

CHAPTER 9

Inventory Costing
and
Capacity Analysis

INVENTORY COSTING CHOICES: OVERVIEW

- ◉ Variable costing—a method of inventory costing in which all variable manufacturing costs (direct and indirect) are included as inventoriable costs. (Also known as direct costing) - **Internal reporting to management.**
- ◉ Absorption costing—a method of inventory costing in which all variable and fixed manufacturing costs are included as inventoriable costs. You can say that inventory “absorbs” all manufacturing costs. **Required for external financial reporting.**
- ◉ Throughput costing—only direct materials are capitalized; all other costs are expensed.

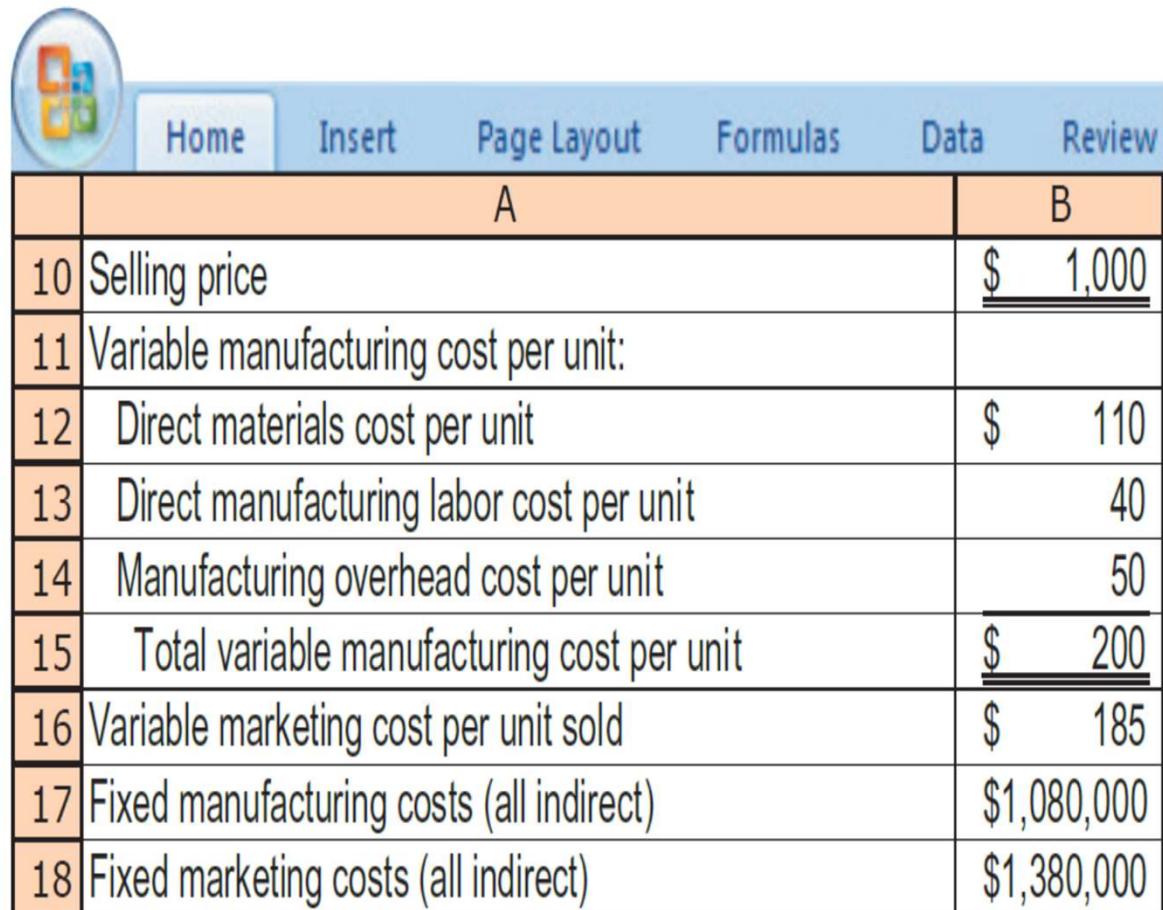
INVENTORY COSTING: DIFFERENCES IN INCOME

- ◉ Operating income will differ between absorption and variable costing.
- ◉ The amount of the difference represents the amount of fixed manufacturing costs capitalized as inventory under absorption costing and expensed as a period cost under variable costing.
- ◉ If inventory levels change, operating income will differ between the two methods because of the difference in accounting for fixed manufacturing costs.

EXAMPLE

	2017	2018
Units produced	8,000 units	8,000 units
Beginning inventory	0	2,000 units
Units sold	6,000 units	10,000 units
Ending inventory	2,000 units	0

ACTUAL PRICE AND COST DATA FOR 2017 & 2018



	A	B
10	Selling price	<u>\$ 1,000</u>
11	Variable manufacturing cost per unit:	
12	Direct materials cost per unit	\$ 110
13	Direct manufacturing labor cost per unit	40
14	Manufacturing overhead cost per unit	50
15	Total variable manufacturing cost per unit	<u>\$ 200</u>
16	Variable marketing cost per unit sold	\$ 185
17	Fixed manufacturing costs (all indirect)	\$1,080,000
18	Fixed marketing costs (all indirect)	\$1,380,000

Based on the preceding information, costs per unit under the two inventory costing methods are as follows:

	Variable Costing	Absorption Costing
V.C per unit produced		
DM	\$110	\$110
DL	40	40
Manufacturing OH	50	50
Fixed cost per unit produced	-	135*
Total inventoriable cost per unit produced	\$200	\$335

*(1080,000/8,000)

Income Statements under A.C and V.C for 2017

	2017
	APSORPTION COSTING
Sales	\$6,000,000
less: C.G.S	<u>2,010,000</u>
Gross profit	\$3,990,000
Less: Variable marketing costs	1,110,000
Fixed manufacturing costs	<u>1,380,000</u>
Operating income	\$1,500,000
	VARIABLE COSTING
Sales	\$6,000,000
less: Variable C.G.S	1,200,000
Variable marketing costs	<u>1,110,000</u>
Contribution margin	\$3,690,000
less: Fixed manufacturing costs	1,080,000
Fixed marketing costs	<u>1,380,000</u>
Operating income	\$1,230,000

Income Statements under A.C and V.C for 2018

	2018
	APSORPTION COSTING
Sales	\$10,000,000
less: C.G.S	<u>3,350,000</u>
Gross profit	\$6,650,000
less: Variable marketing costs	1,850,000
Fixed marketing costs	<u>1,380,000</u>
Operating income	\$3,420,000
	VARIABLE COSTING
Sales	\$10,000,000
less: Variable C.G.S	2,000,000
Variable marketing costs	<u>1,850,000</u>
Contribution margin	\$6,150,000
less: Fixed manufacturing costs	1,080,000
Fixed marketing costs	<u>1,380,000</u>
Operating income	\$3,690,000

COMPARING VARIABLE COSTING AND ABSORPTION COSTING

	Variable Costing	Absorption Costing
Are fixed OH inventoried?	No	Yes
How do changes in unit inventory levels affect operating income?		
Production = Sales	Equal	Equal
Production higher than Sales	Lower	Higher
Production lower than Sales	Higher	Lower

Thank You

