Absorption Costing V's Marginal Costing

Author: Richie Hoare, Examiner:- Formation 2 Management Accounting

The objective of this article is to present, with detailed workings, the structure, content and format of profit statements prepared under both marginal and absorption costing principles.

Absorption costing:
Absorption costing principles must be used when preparing financial statements for external purposes. One of the key principles of absorption costing is that inventory and units produced must include a share of all production costs, both fixed and variable, incurred in getting them to their present condition. Using the following example, prepare a profit statement using absorption costing principles for the months of May and June:

<u>EXAMPLE:</u>
Galway Plc manufactures and sells a single product .The following budgeted/ actual information is provided in relation to the production of this product:

	€
Selling price per unit	50.00
Direct materials per unit	8.00
Direct labour per unit	5.00
Variable production overheads per unit	3.00

Details for the months of May and June 2010 are as follows:

	May	**June**
Production of Product A	500	380
Sales of Product A (units)	300	500

Fixed production overheads are budgeted at €4,000 per month and are absorbed on a unit basis. The normal level of production is budgeted at 400 units per month.

<u>Other costs</u>

Fixed selling	€4,000 per month
Fixed Administration	€2,000 per month
Variable sales commission	5% of sales revenue

There was no opening inventory of Product A at the start of May.

Working 1: Calculate <u>full production cost</u>	**€**
Direct materials	8.00
Direct labour	5.00
Variable production o/h's	3.00
Fixed production o/h's[€4,000/400 units]	<u>10.00</u>
Full production cost	26.00

Working 2: Calculate value of inventory and production (These must be valued at €26 p/u]

	Opening inventory	Production	Closing inventory
May	0	[500 units x €26] = €13,000	[200 units x €26] = €5,200
June	[200 units x €26] = €5,200	[380 units x 26] = €9,880	[80 units x €26] = €2,080

Working 3: Under/over absorbed fixed production overhead

	May	June
Actual fixed prod o/h	€4,000	€4,000
Fixed o/h absorbed	€5,000 [500*€10]	€3,800 [380 units *€10]
	€1,000 (over absorbed)	€200 (under absorbed)

<u>Absorption costing profit statement</u>

	May	May	June	June
	€	€	€	€
Sales		15,000		25,000
<u>Less cost of sales</u>				
Opening inventory (w2)	0		5,200	
Production (w2)	13,000		9,880	
Closing inventory (w2)	(5,200)	(7,800)	(2,080)	(13,000)
(Under)/over absorbed Fixed prod o/h (w3)		1,000		(200)
Gross profit		8,200		11,800
<u>Less expenses</u>				
Variable sales commission	750		1,250	
Fixed administration	2,000		2,000	
Fixed selling	4,000	(6,750)	4,000	(7,250)
Net profit		1,450		4,550

Marginal Costing

Marginal costing principles are used for internal decision making purposes (short-term). As fixed costs are incurred regardless of the level of activity the purpose of marginal costing is to determine what contribution is been generated (sales less variable costs). Using the previous example prepare a marginal costing profit statement for the months of May and June.

Working 1: Calculate <u>the variable production cost</u>	€
Direct materials	8.00
Direct labour	5.00
Variable production o/h's	<u>3.00</u>
Variable production cost	16.00

Working 2: Calculate value of inventory and production (These must be valued at €16 p/u]

	Opening inventory	**Production**	**Closing inventory**
May	0	[500 units x €16]= €8,000	[200 units x €16] = €3,200
June	[200 units x €16] = €3,200	[380 units x €16] = €6,080	[80 units x €16] = €1,280

<u>**Marginal costing profit statement**</u>

	May	**May**	**June**	**June**
	€	€	€	€
Sales		15,000		25,000
<u>**Less variable costs**</u>				
Opening inventory (w2)	0		3,200	
Production (w2)	8,000		6,080	
Closing inventory (w2)	<u>(3,200)</u>	(4,800)	<u>(1,280)</u>	(8,000)
Variable sales commission		<u>(750)</u>		<u>(1,250)</u>
Contribution		9,450		15,750
<u>**Less fixed costs**</u>				
Fixed production	4,000		4,000	
Fixed administration	2,000		2,000	
Fixed selling	<u>4,000</u>	<u>(10,000)</u>	<u>4,000</u>	<u>(10,000)</u>
Profit		(550)		5,750

Difference in profit figures calculated under absorption and marginal costing principles:

The difference between the profit figures calculated under absorption and marginal costing principles is caused by the treatment of fixed production overheads. In marginal costing the full amount of fixed production overheads is written off in the period that it occurs. In absorption part of the fixed production overheads is carried between accounting periods as part of inventory valuations.

Reconciliation of profit figures

	May	June
Profit under absorption	€1,450	€4,550
Difference in units of inventory * fixed production overhead p/u	(€2,000) [200 units * €10]	€1,200 [120 units * €10]
Profit under marginal costing	(€550)	€5,750

When the number of units produced is higher than the number of units sold absorption profit will be higher than marginal profit
When the number of units produced is less than the number of units sold absorption profit will be lower than marginal profit.