



**Week 15**



**ensia** The National School of  
Artificial Intelligence  
المدرسة الوطنية العليا للذكاء الاصطناعي

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**Introduction to Business / NHSAI (ENSIA) 2023-2024 / Instructor: Prof. Oukil**



# **Chapter 20** **(last)**

## **Understanding Financial Management and Main Accounting Statements**



## Typical financing sources:

- **Personal savings. ...**
- **Love money. ...**
- **Venture capital. ...**
- **Angels. ...**
- **Crowdfunding. ...**
- **Business Incubators. ...**
- **Grants and subsidies. ...**
- **Loans.**



# 3 Basic Financial Statements

## 1> Balance Sheet:

Estimates the firm's worth on a given date:

$$\text{Assets} = \text{Liabilities} + \text{Owner's Equity}$$

<http://finance.yahoo.com/q/bs?s=SAM+Balance+Sheet&annual>

## 2> Income Statement:

Compares the firm's expenses against its revenue over a period of time to show its net income (or loss):

$$\text{Net Income} = \text{Sales Revenue} - \text{Expenses}$$

<http://finance.yahoo.com/q/is?s=SAM+Income+Statement&annual>

## 3> Cash flow statement/report:

Shows the change in the firm's working capital over a period of time by listing the *sources* and *uses* of funds.

<http://finance.yahoo.com/q/cf?s=SAM+Cash+Flow&annual>



# Balance sheet

By calculating the accounting equation on a balance sheet you will see whether your assets are covering your liabilities, as well as the book value of your company after all liabilities have been met, or not.

**Book value:** *It is what the business's shareholders would theoretically get if the company was liquidated. And if the book value is compared with the market value of the company it can indicate if the business is under- or overpriced, which is of interest to buyers or investors.*





# Balance Sheet

## ASSETS

### Current Assets

Cash and cash equivalents	DZD 200,000
Accounts Receivable	34,000
Inventory	20,000

Total Current Assets DZD 254,000

### Fixed Assets

Equipment	DZD 60,000
Land and Buildings	180,000
Vehicles	40,000

Total Fixed Assets DZD 280,000

Total Assets DZD 534,000

## LIABILITIES

### Current Liabilities

Accounts Payable	DZD 64,000
Income Tax Payable	70,000
Total Current Liabilities	DZD 134,000

### Non-Current Liabilities

Long term debt	DZD 200,000
Total Non-Current Liabilities	DZD 200,000

Total Liabilities DZD 334,000

## OWNER'S EQUITY

### Owner's Equity

Common Stock	DZD 100,000
Retained Earnings	100,000
Total Owner's Equity	DZD 200,000

Total Liabilities and Owner's Equity DZD 534,000



## INCOME STATEMENT FOR THE YEAR ENDED DECEMBER 2022

### Revenues

Merchandise Sales	DZD	24,800	
Music Lesson Income		3,000	
Total Revenues:			DZD 27,800

### Expenses

Cost of Goods Sold		10,200	
Depreciation expense		2,000	
Wage expense		750	
Rent expense		500	
Interest expense		500	
Supplies expense		500	
Utilities expense		400	
Total Expenses:			14,850

### Net Income

DZD 12,950





# Breakeven Analysis

- Breakeven point - the level of operation at which a business neither earns a profit nor incurs a loss.
- A useful planning tool because it shows entrepreneurs what is the minimum level of activity required to stay in business.
- With one change in the breakeven calculation, an entrepreneur can also determine the sales volume required to reach a particular profit target.

# Calculating the Breakeven Point

- Step 1.** Determine the expenses the business can expect to incur.
- Step 2.** Categorise the expenses in step 1 into fixed expenses and variable expenses.
- Step 3.** Calculate the ratio of variable expenses to net sales. Then compute the contribution margin:

$$\text{Contribution Margin} = 1 - \frac{\text{Variable Expenses}}{\text{Net Sales Estimate}}$$

- Step 4.** Compute the breakeven point:

$$\text{Breakeven Point (DZ)} = \frac{\text{Total Fixed Costs}}{\text{Contribution Margin}}$$

# Calculating the Breakeven Point: X

**Step 1.** Net Sales estimate is DZD 950,000 with Cost of Goods Sold of DZD 646,000 and total expenses of DZD 236,500.

**Step 2.** Variable Expenses: DZD 705,125  
Fixed Expenses: DZD 177,375

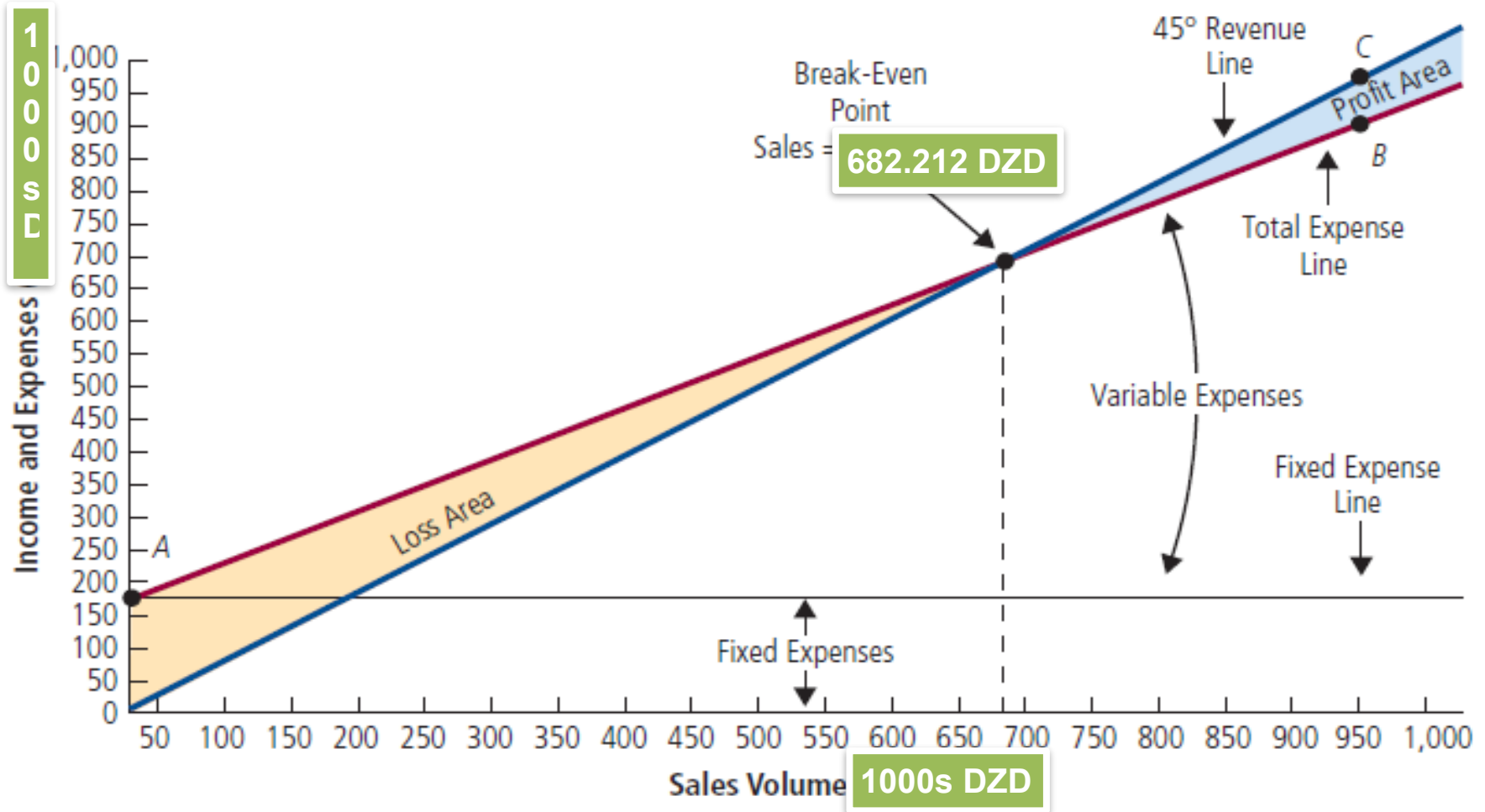
**Step 3.** CALCULATE Contribution margin:

$$\text{Contribution Margin} = 1 - \frac{\text{DZD } 705,125}{\text{DZD } 950,000} = 0.26$$

**Step 4.** Breakeven Point:

$$\text{Breakeven Point} = \frac{\text{DZD } 177,375}{0.26} = \text{DZD } 682,212$$

# Breakeven Chart for





# **PLEASE READ THE FILE ENTITLED:** **Understanding Financial Management and Securities Markets**

**20.1 The Role of Finance and the Financial Manager**

**20.2 How Organisations Use Funds**

**20.3 Obtaining Short-Term Financing**

**20.4 Raising Long-Term Financing**

**20.5 Equity Financing**

**20.6 Securities Markets**

**20.7 Buying and Selling at Securities Exchanges**

**20.8 Trends in Financial Management and Securities Markets**



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