

Marginal vs Absorption Costing

Chapter 2.6

Marginal vs Absorption Costing Systems

Costing methods for product costing and profit measurement

Key focus: **treatment of fixed production overheads**

Introduction

In product costing:

- All manufacturing costs are assigned to products
- Used for **inventory valuation and reporting**

Two approaches:

- Absorption costing (Full costing)
- Marginal costing (Variable costing)

Absorption Costing

Absorption costing includes:

- ✓ Direct materials
- ✓ Direct labour
- ✓ Variable overhead
- ✓ **Fixed production overhead**

👉 All costs are absorbed into product cost

Marginal costing

- Marginal costing includes only:
- ✓ Variable manufacturing costs

👉 Fixed production overheads are treated as **period costs** and charged to P&L

Contribution Concept

Contribution = Sales – Variable Costs

Contribution is used to:

- Cover fixed costs
- Generate profit

👉 Key concept in marginal costing

Contribution Example

◆ Given Data

A company sells a product with the following details:

Particular	Per Unit (Rs.)
Selling price	200
Direct material	60
Direct labour	40
Variable overhead	20

Fixed costs = Rs. 300,000

Units sold = 5,000

◆ Step 1 – Calculate Variable Cost per Unit

Variable cost
= 60 + 40 + 20
= **Rs. 120**

◆ Step 2 – Contribution per Unit

Contribution
= Selling price – Variable cost
= 200 – 120
= **Rs. 80**

◆ Step 3 – Total Contribution

Total contribution
= 80 × 5,000
= **Rs. 400,000**

◆ Step 4 – Profit Calculation

Profit
= Contribution – Fixed cost
= 400,000 – 300,000
= **Rs. 100,000**

Cost Treatment Comparison

Cost Component	Marginal	Absorption
Variable costs	Included	Included
Fixed overhead	Period cost	Product cost

👉 Main difference lies in **fixed overhead treatment**

Unit Cost Comparison

Cost Element	Marginal (Rs.)	Absorption (Rs.)
Variable cost	120	120
Fixed overhead	—	80
Total cost	120	200

Income Statement – Marginal Costing

	\$	\$
Sales		X
Less Cost of sales:		
Opening inventory	X	
Variable cost of production	X	
Less Closing inventory	(X)	
	—	(X)
		—
Less Other variable costs		X
Contribution		(X)
Less fixed costs		X
		(X)
		—
Profit/loss		X
		—

Example - Income Statement – Marginal Costing

◆ Given Data

A company produces and sells **4,000 units**

Particular	Per Unit (Rs.)
Selling price	150
Direct material	40
Direct labour	30
Variable overhead	20

Fixed costs = Rs. 200,000

◆ Step 1 – Variable Cost per Unit

Variable cost
= $40 + 30 + 20$
= **Rs. 90**

◆ Step 2 – Contribution per Unit

Contribution
= Selling price – Variable cost
= $150 - 90$
= **Rs. 60**

◆ Step 3 – Total Contribution

Total contribution
= $60 \times 4,000$
= **Rs. 240,000**

◆ Step 4 – Profit Calculation

Profit
= Contribution – Fixed cost
= $240,000 - 200,000$
= **Rs. 40,000**

Example - Income Statement – Marginal Costing

◆ Marginal Costing Statement

Particular	Amount (Rs.)
Sales ($4,000 \times 150$)	600,000
Variable costs ($4,000 \times 90$)	(360,000)
Contribution	240,000
Fixed costs	(200,000)
Profit	40,000

◆ Key Teaching Point

- ✓ Only **variable costs** are deducted to find contribution
- ✓ Fixed costs are deducted **separately**
- ✓ Profit depends mainly on **sales volume**

Income Statement – Absorption Costing

Sales	\$	\$
Less Cost of sales:		X
Opening inventory	X	
Variable cost of production	X	
Fixed overhead absorbed	X	
less closing inventory	(X)	
		(X)
(under)/over-absorption		X
Gross profit		(X) / X
Less Non-production costs		X
		(X)
Profit/loss		X

Absorption Costing Profit Calculation

Valuation of inventory at Absorption Costing

Opening and closing inventory are valued at full production cost under absorption costing.

Under/over-absorbed overhead

An adjustment for under or over absorption of overheads is necessary in absorption costing income statements.

Example -Income Statement – Absorption Costing

◆ Given Data

Production = **5,500 units**
Sales = **4,800 units**

Particular

Per Unit
(Rs.)

Selling price	200
Direct material	50
Direct labour	40
Variable production overhead	30

Budgeted fixed production overhead = **Rs. 240,000**
Budgeted production = **5,000 units**
Administration cost = **Rs. 60,000**

◆ Step 1 – Fixed Overhead Absorption Rate

Fixed OH absorption rate
= Budgeted fixed production OH ÷ Budgeted production
= $240,000 \div 5,000$
= **Rs. 48 per unit**

◆ Step 2 – Absorption Cost per Unit

Cost Element	Rs.
Direct material	50
Direct labour	40
Variable production overhead	30
Fixed production overhead absorbed	48
Absorption cost per unit	168

Example -Income Statement – Absorption Costing

◆ Step 3 – Value of Production

Production cost
= $5,500 \times 168$
= **Rs. 924,000**

◆ Step 4 – Closing Inventory

Closing inventory
= Production – Sales
= $5,500 - 4,800$
= **700 units**
Closing inventory value
= 700×168
= **Rs. 117,600**

◆ Step 5 – Cost of Goods Sold Before OH Adjustment

COGS before adjustment
= Cost of production – Closing inventory
= $924,000 - 117,600$
= **Rs. 806,400**

◆ Step 6 – Over-Absorption of Fixed Overhead

Absorbed fixed overhead
= $5,500 \times 48$
= **Rs. 264,000**
Actual fixed production overhead
= **Rs. 250,000**
Over-absorbed overhead
= $264,000 - 250,000$
= **Rs. 14,000**

👉 Since overhead is **over-absorbed**, it is deducted from cost of goods sold.

Adjusted COGS
= $806,400 - 14,000$
= **Rs. 792,400**

Example -Income Statement – Absorption Costing

◆ Step 7 – Profit Calculation

Particular	Amount (Rs.)
Sales (4,800 × 200)	960,000
Adjusted cost of goods sold	(792,400)
Gross profit	167,600
Administration cost	(60,000)
Net profit	107,600

◆ Key Teaching Points

- Under **absorption costing**, fixed production overhead is included in product cost.
- If absorbed overhead is more than actual overhead, there is **over-absorption**.
- Over-absorbed overhead is usually **deducted from cost of goods sold**.
- Administration cost is treated as a **period cost** and charged to profit statement.

Inventory Valuation

Method	Inventory Value
Marginal	Variable cost only
Absorption	Full cost

Profit Difference

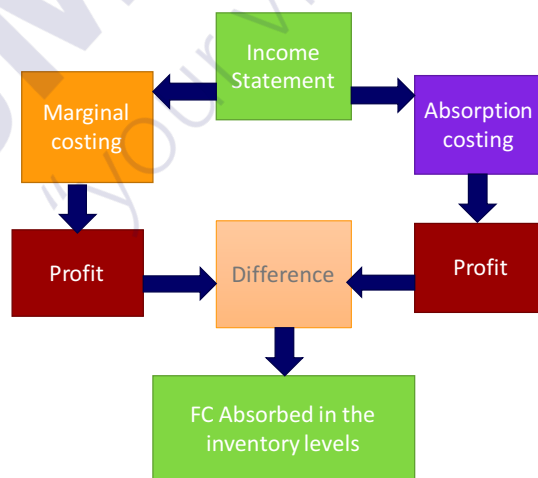
Profit differs due to:

👉 Fixed overhead in inventory

Formula:

$\text{Difference} = \text{Change in inventory} \times \text{Fixed OH rate}$

Why difference in profit?



Example 1 - Profit Difference (Marginal vs Absorption)

◆ Given Data (Same Scenario)

Production = 5,500 units
 Sales = 4,800 units
 Fixed production overhead = Rs. 240,000
 Normal absorption rate = Rs. 48 per unit
 📁 Closing inventory = 700 units

◆ Step 1 – Profits from Both Methods

Absorption Costing Profit

= Rs. 107,600 (from previous slide)

Marginal Costing Profit

Under marginal costing:

- Fixed production overhead is fully expensed
 - Inventory carries **no fixed OH**
- 📁 Profit = Rs. 74,000

◆ Step 2 – Profit Difference

Difference
 = Absorption – Marginal
 = 107,600 – 74,000
 = Rs. 33,600

◆ Step 3 – Reconciliation

Difference arises due to **fixed OH in closing inventory**

Formula:

Profit difference
 = Closing inventory × Fixed OH rate
 = 700 × 48
 = Rs. 33,600 ✓

Particular	Rs.
Profit (Marginal Costing)	74,000
Add: Fixed OH in closing inventory (700 × 48)	33,600
Profit (Absorption Costing)	107,600

Example 2- Profit Difference (Marginal vs Absorption)

Given

- Opening inventory = 200 units
- Closing inventory = 500 units
- Fixed production overhead absorption rate = Rs. 30 per unit
- Profit under marginal costing = Rs. 120,000

Step 1 – Calculate change in inventory

Change in inventory
 = Closing inventory – Opening inventory
 = 500 – 200
 = 300 units increase

Step 2 – Calculate fixed overhead deferred in inventory

Profit difference
 = Change in inventory × Fixed OH rate
 = 300 × 30
 = Rs. 9,000

Step 3 – Reconcile profits

Particular	Rs.
Profit as per Marginal Costing	120,000
Add: Fixed overhead in closing inventory	15,000
Less: Fixed overhead in opening inventory	(6,000)
Profit as per Absorption Costing	129,000

Example 2- Profit Difference (Marginal vs Absorption)

Short explanation

Opening inventory fixed OH

= 200×30 = **Rs. 6,000**

Closing inventory fixed OH

= 500×30 = **Rs. 15,000**

Net increase in deferred fixed OH

= $15,000 - 6,000$ = **Rs. 9,000**

Therefore, **absorption costing profit is higher by Rs. 9,000**

because inventory has increased and some fixed production overhead is carried forward in closing stock instead of being fully charged in the current period.

Profit Behaviour

Situation

Production = Sales

Production > Sales

Sales > Production

Result

Same profit

Absorption profit higher

Marginal profit higher

Advantages (Marginal Costing)

- ✓ Better for decision making
- ✓ Clear cost behaviour
- ✓ Prevents profit manipulation
- ✓ Useful for pricing and planning

Advantages (Absorption Costing)

Required for financial reporting

- ✓ Complies with IFRS / SLFRS
- ✓ Ensures full cost recovery
- ✓ Suitable for long-term pricing

Disadvantages

Marginal Costing

- ✗ Not allowed for external reporting
- ✗ May understate inventory

Absorption Costing

- ✗ Can manipulate profit (overproduction)
- ✗ Less useful for decisions

Hybrid Approach (Important Slide)

In practice, companies use both:

- ✓ Absorption costing → external reporting
- ✓ Marginal costing → internal decision making

👉 This provides:

- Compliance
- Better management insight

Real-World Application

Example:

Manufacturing company uses:

- Absorption → financial statements
- Marginal → pricing, product mix, decisions

👉 Reconciliation prepared monthly

Key Takeaway

👉 No single method is perfect

- Marginal → short-term decisions
- Absorption → reporting & compliance

Final Summary

- ✓ Difference = Fixed overhead treatment
- ✓ Profit depends on inventory changes
- ✓ Both methods are important
- ✓ Used together in practice

