Lesson 7:

Variable Costing & Absorption Costing

7.1 Introduction

Income from operations is one of the most important information reported by a company. Depending on the decision –making needs of management, income from operations can be determined using absorption or variable costing.

7.2 Learning Outcomes

By the end of this lesson, you should be able to:

- explain the differences between absorption costing and variable costing system;
- prepare profit statements based on a variable costing and absorption costing system; and
- explain the difference in profits between variable and absorption costing profit calculations.

7.3 Required Readings

Drury, Chapter 7

7.4 Points to Ponder/Takeaways

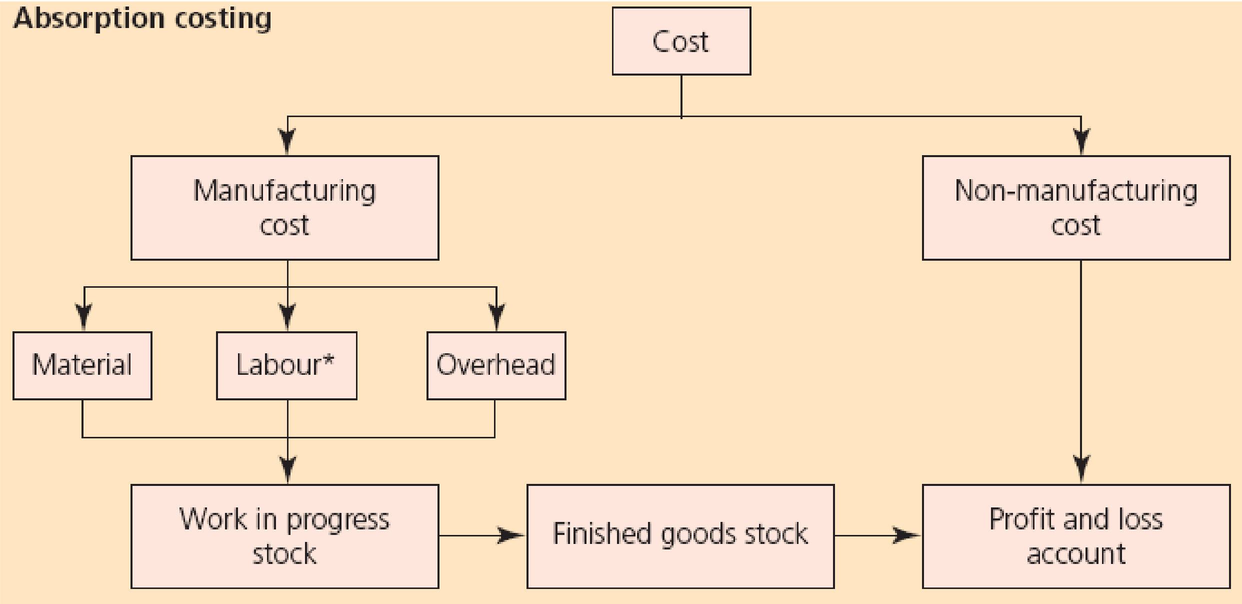
Variable costing system	Variable costing also known it as marginal costing. Is a system that assigns only variable manufacturing costs, not fixed manufacturing costs to products and includes them in the inventory valuation.
Absorption costing system	Absorption costing also known it as full costing system. Is a costing system that allocates all manufacturing costs including fixed manufacturing costs, to products and value unsold inventories at their total cost of manufacture.

7.5 Learning Material

1.Absorption and variable costing

Absorption costing (also known as full costing) traces all manufacturing costs to products and treats non-manufacturing overheads as a period cost.

Variable costing (also known as direct or marginal costing) traces all variable costs to products and treats fixed manufacturing overheads and non-manufacturing overheads as a period cost. Therefore, variable and absorption costing differ in the treatment of fixed manufacturing costs.



Example

The following information is available for periods 1–6 for a company that produces a single product:

	£
Unit selling price	10
Unit variable cost	6
Fixed costs for each period	300 000

Normal activity is expected to be 150 000 units per period, and production and sales for each period are as follows:

	Period 1	Period 2	Period 3	Period 4	Period 5	Period 6
Units sold (000's)	150	120	180	150	140	160
Units produced (000's)	150	150	150	150	170	140

There were no opening stocks at the start of period 1, and the actual manufacturing fixed overhead incurred was £300 000 per period. Assume that non-manufacturing overheads are £100 000 per period.

1.1Variable costing statements

	Period 1 £000's	Period 2 £000's	Period 3 £000's	Period 4 £000's	Period 5 £000's	Period 6 £000's
Opening stock	–	–	180	–	–	180
Production cost	900	900	900	900	1 020	840
Closing stock	–	(180)	–	–	(180)	(60)
Cost of sales	900	720	1 080	900	840	960
Fixed costs	300	300	300	300	300	300
Total costs	1 200	1 020	1 380	1 200	1 140	1 260
Sales	1 500	1 200	1 800	1 500	1 400	1 600
Gross profit	300	180	420	300	260	340
Less Non-manufacturing costs	100	100	100	100	100	100
Net profit	200	80	320	200	160	240

1.2Absorption costing statements

	Period 1 £000's	Period 2 £000's	Period 3 £000's	Period 4 £000's	Period 5 £000's	Period 6 £000's
Opening stock	–	–	240	–	–	240
Production cost	1 200	1 200	1 200	1 200	1 360	1 120
Closing stock	–	(240)	–	–	(240)	(80)
Cost of sales	1 200	960	1 440	1 200	1 120	1 280
Adjustment for under/(over) recovery of overhead	–	–	–	–	(40)	20
Total costs	1 200	960	1 440	1 200	1 080	1 300
Sales	1 500	1 200	1 800	1 500	1 400	1 600
Gross profit	300	240	360	300	320	300
Less Non-manufacturing costs	100	100	100	100	100	100
Net profit	200	140	260	200	220	200

2.Profit comparisons (variable and absorption costing)

- Profits are the same for both methods when production equals sales (no changes in stock levels)in periods 1 and 4.

- Where production exceeds sales (increasing stock levels) the absorption costing system produces higher profits in periods 2 and 5.

- Where sales exceed production (declining stock levels)the variable costing system produces higher profits in periods 3 and 6.

- With an absorption costing system profits can decline when sales volume increases and costs remain unchanged (e.g. period 6).

3.Some arguments in support of variable costing

• Variable costing provides more useful information for decision-making.

• Variable costing removes from profit the effect of stock changes.

• Variable costing avoids fixed overheads being capitalized in unsaleable stocks.

3.1Some arguments in support of absorption costing

• Absorption Costing does not understate the importance of fixed costs.

• Absorption costing avoids fictitious losses being reported (e.g stocks accumulated for seasonal sales).

• Absorption costing is theoretically superior to variable costing.(Note cost obviation concept favours variable costing, whereas revenue production concept favours absorption costing.)