

Chapter 1

Managerial	Financial
Internal users (information stays within the company, a manager may request information)	External users (information is available to the public: stockholders, banks, etc.)
Non-GAAP	Complies with GAAP
Departmental/divisional reporting	Company-wide reporting (shows the big picture)
Reports are prepared as needed	Reports are prepared at the end of a period
More timely (relevance)	Less timely (reliability)

Chapter 2

As the cost driver level **increases**:

	Total Cost	Cost Per Unit
Variable	Increases	Stays Constant
Fixed	Stays Constant	Decreases
Mixed	Increases	Decreases

As the cost driver level **decreases**:

	Total Cost	Cost Per Unit
Variable	Decreases	Stays Constant
Fixed	Stays Constant	Increases
Mixed	Decreases	Increases

- Cost Behavior is the way a cost reacts to changes
 - The activity that causes costs to change is called the cost driver
 - Ex: The cost driver of an electricity bill (the cost object) would be the output
- **Variable Cost:** a cost that changes in total as a cost driver activity changes
 - A company manufactures cameras, each camera needs a lens that will cost \$10, the cost object is the camera lens

Cost Driver (Output)	Cost Per Lens	Total Cost
----------------------	---------------	------------

300	10	3000
600	10	6000
1200	10	12000

- **Fixed Cost:** a cost that does not change in total as the cost driver activity changes
 - o You rent an apartment with three bedrooms, no matter how many people you have stay in that apartment, your rent will remain constant; however, your cost per person may change, the cost object is the rent

Cost Driver (# of people)	Cost Per Person	Total Cost
1	600	600
2	300	600
3	200	600

- **Discretionary Fixed Costs:** fixed costs that management has the ability to change in the short run (things you can cut, advertising, research and development)
- **Committed Fixed Costs:** fixed costs that the company cannot change in the short run (something you can't get out of, a lease)
- **Mixed Costs:** a cost that has a fixed cost and a variable cost component
 - o The cost of an electric bill: you have a fixed fee (a fee that you will pay even if you use no electricity) and your bill goes up with your usage
- **Cost Estimation:** goal is to determine the amount of fixed and variable costs
 - o Use a linear approach (cost function)

$$y = mx + b$$

Y- total cost

M- variable cost per unit

X- activity level, number of units

B- total fixed cost

- o This is used to estimate or predict future costs
- **Scattergraph (Visual Fit) Method**
 - o This is the **least accurate** because there is no standardization
 - o Calculate the fixed cost first
 - o Given a scattergraph, a line-of-best-fit is drawn, the point in which your line hits the y-axis is your estimated fixed cost (b)
 - o To get your slope (m), select two points and use the following formula

$$\frac{Y_2 - Y_1}{X_2 - X_1}$$

$$X_2 - X_1$$

- **High-low Method**

- o This is in the **middle in terms of accuracy** because everything is based on two points
- o Calculate the slope first
- o First, identify the highest and lowest points based on **cost driver activity**
- o Using these two points, determine the slope

$$\frac{Y_2 - Y_1}{X_2 - X_1}$$

- o Plug in the slope, the total cost, and the number of units into the cost function formula ($y = mx + b$), and solve for b
 - You can use either the high or the low point, both points will give you the same answer
- **Regression Analysis**
 - o Statistical technique where you plug data into software and it calculates the cost function for you
 - o Because it takes all historical data into account, it is the **most accurate**

- **Contribution Margin Analysis**

$$\begin{array}{r} \text{Sales Revenue} \\ - (\text{Total Variable Expenses}) \\ - (\text{Total Fixed Expenses}) \\ \hline \text{Operating Income} \end{array}$$

(1) Contribution Margin Per Unit: Sales Price Per Unit - Variable Cost Per Unit

Total amount left after variable expenses that can go towards fixed expenses and profit.

(2) Contribution Margin = Sales Revenue - Variable Expenses

How much you make per unit that can go towards fixed expenses and profit.

(3) Contribution Margin Ratio = $\frac{\text{Contribution Margin}}{\text{Sales Revenue}}$

Percent from every dollar you get in sales that go towards fixed expenses and profit.

- Ex: Tropical Smoothie sells smoothies for \$3 each and their variable costs total to \$1.80. They have a fixed expense of \$4000.
 - o What is the contribution margin per smoothie?
 - $\$3.00 - 1.80 = 1.20$
 - o What is the contribution margin if 5000 smoothies were sold?
 - $(\$3 \times 5000) - (1.80 \times 5000)$
 $\$15000 - 9000 = 6000$
 $*\$1.20 \times 5000 \text{ will also give you } 6000*$
 - o What is the contribution margin ratio?
 - $\$6000 / 15000 = 40\%$
 $\$1.20 / 3 = 40\%$

Sales - Variable Expenses = Contribution Margin - Fixed Expenses = Operating Income

- o What is the operating income if 5,000 smoothies are sold?
 - $\$15000 - 9000 = 6000 - 4000 = 2000$