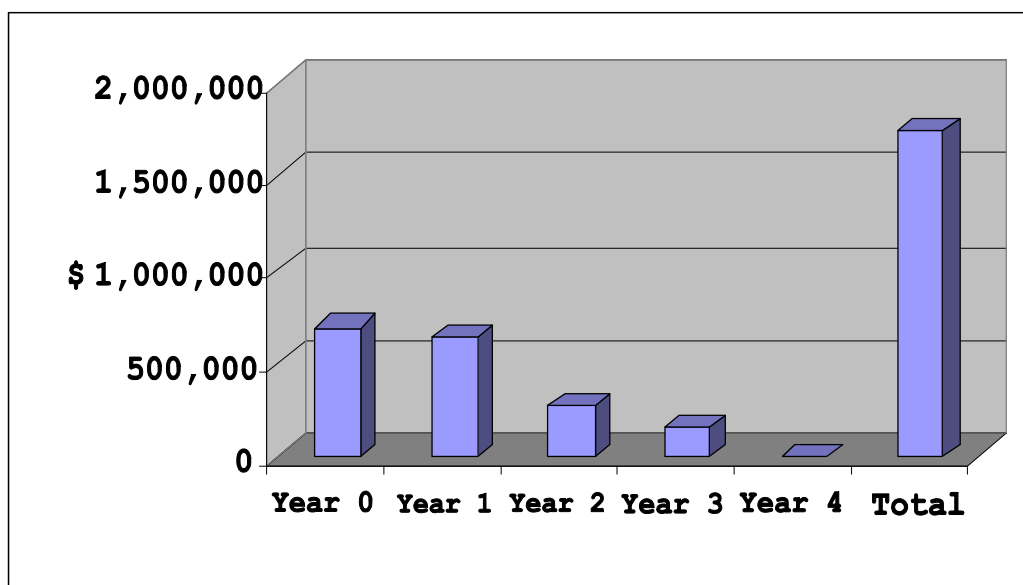
Introduction

This winery budgets originated from “Writing a Business Plan: An Example for a Small Premium Winery” by Mark E. Pisoni and Gerald B. White, Department of Applied Economics and Management, College of Agriculture and Life Sciences, Cornell University, Ithaca, New York, June 2002. Although the proposed winery was to be established in the Finger Lakes region of New York, we believe there will be no major cost differences between New York and Georgia. Furthermore, this study could serve as a guide to those interested in investing in a small winery until such time when a budget for Georgia per se will be developed.

Amount Needed for A Small Premium Winery

The winery was intended to produce four vinifera varieties: (a) Pinot Noir, (b) Cabernet Franc, (c) Chardonnay and (d) Riesling. Initially, only 2,000 cases, i.e. 500 of each would be produced in the first year and increase to 10,000 cases in the fifth year. Figure 1 summarizes the amount of money needed each year to establish a small premium.

Fig 1: Summary of the Amount of Money Needed to Establish A Small Premium Winery



Source: Pisoni and White (2002). Writing a Business Plan: An Example for a Small Premium Winery, Dept. of Ag & Applied Economics & Management, College of Agriculture and Life Sciences, Cornell University, Ithaca, NY, EB 2002-07.

Winery. The highest cost of almost \$700,000 will be incurred in the year 0, which is the first year. Thereafter, the cost decreases with the lowest cost of only \$1,545 in year 4. However, it is important to note that it would cost almost \$2 million to establish a small winery in the first four years.

Projected Revenue for a Small Premium Winery

The projected revenue for a small premium winery reflects zero income in year 1 and up to about \$1.3 million in year 7 and thereafter (Table 1). Direct sales to customers generated 87% of total revenue followed by 7.2 % for direct sales to retailers and 5.5% for sales to distributors. Sales to distributors will not occur until year 6 while direct sales to retailers will not occur until year 5.

Table 1: Projected Revenue for a Small Premium Winery

Revenue	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7+
Direct Sales-Customers	0	\$37,222	\$293,954	\$574,781	\$808,787	\$943,024	\$1,171,477
Direct Sales-Retailers	0	0	0	0	\$59,311	\$77,799	\$96,647
Sales to Distributors	0	0	0	0	0	\$58,939	\$73,217
Total Revenue	0	\$37,222	\$293,954	\$574,781	\$868,098	\$1,079,762	\$1,341,341

Source: Pisoni and White (2002). Writing a Business Plan: An Example for a Small Premium Winery, Dept. of Ag & Applied Economics & Management, College of Agriculture and Life Sciences, Cornell University, Ithaca, NY, EB 2002-07.

Winery, office & vehicles and receiving equipment are the most expensive cost components for year 0. Winery, office and vehicles contributed to 70.2 % of total capital assets in year 0 whereas receiving equipments contributed 13.6 % of annual investment in year 0 (Table 2). Receiving equipment includes forklift, pallet jack, rotator attachment, sort table with conveyor, crusher/destemmer, press and scale (Table 2). Furthermore, there was a 36% decrease in the cost of fermentation/storage from year 0 to year 2. Fermentation/storage includes three tanks, glass carboys, 15-gallon ss kegs and 55-gallon ss drums. The cost of cooperage increased steadily from year 0 to year 5 and include new French oak, old French oak for both chardonnay and reds, barrel washer barrel racks and bungs. Cellar equipment which accounts for 5.4% of total investment in year 0 comprises of transfer pump, Must pump, transfer hose, clamps and fittings, fitting board, bulldog pup, punch down device, stirring rod, SS hopper for dumping pomace into press, SS sump and screen, Plate and frame and lees filter, buckets, carts, food grade shovels, water hose, SO2 dispenser, flashlights, funnels, tools and siphon hoses.

Table 2: Projected Capital Assets

Capital Asset	Year 0	Year 1	Year 2	Year 3	Year 4	Year 5
Receiving Equipment	\$93,740	0	0	0	0	0
Fermentation/Storage	34,231	0	21,748	22,411	23,095	23,799
Cooperage	16,307	0	21,855	28,909	35,831	43,517
Cellar Equipment	37,358	0	0	0	0	0
Lab Equipment	11,152	0	0	0	0	0
Refrigeration	12,628	0	1,272	1,311	1,350	13,620
Bottling line	0	\$122,400	0	425	0	451
Winery, office & vehicles	484,625	0	0	0	0	0
Tasting Room & landscaping	0	331,250	0	0	0	0
Annual Investment	690,042	453,650	44,874	53,056	60,276	81,387

Source: Pisoni and White (2002). Writing a Business Plan: An Example for a Small Premium Winery, Department of Agriculture & Applied Economics & Management, College of Agriculture and Life Sciences, Cornell University, Ithaca, NY, EB 2002-07.

These are all one time spending as no cost is incurred from year 1 through year 5. Lab equipment also incurs a one time initial cost. However, refrigeration, which consists of glycol refrigerator and heating unit, thermostat and valves for tanks, pipes from the chilling unit to the tanks and glycol accounted for 1.8 % total initial investment and 16.7% of annual investment cost for year 5.

Projected Operating Costs

Depreciation and grapes are the largest operating cost component in Table 3. Grapes accounts for 16.2 % of operating cost in year 1 whereas depreciation accounts for 31.4 %. The initial objective of the project was to produce about 2000 cases in year one and 10,000 cases in year five. This can be seen as the operating cost of grapes continues to increase in subsequent years, thus, 20.7%, 25.1%, 27.8%, 28.4%, 27.3% and 26.9% in years 2,3,4,5,6 and 7. Depreciation cost were 37%, 26.7%, 20.9%, 17.6%, 16.5% and 15.3% respectively for years 2,3,4,5, 6 and 7.

Table 3: Projected Operating Costs

Operating costs	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7+
Grapes	\$41,488	\$85,507	132,173	181,606	233,931	241,065	248,418
labor	73,700	85,635	123,768	160,170	223,197	232,096	251,630
Packaging	0	30,783	50,047	77,360	106,293	135,875	141,094
Marketing	10,000	2772	11,274	20,293	31,307	39,977	48,632
Utilities	8,500	10,500	14,000	15,000	16,000	16,488	16,991
Professional fees	6,000	3,500	4,061	4,624	5,189	5,347	5,510
Supplies	1,890	3,280	4,970	6,560	7,950	8,192	8,442
Gasoline, fuel, oil	750	1,500	1,750	2,000	2,250	2,319	2,389
Insurance	9,000	9,275	12,000	12,366	12,743	13,132	13,532
Interest	0	0	0	0	0	0	0
Taxes	9,735	10,528	12,696	15,053	17,542	19,914	22,005
Rents/leases	0	0	0	0	0	0	0
Repairs/Maintenance	11,437	11,886	12,416	13,019	13,833	14,260	14,705
Depreciation	80,154	152,595	140,542	136,490	145,259	146,175	141,144
Miscellaneous	4,000	5,000	7,000	8,000	9,000	9,275	9,557
Total	\$255,655	\$412,761	\$526,697	\$652,540	\$824,493	\$884,115	\$924,050

Source: Pisoni and White (2002). Writing a Business Plan: An Example for a Small Premium Winery, Department of Agriculture & Applied Economics & Management, College of Agriculture and Life Sciences, Cornell University, Ithaca, NY, EB 2002-07.

Projected Income and Expenditure Statement

Total revenue generated from the sales of wine to retailers, wholesalers and distributors were \$37,222, \$293,954, \$575,781 and \$868,098 for years 2, 3, 4 and 5 respectively. These figures look pretty good until total expenses of \$256,654, \$412,761, \$526,697, \$652,541 and \$824,494 for years 2, 3, 4, and 5 are deducted. (Table 4). However, net income before and after taxes are negative for the first four years of the business.

Table 4: Projected Income and Expenditure Statement

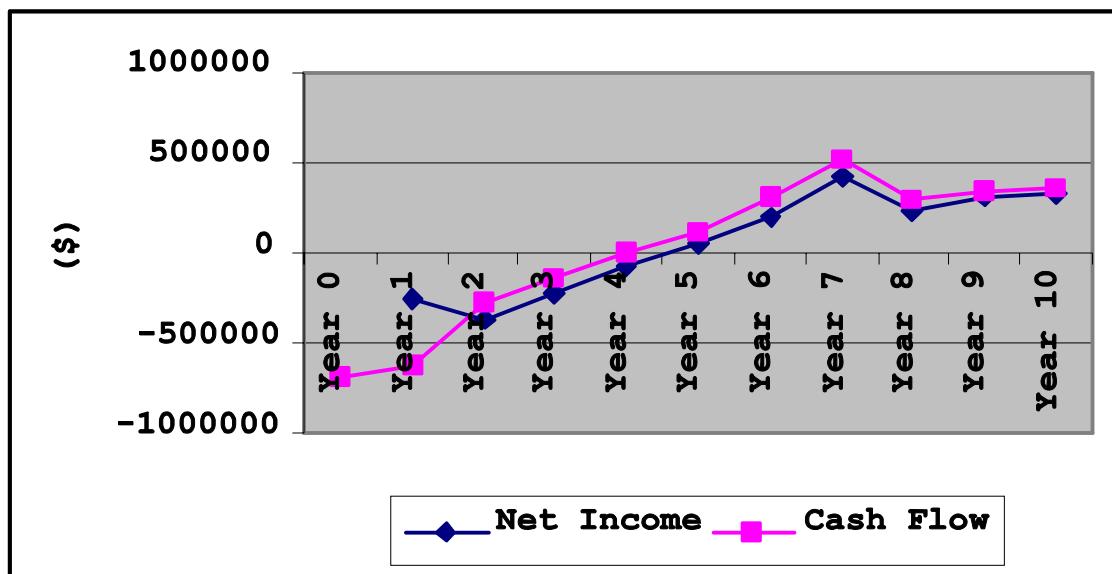
Revenues	Year 0	Year 1	Year 2	Year 3	Year 4	Year 5
Wine sales - Retail	\$ -	\$ -	\$ 37,222	\$ 293,954	\$ 574,781	\$ 808,787
Wine sales - Wholesale	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 59,311
Wine sales - Distributors	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Total Revenue	\$ -	\$ -	\$ 37,222	\$ 293,954	\$ 574,781	\$ 868,098
Expenses						
Grapes	\$ -	\$ 41,488	\$ 85,507	\$ 132,173	\$ 181,606	\$ 233,931
Labor	\$ -	\$ 73,700	\$ 85,635	\$ 123,768	\$ 160,170	\$ 223,197
Packaging	\$ -	\$ -	\$ 30,783	\$ 50,047	\$ 77,360	\$ 106,293
Marketing	\$ -	\$ 10,000	\$ 2,772	\$ 11,274	\$ 20,293	\$ 31,307
Utilities	\$ -	\$ 8,500	\$ 10,500	\$ 14,000	\$ 15,000	\$ 16,000
Professional fees	\$ -	\$ 6,000	\$ 3,500	\$ 4,061	\$ 4,624	\$ 5,189
Supplies	\$ -	\$ 1,890	\$ 3,280	\$ 4,970	\$ 6,560	\$ 7,950
Gasoline, fuel, oil	\$ -	\$ 750	\$ 1,500	\$ 1,750	\$ 2,000	\$ 2,250
Insurance	\$ -	\$ 9,000	\$ 9,275	\$ 12,000	\$ 12,366	\$ 12,743
Interest	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Taxes	\$ -	\$ 9,735	\$ 10,528	\$ 12,696	\$ 15,053	\$ 17,542
Rent/leases	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Repairs & Maintenance	\$ -	\$ 11,437	\$ 11,886	\$ 12,416	\$ 13,019	\$ 13,833
Depreciation	\$ -	\$ 80,154	\$ 152,595	\$ 140,542	\$ 136,490	\$ 145,259
Miscellaneous	\$ -	\$ 4,000	\$ 5,000	\$ 7,000	\$ 8,000	\$ 9,000
Total Expenses	\$ -	\$ 256,654	\$ 412,761	\$ 526,697	\$ 652,541	\$ 824,494
Taxable						
Income before Taxes	\$ -	\$ (256,654)	\$ (375,539)	\$ (232,743)	\$ (77,760)	\$ 43,604
Loss/Gain C/F	\$ -	\$ (256,654)	\$ (632,193)	\$ (864,936)	\$ (942,696)	\$ (899,092)
Income Tax @ 40%						
Net Income	\$ -	\$ (256,654)	\$ (375,539)	\$ (232,743)	\$ (77,759)	\$ 43,604
Capital Purchases	\$ (690,042)	\$ (453,650)	\$ (44,874)	\$ (53,056)	\$ (60,276)	\$ (81,387)
Depreciation	\$ -	\$ 80,154	\$ 152,595	\$ 140,542	\$ 136,490	\$ 145,259
Cash flow	\$ (690,042)	\$ (630,150)	\$ (267,818)	\$ (145,257)	\$ (1,545)	\$ 107,476

Source: Pisoni and White (2002). Writing a Business Plan: An Example for a Small Premium Winery, Department of Agriculture & Applied Economics & Management, College of Agriculture and Life Sciences, Cornell University, Ithaca, NY, EB 2002-07.

Projected Cash Flows and Net Income

From year 0 to year 5, the projected cash flows and net income were negative. From year 5 and thereafter, cash flow and net income were positive. Net income quadrupled in year 6 and doubled in year 7 and leveled off through year 10. On the other hand, cash flow increased almost three-folds in year 6 and almost two folds in year 7 and then leveled off through year 10 (Fig. 2). The decrease in cash flow and total income in years 8, 9 and 10 is due to the 40 % taxes.

Fig. 2: Projected Cash Flows



Source: Pisoni and White (2002). *Writing a Business Plan: An Example for a Small Premium Winery*, Department of Agriculture & Applied Economics & Management, College of Agriculture and Life Sciences, Cornell University, Ithaca, NY, EB 2002-07.

Reference:

1. Pisoni and White (2002). *Writing a Business Plan: An Example for a Small Premium Winery*. Dept. of Ag & Applied Economics & Management, College of Agriculture and Life Sciences, Cornell University, Ithaca, NY, EB 2002-07.

NOTE: Also see Proceedings for the 2004 Georgia-South Carolina Muscadine Conference and Proceedings for the 2004 Georgia-South Carolina Wine Grape pages 47 to 51.