

CONTRIBUTION MARGIN INCOME STATEMENT



OBJECTIVES:

1. *Variable cost margin,*
2. *Fixed charges,*
3. *Formation of the result*

PREREQUISITE:

1. *Distinction between fixed costs and variable costs*

Introduction:

It is noted that some of the company's expenses vary according to the production or activity and that others are independent of activity in a given structure. This difference of behaviour leading to reclassification of charges:

The differential income statement is a fundamental control state management, which highlights the margin left over from variable costs and, subsequently, to identify the break-even point of a company.

the structure of the contribution margin income statement :

The contribution margin income statement is a table, which contains:

- **TURNOVER**, which is the sum of sales made by the company in the course of its activity (sale of products or services).
- **VARIABLE COSTS**, that is the expenses incurred by the company for the operation of its various services and which vary in particular according to the volume of activity and seasonality (for example: purchase of raw materials, electricity costs, delivery costs, business bonuses paid to employees, etc.);
- **CONTRIBUTION MARGIN**: obtained by subtracting the variable costs from turnover, it represents the share of the remaining turnover after deducting variable costs. It can also, when obtained by adding the unit margins, identify which products or services are most profitable for the company;
- **FIXED COSTS**, which are the expenses incurred by the business regardless of its volume of activity (for example: rent, maintenance costs of the business premises, salaries, insurance premiums, etc.);
- **NET INCOME**, which represents the profits made by the company during the accounting year to which the financial statement relates, i.e. turnover less costs (variable and fixed, including depreciation, interest and taxes).

Application

The head of the ABC business provides you with the following information extracts from his accounts:

1. Initial raw material stock: 12 500
2. Initial stock of finished products: 15 000
3. Final raw material stock: 13 500
4. Final stock of finished products: 14 142.5
5. Raw material purchase: 43 000
6. Turnover: 121 700

7. Variable supply charges: 11 830
8. Variable distribution charges: 7 820.5
9. Variable production costs: 27 550
10. Fixed charges: 26 000

The contribution margin income statement is presented as follows:

https://up.coursdefsjes.com/uploads/s5/cours-de-contrôle-de-gestion-approfondi-coursdefsjes_com.pdf

Turnover Chiffres d'affaires				121 700	
Variable cost of purchase Coût variable d'achat			53 830	-53 830	
+ Consumption of raw materials + Consommation de matières premières		42 000			
- purchase	43 00				
- Initial stock	0				
- final stock	12 50				
	0				
	-13				
	500				

+Charges variables d'approvisionnement		11 830			
+ Charges variables d'approvisionnement					
<i>variable margin/purchase cost</i> MARGE/COÛT VARIABLE D'ACHAT				67 870	55,77%
<i>Variable production cost</i> Coût variable de production			28 407,5	- 28 407,5	
+ Variation de stocks de produits finis		857,5			
+ Change in finished product stocks					
- Initial stock	15 00				
- Final stock	0				
	-14				
	143				
+ Variable production costs		27 550			
+ Charges variables de production					
<i>margin/variable cost of production</i> MARGE/COÛT VARIABLE DE PRODUCTION				39 462,5	32,43%
<i>Variable distribution cost</i> Coût variable de distribution			7 821	-7 821	
+ Variable distribution costs		7 820,5			
+ Charges variables de distribution					
			90 058		74%

<i>Total variable charges</i>					
Charges variables totales					

Marge	sur	coût	variable
31 642	26%		
Charges fixes			-
26 000			
Résultat			différentiel
5 642	4,64%		

Dans cet exemple, le taux de marge apparaît comme égal à 26%. Cette présentation du résultat met l'accent sur l'analyse des charges variables et impute globalement les charges fixes sur la marge sur coût variable. Le gestionnaire ressent alors son objectif de rentabilité comme l'obligation de maximiser la marge sur coût variable sur laquelle viendront s'imputer les frais fixes sur lesquels il n'a pas prise. Dans cette optique, il est intéressant de savoir à partir de quand la marge sur coût variable couvrira les frais fixes.

In this example, the margin rate appears to be 26%. This presentation of the result focuses on variable load analysis and allocates fixed loads globally to the variable cost margin.

The manager then feels his objective of profitability as the obligation to maximize the variable cost margin on which fixed costs will be charged taking.

In this context, it is interesting to know when the variable cost margin will cover fixed costs.

<file:///C:/Users/windows/Desktop/hp/control%20de%20gestion%20hp/ING/Chapter%206%20Questions.pdf>

A Company has a contribution margin of 40% and fixed costs of \$120,000. What is the break-even point in dollars?

- a) \$48,000*
- b) \$300,000*
- c) \$200,000*
- d) \$72,000*

P Company has fixed costs of \$200,000, sales price of \$50, and variable cost of \$30 per unit. How many units must be sold to earn profit of \$50,000?

- a) 2,500*
- b) 10,000*
- c) 12,500*
- d) 25,000*

B Company has fixed costs of \$20,000 and a contribution margin ratio of 40%. Currently, sales are \$75,000. What is Bowl's margin of safety?

- a) \$20,000*
- b) \$25,000*
- c) \$30,000*
- d) \$50,000*

Z Company makes two different products, Product A and Product B. They currently sell 2,000 units of product A and 3,000 units of product B. What is the sales mix percentages?

- a) Product A= 40%, Product B= 60%*
- b) Product A= 60%, Product B= 40%*
- c) Product A= 67%, Product B= 33%*
- d) Product A= 33%, Product B= 67%*

Question:

https://saylordotorg.github.io/text_managerial-accounting/s10-01-cost-volume-profit-analysis-fo.html

The profit equation shows that profit equals total revenues minus total variable costs and total fixed costs. This profit equation is used extensively in cost-volume-profit (CVP) analysis, and the information in the profit equation is typically presented in the form of a contribution margin income statement (first introduced in Chapter 5 "How Do Organizations Identify Cost Behavior Patterns?"). What is the relationship between the profit equation and the contribution margin income statement?

Answer: *Recall that the contribution margin income statement starts with sales, deducts variable costs to determine the contribution margin, and deducts fixed costs to arrive at profit. We use the term “variable cost” because it describes a cost that varies in total with changes in*

volume of activity. We use the term “fixed cost” because it describes a cost that is fixed (does not change) in total with changes in volume of activity.

To allow for a mathematical approach to performing CVP analysis, the contribution margin income statement is converted to an equation using the following variables:

Key Equation

S = Selling price per unit

V = Variable cost per unit

F = Total fixed costs

Q = Quantity of units produced and sold

Thus

$Profit = Total\ sales - Total\ variable\ costs - Total\ fixed\ costs$

$$Profit = (SQ) - (VQ) - F$$

Comparison of Contribution Margin Income Statement with Profit Equation clarifies the link between the contribution margin income statement presented in Chapter 5 "How Do Organizations Identify Cost Behavior Patterns?" and the profit equation stated previously. Study this figure carefully because you will encounter these concepts throughout the chapter.

Figure 6.1 Comparison of Contribution Margin Income Statement with Profit Equation

Contribution Margin Income Statement		Profit Equation
Sales	\$xxx,xxx	→ $S \times Q$
Less total variable costs	<u>xxx,xxx</u>	→ $V \times Q$
Contribution margin	\$xxx,xxx	
Less total fixed costs	<u>xxx,xxx</u>	→ F
Operating profit	<u><u>\$xxx,xxx</u></u>	

Recall that when identifying cost behavior patterns, we assume that management is using the cost information to make short-term decisions. Variable and fixed cost concepts are useful for short-term decision making. The short-term period varies, depending on a company's current production capacity and the time required to change capacity. In the long term, all cost behavior patterns are likely to change.