**HANDOUT XVI**

**FINANCE 300 CHAPTER 4**

**DR. BOUDREAUX SPRING 2022**

**FINANCIAL PLANNING: PRO FORMA STATEMENTS**

**& CASH BUDGET**

FINANCIAL PLANNING INCLUDES:

1.Cash Planning (Cash Budget)

2. Profit or Performance Planning: Pro Forma Income Statement (Income statement in the future) – on upcoming test

3.Investment & Financial Mix Planning: Pro Forma Balance Sheet (Balance sheet in the future)

Strategic (Long-term) Years out, integrated strategy (Senior Executives)

Operating (Short-term) 1-3 Years (Middle Management) – Cash budget,

**The Sales Forecast-The starting point for all Short-term planning – have to have sales before you move forward. All short range planning is the sales forecast.**

Future sales can be predicted or forecasted by many sophisticated and naive methods.

-Econometric Models: Ford Motor Company

-Naïve Method: Asks Sales Force – seeking info by asking the sales team to go out and ask the customers

-Carnegie **Andrew Carnegie** was a [Scottish-American](http://en.wikipedia.org/wiki/Scottish-American) [industrialist](http://en.wikipedia.org/wiki/Industrialist) who led the enormous expansion of the American [steel industry](http://en.wikipedia.org/wiki/Steel_industry) in the late 19th century. He was also one of the most important [philanthropists](http://en.wikipedia.org/wiki/Philanthropists) of his era.

Carnegie was born in [Dunfermline](http://en.wikipedia.org/wiki/Dunfermline), Scotland, and emigrated to the United States with his parents in 1848. His first job in the United States was as a factory worker in a [bobbin](http://en.wikipedia.org/wiki/Bobbin) factory. Later on he became a bill logger for the owner of the company. Soon after he became a messenger boy. Eventually he progressed up the ranks of a telegraph company. He built Pittsburgh's [Carnegie Steel Company](http://en.wikipedia.org/wiki/Carnegie_Steel_Company), which was later merged with [Elbert H. Gary](http://en.wikipedia.org/wiki/Elbert_H._Gary)'s Federal Steel Company and several smaller companies to create [U.S. Steel](http://en.wikipedia.org/wiki/U.S._Steel). With the fortune he made from business among others he built [Carnegie Hall](http://en.wikipedia.org/wiki/Carnegie_Hall), later he turned to philanthropy and interests in education, founding the [Carnegie Corporation of New York](http://en.wikipedia.org/wiki/Carnegie_Corporation_of_New_York), [Carnegie Endowment for International Peace](http://en.wikipedia.org/wiki/Carnegie_Endowment_for_International_Peace), [Carnegie Institution of Washington](http://en.wikipedia.org/wiki/Carnegie_Institution_of_Washington), [Carnegie Mellon University](http://en.wikipedia.org/wiki/Carnegie_Mellon_University) and the [Carnegie Museums of Pittsburgh](http://en.wikipedia.org/wiki/Carnegie_Museums_of_Pittsburgh).

Carnegie gave most of his money to establish many [libraries](http://en.wikipedia.org/wiki/Carnegie_library), schools, and universities in the United States, the United Kingdom, Canada and other countries, as well as a pension fund for former employees. He is often regarded as the [second-richest man in history](http://en.wikipedia.org/wiki/List_of_wealthiest_historical_figures) after [John D. Rockefeller](http://en.wikipedia.org/wiki/John_D._Rockefeller). Carnegie started as a [telegrapher](http://en.wikipedia.org/wiki/Telegraph) and by the 1860s had investments in railroads, railroad sleeping cars, bridges and oil derricks. He built further wealth as a bond salesman raising money for American enterprise in Europe. Carnegie once gave $25,000 to Speaker of the House [David B. Henderson](http://en.wikipedia.org/wiki/David_B._Henderson) to erect a library on the campus of [Upper Iowa University](http://en.wikipedia.org/wiki/Upper_Iowa_University) in his name.[[2]](http://en.wikipedia.org/wiki/Andrew_Carnegie#cite_note-1)

He earned most of his fortune in the [steel industry](http://en.wikipedia.org/wiki/Steel). In the 1870s, he founded the [Carnegie Steel Company](http://en.wikipedia.org/wiki/Carnegie_Steel_Company), a step which cemented his name as one of the "Captains of Industry". By the 1890s, the company was the largest and most profitable industrial enterprise in the world. Carnegie sold it in 1901 for $480 million to [J.P. Morgan](http://en.wikipedia.org/wiki/J.P._Morgan), who created [U.S. Steel](http://en.wikipedia.org/wiki/U.S._Steel). Carnegie devoted the remainder of his life to large-scale philanthropy, with special emphasis on local libraries, world peace, education and scientific research. His life has often been referred to as a true "[rags to riches](http://en.wikipedia.org/wiki/Rags_to_riches)" story.

Pro Forma Statements – forecast future performance

A pro forma statement is a look at a what-if scenario. It's a tool that business owners, decision-makers, stakeholders, investors, creditors, and others use to examine hypothetical conditions. They can look forward or backward, revealing financial information that standard financial statements simply cannot provide

**Business Planning & Financial Modeling**

It's helpful for business leaders to look at side-by-side comparisons based on different assumptions to guide their strategies. If, for instance, management is trying to decide between two separate proposals or business plans, they can use pro forma statements for each scenario to see which might serve their goals and vision best. In fact, creating the pro forma statements for each of those scenarios is a useful exercise in of itself, letting the decision-makers:

* Identify the different assumptions driving each of the scenarios
* Create sales and budget projections for each
* Collect the results in P&L projections
* Use the data to generate cash flow projections
* Compare the resulting pro forma balance sheets
* Gauge the effectiveness of each scenario against industry benchmarks using financial ratio analysis

In a sense, pro forma financial statements allow management to A/B test different strategies without any real-world impact.

**Gauge the Impact of Financial Decisions**

Yes, that subheader is a mouthful, but there's a reason for that – it encompasses an awful lot. One of the most common uses of pro forma statements is projecting the impact of a significant event, perhaps a [business combination](https://blog.embarkwithus.com/2018-updates-asc-805-business-combinations) or refinancing debt. Just like the previous section, a company can use a pro forma income statement, balance sheet, and cash flow statement to project how a significant event might affect its financial position.

In this case, think of pro forma statements like dipping your toe in the water before diving into a pool. If the water feels too cold – i.e., the pro forma projections aren't favorable – it's probably not a great idea to take a dip. But if the water is to your liking, then you might benefit from a nice swim.

**Financial Reporting**

Naturally, pro formas aren't just useful for internal purposes. Companies use them in external reports for stockholders, creditors, and potential investors. Publicly traded companies have to include pro forma statements with any SEC filing, registration statements, or proxy statements. This only makes sense since stockholders need to know the impact of significant changes – relative to the company's financial statements – that have either already occurred or are going to occur. Some of those changes might include:

* The impact of a change in newly adopted accounting standards
* An updated estimate on the economic life and net residual value of an asset
* A business combination from an [acquisition](https://blog.embarkwithus.com/technical-accounting-subjects-to-know-for-an-acquisition-1), disposition, investment, or combined interests of two or more existing business lines
* Correcting errors made in previously filed reports

Also, it's important to remember that the Securities and Exchange Commission, AICPA, and FASB have specific guidelines regarding the form, content, and necessity of pro forma financials under particular circumstances. Therefore, whatever prompts the need for pro forma statements, you must be sure to adhere to any mandatory guidelines. For instance, [SOX regulations](https://www.sec.gov/rules/final/33-8176.htm) state that a company must file a set of statements that conform to generally accepted accounting principles (GAAP) in conjunction with any pro formas to avoid giving the public a false impression of a company's actual financial status.

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**PROFIT PLANNING**- Preparing Pro forma Income Statements

A simple but not accurate method is the percentage of sales method. This method assumes ALL expenses are **variable.**

Managerial Approach, estimates expenses based on past experience or expectations.

1. **Gross profit**: Take all of your expected revenue adjustments – i.e., price changes, new product lines & customers, promotional offers – and inflate them by the expected amount. Do the same with the cost of goods sold (COGS) to arrive at your pro forma gross profit.
2. **Total operating expenses**: Look through every line item and identify what costs you will cut in the following year. Make those cuts and then inflate your expenses by your projected rate for your pro forma total operating expenses.
3. **Net income before taxes**: Net your gross profit and total operating expenses
4. **Taxes**: Multiply your estimated tax rate by your net income
5. **Net income after taxes**: Subtract your tax bill from your net income before taxes to arrive at your pro forma profit after taxes.

**FINANCING PLANNING**- Preparing Pro forma Balance Sheet

1. Transfer the change in retained pro forma earnings from your hot-off-the-presses pro forma income statement to the balance sheet
2. Identify adjustments to your current assets and liabilities that will vary according to the sales variance used in the projection
3. Use the usual suspects – assets, total liabilities, owner's equity – to complete the balance sheet.

USES

1-Forecasting the firm’s Investments or Assets for Planning Purposes. – forecast how our assets

2-Forecasting how the investments are going to be financed (Financing Mix) for Planning Purposes.

3-External Funds Needed (EFN) – tells us if we need additional financing

If the Left-Hand Side of the Balance Sheet is larger than right hand side, what does this forecast?

THE FINANCIAL MANAGER WILL PERFORM FINANCIAL STATEMENT ANALYSIS WITH THE PRO FORMA STATEMENTS.

**CASH MANAGEMENT-**Preparing the Cash Budget

Reasons for Holding Cash (Professor Baumol)

1. Transaction Motive
2. Precautionary Motive
3. Speculative Motive
4. Compensating Balance

THE CASH BUDGET-A very important tool to help manage cash, AR and AP

The cash budget:

Matched expected cash inflows to expected cash outflows and the budget shows expected cash position or cash balance at different time periods

**Cash Inflows:**

EXAMPLES: Cash Sales, Collect Accounts Receivable, Interest Income, Dividend Income, Sell Assets, Issue Securities

**Cash Outflows:**

EXAMPLES: Cash Purchases, Pay Account Payable, Principle Payments, Interest Expense, Taxes, Purchase Assets, Pay Dividends,

BUDGET FORMAT (YOU MUST KNOW THIS):

1. CASH INFLOWS:

List

1. CASH OUTFLOWS:

List

1. NET CASH FLOW
2. BEGIN CASH BALANCE
3. END CASH BALANCE
4. REQUIRED CASH BALANCE
5. EXCESS (SHORTAGE)

REASONS TO PREPARE CASH BUDGET

1. Use as Budget- compare expected to actual values and investigate variances
2. Predicts Cash Shortages and Surpluses and allows for planning

Shortages

Surpluses

1. Loan Documentation (Cash Budget shows how much is needed, when is the loan needed, reason for borrowing, and when repayment can be expected)BASIC CASH

If there is much Uncertainty in the cash flows perform **SENSITIVITY ANALYSIS** or **WHAT IF ANALYSIS**

CASH FLOW MANAGEMENT- Attempt To Synchronize cash flows (match inflows to outflows)

To slow down cash flow:

Check Clearing-it takes time to clear checks so take advantage of mail float and collection float.

To speed up collection: Require Wire transfers or use of PAYPAL

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THE FINANCIAL MANAGER WILL PERFORM FINANCIAL STATEMENT ANALYSIS WITH THE PRO FORMA STATEMENTS.

PRO FORMA INCOME STATEMENT PRkmOBLEM

METROLINE MANUFACTURING

INCOME STATEMENT

% SALES MANAGERIAL

YEAR\_2012\_\_\_\_\_\_% YEAR\_2013\_\_\_\_\_\_ YEAR\_\_\_\_\_\_\_

SALES $1,400,000 1.000 $1,500,000 $1,500,000

CGS 910,000 .650 975,000

Gross P 490.000 .350

OE 120,000

Oper prof. 370,000

Int. 35000

Prof b/taxes 335000

Tax (.4) 134000

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PRO FORMA BALANCE SHEET PROBLEM PAGE

LEONARD INDUSTRIES

PRO FORMA BALANCE SHEET

YEAR\_\_\_\_\_\_\_\_\_\_\_\_\_

Cash $50,000

Marketable Securities

Accounts Receivable

EXAMPLE PROBLEM

CASH BUDGET

You are given the following information for the Boodro Company:

Actual Sales 3rd QTR Estimated Sales 4th QTR

July $500,000 Oct. $2,000,000

Aug. $700,000 Nov. $4,000,000

Sept. $900,000 Dec. $6,000,000

Actual Purchases 3rd QTR Estimated Purchases 4th QTR

July $300,000 Oct. $2,500,000

Aug. $400,000 Nov. $4,500,000

Sept. $700,000 Dec. $1,500,000

One-half of the sales each month are for cash and one half are on credit. One half of the credit sales are collected in the month following the sale and the other one half is collected two months following the sale.

Costs of Goods Sold (CGS) are equal to 70% of sales.

Boodro pays cash for 75% of its purchases and pays the other 25% the month following the purchase.

Other monthly cash expenses are estimated at $30,000 (rent), $25,000 (salaries) and $10,000 (interest).

Depreciation, which is the only non-cash expense, will be $40,000 per month.

No change is expected in the 50% income tax rate. Income tax expense for October through December (4th QTR) will be paid in December.

Preferred Dividends of $50,000 will be paid in October.

Equipment totaling $500,000 will be purchased for cash in November.

In November, the firm will sell equipment for its book value (no tax consequence) of $250,000. The money will be collected in December.

The Company intends to float a $5,000,000 (raise capital by issuing new stock) preferred stock issue in October. There will be 10% investment banker fee, which will be paid in October (disregard for the income statement). The money for the preferred stock issue will be received in December.

The cash balance is $200,000 on October 1, and a minimum balance of $200,000 is desired.

REQUIRED: Prepare a monthly cash budget for the Company. Do not forget to prepare a quarterly pro forma income statement to determine the expected income tax.

BOODRO COMPANY

PROFORMA 4th QTR

INCOME STATEMENT

SALES $

SALES(000’s)

PURCHASE(000’s)

CASH BUDGET

AUG SEPT **OCT NOV DEC**

I.CASH INFLOWS

1. Cash Sales = St  \* .5