

Eighth Edition

Entrepreneurship

Chapter 10 The Financial Plan

The Financial Plan

- It provides the entrepreneur with a complete picture of:
 - The amount funds and when they are coming into the organization.
 - Where funds are going and how much cash is available.
 - The projected financial position of the firm.
- The plan explains how the entrepreneur intends to meet financial obligations and maintain the venture's liquidity.

Operating and Capital Budgets

- These are developed before developing the pro forma income statement.
- Sales budget – An estimate of the expected volume of sales by month.
 - Cost of sales can be determined from the sales forecasts.
 - In manufacturing ventures, costs of internal production and subcontracting are compared.
 - Includes estimated ending inventory required as a buffer.

Table 10.1 - A Sample Manufacturing Budget for First Three Months

	Jan.	Feb.	Mar.
Projected sales (units)	5,000	8,000	12,000
Desired ending inventory	100	200	300
Available for sale	5,100	8,200	12,300
Less: beginning inventory	0	100	200
Total production required	5,100	8,100	12,100

Operating and Capital Budgets

- Operating costs:
 - Includes fixed expenses incurred regardless of sales volume.
 - Variable expenses must be linked to strategy in the business plan.
- Capital budgets provide a basis for evaluating expenditures that will impact the business for more than one year.

Table 10.2 - A Sample Operating Budget for First Three Months (\$000s)

Expense	January	February	March
Salaries	\$23.2	\$23.2	\$26.2
Rent	2	2	2
Utilities	0.9	0.9	0.9
Advertising	13.5	13.5	17
Selling expenses	1	1	1
Insurance	2	2	2
Payroll taxes	2.1	2.1	2.5
Depreciation	1.2	1.2	1.2
Office expenses	<u>1.5</u>	<u>1.5</u>	<u>1.5</u>
Total expenses	\$47.4	\$47.4	\$53.9

Pro Forma Income Statements

- Pro forma income - Projected net profit calculated from projected revenue minus projected costs and expenses.
 - Sales by month is calculated first.
 - Basis of the figures - Marketing research, industry sales, trial experience, forecasting, and financial data on similar start-ups.
 - Projections of all operating expenses for each of the months during the first year should be made.

Pro Forma Income Statements (cont.)

- Increasing selling expenses as sales increase should be taken into account.
- Changes in expenses during the first year can necessitate month-by-month illustration.
- Increase in individual expenses need to be reflected in the first year's pro forma income statement.
- Projections should be made for years 2 and 3 as well; consider expenses that are likely to remain stable over time.

Table 10.3 - MPP Plastics Inc., Pro Forma Income Statement, First Year by Month (\$000s)

	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Totals
Sales	20.0	32.0	48.0	70.0	90.0	100.0	100.0	100.0	80.0	80.0	120.0	130.0	970.0
Less: Cost of goods sold	<u>10.0</u>	<u>16.0</u>	<u>24.0</u>	<u>35.0</u>	<u>45.0</u>	<u>50.0</u>	<u>50.0</u>	<u>50.0</u>	<u>40.0</u>	<u>40.0</u>	<u>60.0</u>	<u>65.0</u>	<u>485.0</u>
Gross profit	10.0	16.0	24.0	35.0	45.0	50.0	50.0	50.0	40.0	40.0	60.0	65.0	485.0
Operating expenses													
Salaries*	23.2	23.2	26.2	26.2	26.2	26.2	26.2	26.2	26.2	26.2	26.2	26.2	308.4
Rent	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	24.0
Utilities	0.9	0.9	0.9	0.8	0.8	0.8	0.9	0.9	0.9	0.8	0.8	0.9	10.3
Advertising	13.5	13.5	17.0	17.0	17.0	17.0	14.0	14.0	14.0	21.0 [†]	17.0	17.0	192.0
Sales expenses	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	12.0
Insurance	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	24.0
Payroll taxes	2.1	2.1	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	29.2
Depreciation [‡]	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	14.4
Office expenses	<u>1.5</u>	<u>1.5</u>	<u>1.5</u>	<u>1.7</u>	<u>1.8</u>	<u>2.0</u>	<u>2.0</u>	<u>2.0</u>	<u>1.8</u>	<u>1.8</u>	<u>2.2</u>	<u>2.2</u>	<u>22.0</u>
Total operating expenses	47.4	47.4	54.3	54.4	54.5	54.7	51.8	51.8	51.6	58.5	54.9	55.0	636.3
Gross profit	(37.4)	(31.4)	(30.3)	(19.4)	(9.5)	(4.7)	(1.8)	(1.8)	(11.6)	(18.5)	5.1	10.0	(151.3)

Pro Forma Cash Flow

- Projected cash available calculated from projected cash accumulations minus projected cash disbursements.
 - It is not the same as profit.
 - Sales may not be regarded as cash.
 - Use of profit as a measure of success may be deceiving if there is significant negative cash flow.
 - Cash flow can be projected using the indirect or direct method.

Table 10.5 - Statement of Cash Flows: The Indirect Method

Cash Flow from Operating Activities: (+ or – Reflects Addition or Subtraction from Net Income)	
Net income	XXX
Adjustments to net income:	
Noncash nonoperating items:	
+ depreciation and amortization	XXX
Cash provided by changes in current assets or liabilities:	
Increase(+) or decrease(–) in accounts receivable	XXX
Increase(+) or decrease(–) in inventory	XXX
Increase(+) or decrease(–) in prepaid expenses	XXX
Increase(+) or decrease(–) in accounts payable	<u>XXX</u>
Net cash provided by operating activities	XX,XXX
Cash Flow from Other Activities	
Capital expenditures (–)	(XXX)
Payments of debt (–)	(XXX)
Dividends paid (–)	(XXX)
Sale of stock (+)	<u>XXX</u>
Net cash provided by other activities	(XXX)
Increase (Decrease) in Cash	XXX

Pro Forma Cash Flow (cont.)

- Entrepreneurs must make monthly projections of cash.
 - If disbursements are greater than receipts - entrepreneur must either borrow funds or have cash in a bank.
 - Large positive cash flows need to be invested or deposited in a bank for periods when disbursements are greater than receipts.
 - Determining the exact monthly receipts and disbursements is difficult.
- Pro forma cash flow is based on best estimates.

Table 10.6 - MPP Plastics Inc., Pro Forma Cash Flow, First Year by Month (\$000s)

	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
Receipts												
Sales	12.0	27.2	41.6	61.2	82.0	96.0	100.0	100.0	88.0	80.0	104.0	126.0
Disbursements												
Equipment purchase	72.0	—	—	—	—	—	—	—	—	—	—	—
Cost of goods	8.0	14.8	22.4	37.6	43.0	49.0	50.0	50.0	42.0	40.0	56.0	60.0
Salaries	23.2	23.2	26.2	26.2	26.2	26.2	26.2	26.2	26.2	26.2	26.2	26.2
Rent	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Utilities	0.9	0.9	0.9	0.8	0.8	0.8	0.9	0.9	0.9	0.8	0.8	0.9
Advertising	13.5	13.5	17.0	17.0	17.0	17.0	14.0	14.0	14.0	21.0	17.0	17.0
Sales expense	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Insurance	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Payroll & misc. taxes	2.1	2.1	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
Office expenses	1.5	1.5	1.5	1.7	1.8	2.0	2.0	2.0	1.8	1.8	2.2	2.2
Inventory*	<u>0.2</u>	<u>0.4</u>	<u>0.6</u>	<u>0.6</u>	<u>0.8</u>	<u>0.8</u>	<u>1.0</u>	<u>1.0</u>	<u>1.0</u>	<u>1.0</u>	<u>1.2</u>	<u>1.2</u>
Total disbursements	126.4	61.4	76.1	91.4	97.1	103.3	101.6	101.6	93.4	98.3	110.9	115.0
Cash flow	(114.4)	(34.2)	(34.5)	(30.2)	(15.1)	(7.3)	(1.6)	(1.6)	(5.4)	(18.3)	(6.9)	11.0
Beginning balance [†]	300.0	185.6	151.4	116.9	86.7	71.6	64.3	62.7	61.1	55.7	37.4	30.5
Ending balance	185.6	151.4	116.9	86.7	71.6	64.3	62.7	61.1	55.7	37.4	30.5	41.5

Pro Forma Balance Sheet

- Summarizes the projected assets, liabilities, and net worth of the new venture.
 - It is a picture of the business at a certain moment in time and does not cover a period of time.
 - Consists of:
 - Assets - Items that are owned or available to be used in the venture operations; can be current or fixed.
 - Liabilities - Money that is owed to creditors; can be current or long-term debt.
 - Owner's equity - Amount owners have invested and/or retained from the venture operations.

Table 10.7 - MPP Plastics Inc., Pro Forma Balance Sheet, End of First Year (\$000s)

Assets		
Current assets		
Cash	\$41.5	
Accounts receivable	52.0	
Inventory	<u>1.2</u>	
Total current assets		\$ 94.7
Fixed assets		
Equipment	72.0	
Less depreciation	<u>14.4</u>	
Total fixed assets		<u>57.6</u>
Total assets		<u><u>\$152.3</u></u>
Liabilities and Owners' Equity		
Current liabilities		
Accounts payable	<u>\$13.6</u>	
Total liabilities		\$ 13.6
Owners' equity		
K. Peters	100.0	
C. Peters	100.0	
J. Welch	100.0	
Retained earnings	<u>(151.3)</u>	
Total owners' equity		<u>148.7</u>
Total liabilities and owners' equity		<u><u>\$152.3</u></u>

Break-Even Analysis

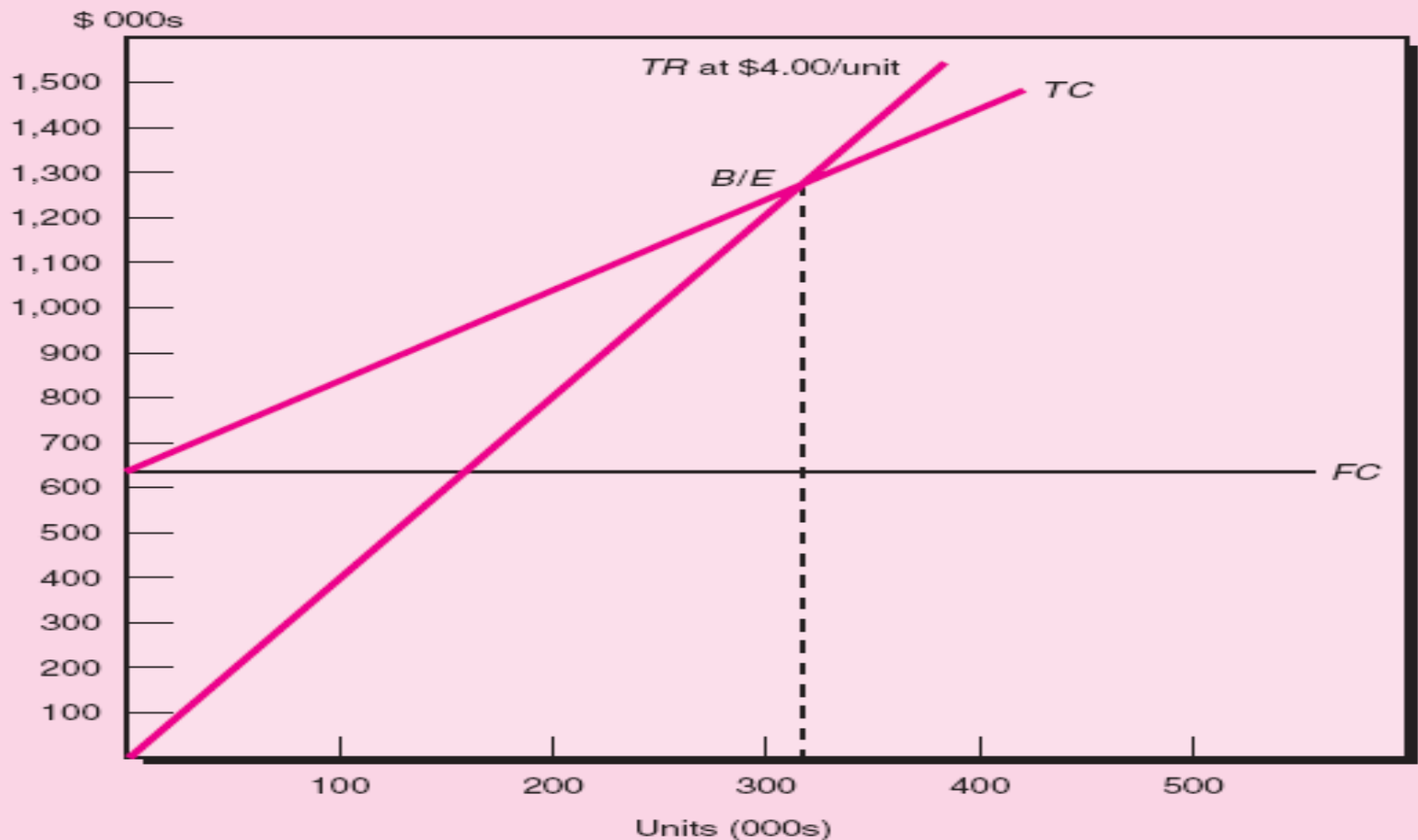
- Breakeven - Volume of sales where the venture neither makes a profit nor incurs a loss.

- The break-even formula:

$$B/E(Q) = \frac{TFC}{SP-VC/unit \text{ (marginal contribution)}}$$

- Major weakness in calculating the breakeven lies in determining if a cost is a fixed or variable.

Figure 10.1 - Graphic Illustration of Breakeven



Pro Forma Sources and Applications of Funds

- Sources:
 - Operations.
 - New investments.
 - Long-term borrowing.
 - Sale of assets.
- Uses/ Applications:
 - Increase assets.
 - Retire long-term liabilities.
 - Reduce owner or stockholders' equity.
 - Pay dividends.

Software Packages

- A spreadsheet program (Microsoft Excel) is most suitable for completing pro forma statements.
 - Helps present different scenarios and assess their impact on the pro forma statements.
- A simple and easy to use software is useful in the start-up stage.
- Software packages vary in price and complexity.