

# Management Accounting

Fall 2024  
Practical class 12  
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# AGENDA



## THEORETICAL RECAP

CVP Analysis  
Operating Leverage



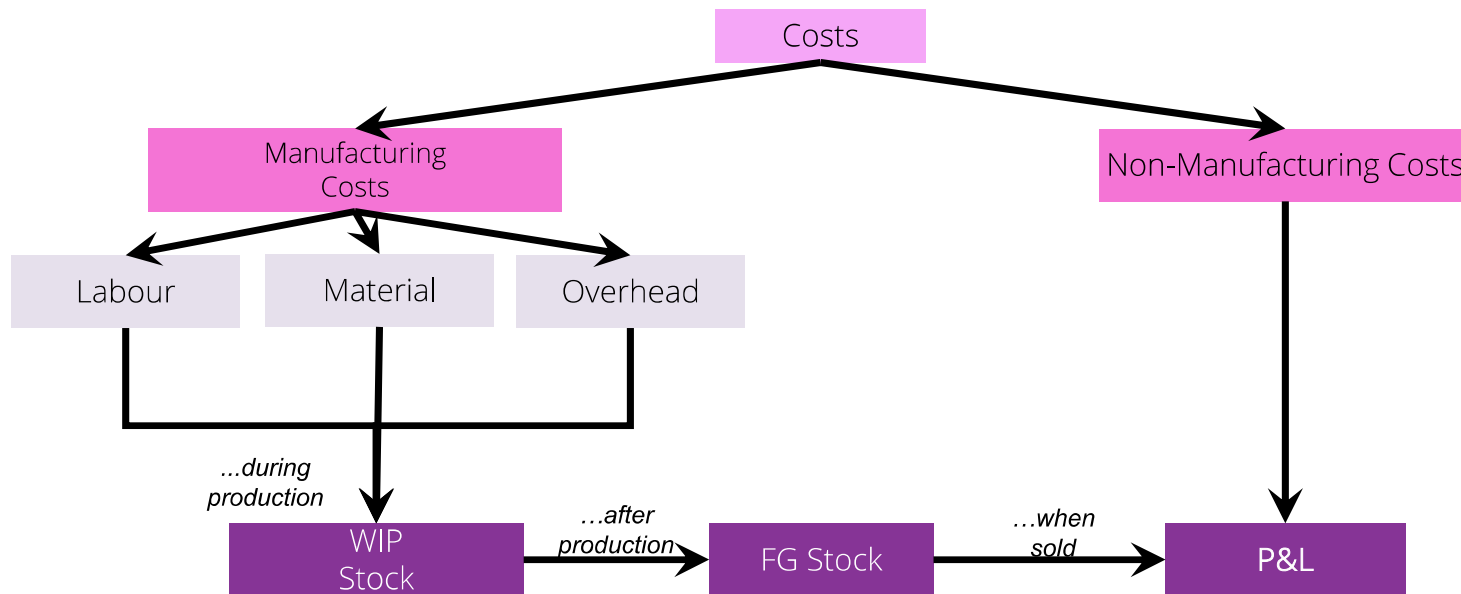
## CHAPTER 8 and 9

Problem 31

# Theoretical Class Recap (or not)

## Alternative Costing System

- .....● So far, we have (**Absorption or full costing system**):
  - .....● Allocate all manufacturing cost to products, and to value unsold inventories at their total cost of manufacture
  - .....● Non-manufacturing costs were not allocated to the products but were charged directly to the P&L and excluded from the inventory valuation (period costs)

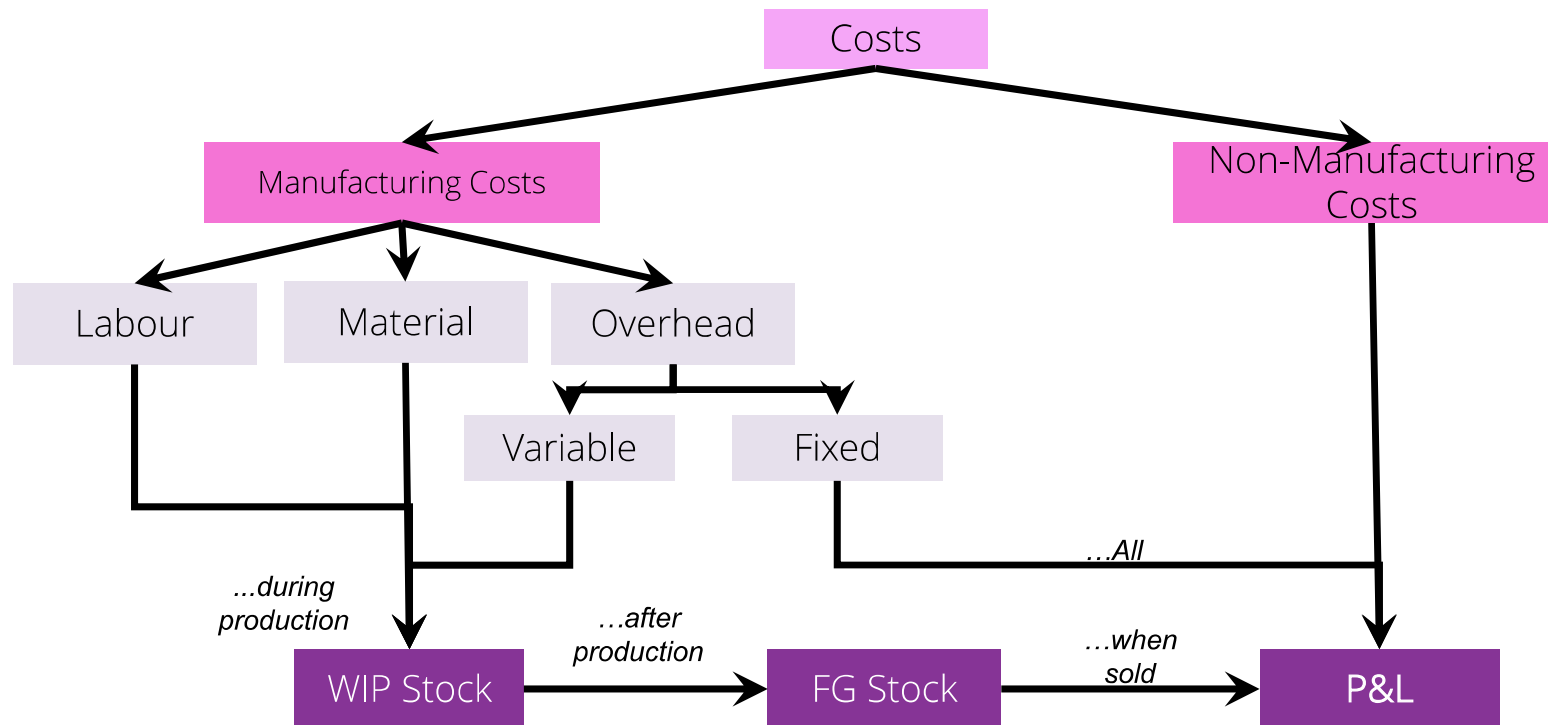


# Theoretical Class Recap (or not)

## Alternative Costing System

### .....● Variable Costing System

- .....● Manufacturing costs: only the variable costs go to the product
- .....● Non-manufacturing costs go directly to the P&L



# Theoretical Class Recap (or not)

Alternative Costing System  
In between we have:

## Full Costing Based on Practical Capacity

- .....● Assigns variable manufacturing costs plus a share of total manufacturing fixed costs to products, after taking into account **practical capacity** (The production that is likely to be produced by the machine after taking into consideration unavoidable interruptions arising from machine maintenance and plant holiday closures)

## Full Costing Based on Budgeted Activity

- .....● Assigns variable manufacturing costs plus a share of the total manufacturing fixed costs to products, after taking into account the **budgeted activity** (the activity level [volume of production] based on the capacity utilization required for the next budget period)

# Theoretical Class Recap (or not)

Alternative Costing System

## Summing up

Type of System	COGM	Under-recovery of OH (UROH)
Variable Costing	$MVC \text{ u } * \text{ Real Production}$	MFC
Total Full Costing	$MVC \text{ u } * \text{ Real production} + \text{MFC}$	0
Full Costing Based on Practical Capacity	$MVC \text{ u } * \text{ Real production} + \text{MFC} * \frac{\text{Real Production}}{\text{Practical Capacity}}$	$\text{MFC} * (1 - \frac{\text{Real Production}}{\text{Practical Capacity}})$
Full Costing Based on Budgeted Activity	$MVC \text{ u } * \text{ Real production} + \text{MFC} * \frac{\text{Real Production}}{\text{Budgeted Activity}}$	$\text{MFC} * (1 - \frac{\text{Real Production}}{\text{Budgeted Activity}})$

# Key takeaways from exercise

## DIFFERENCES IN $\pi$ USING ALTERNATIVE COSTING SYSTEMS

### **PRODUCTION > SALES**

- .....● We have increasing stock levels, so full costing systems produces higher profits

### **SALES < PRODUCTION**

- .....● We have decreasing stock levels, and for that reason variable costing systems produces higher profits

### **SALES = PRODUCTION**

- .....● Profits are the same for any costing system

# Theoretical Class Recap (or not)

Cost Volume – Profit Analysis

## P&L IN THE CM FORMAT

P&L in CM Format	
(+)	1. Sales
(-)	2. Cost of Goods Sold (COGS) under Variable Costing
(=)	3. Gross Profit
(-)	4. Non-Manufacturing Variable Costs
(=)	5. Contribution Margin
(-)	6. Manufacturing Fixed Costs
(-)	7. Non-Manufacturing Fixed Costs
(=)	8. Operating Profit

\*NOTE: Contribution Margin “includes” both manufacturing and non-manufacturing costs as long as they are Variable!; All fixed costs are recognized afterwards



# Theoretical Class Recap (or not)

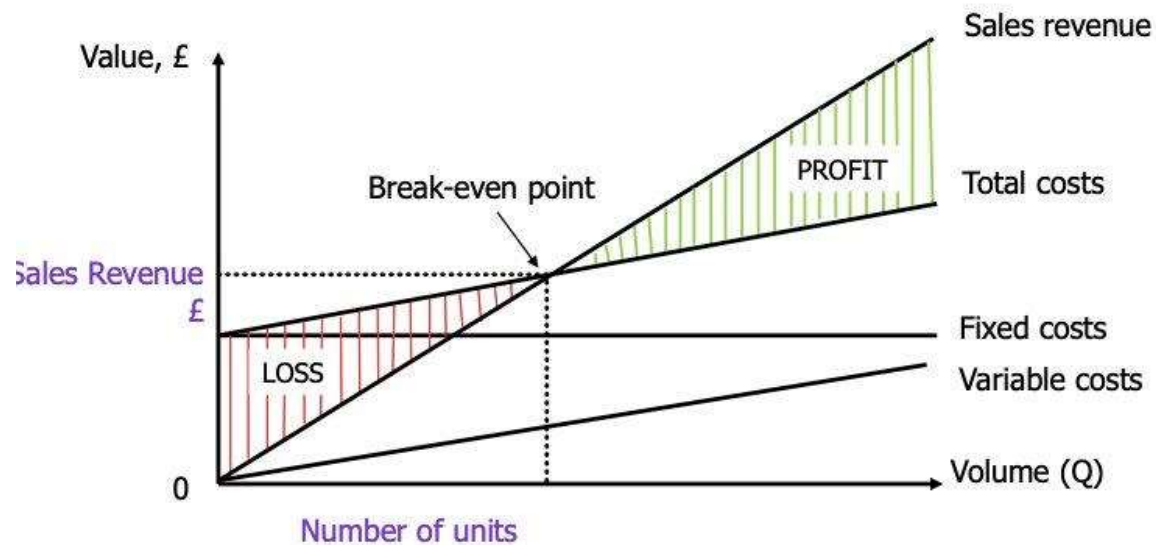
## Cost Volume – Profit Analysis

### Break Even Point:

- .....● Level of Sales (in € or units) that makes Total Costs = Total Revenues and profit = 0

$$\text{BEP un} = \frac{\text{Fixed Costs}}{\text{SP un} - \text{VC un}}$$

$$\text{BEP €} = \text{BEP un} * \text{SP un}$$



# Theoretical Class Recap (or not)

## Cost Volume – Profit Analysis

### Safety margin

- .....● Safety Margin 1: By how much sales are above BEP

$$SM\ 1 = \frac{Sales - BEP}{BEP}$$

- .....● Safety Margin 2: How much sales may decrease before the firm starts incurring in a loss

$$SM\ 2 = \frac{Sales - BEP}{Sales}$$

\*NOTE: Safety Margins can be calculated with either BEP/Sales in units or € (you only need to be careful with consistency)