

Subject: Economics | Topic: Inflation and Price Index

Question:

Assume that the European Suits (ES) business of garment-maker L.L. Matin's sold 75 million Euros worth of suits in a growth vector of 4%, while its Asia-Pacific arm had a sales sinking rate of 3%. As of now, the current rate of 1 euro is because of \$1.1. What will be the total dollar sales after each specific fall and the corresponding decrease in sales of the European Suits business? What are the corresponding proportional sales and currency response to the Asia-Pacific unit in one year?

Given:

- European Suits (ES) sales: 75 million Euros
- Growth rate of ES: 4%
- Asia-Pacific sales sinking rate: 3%
- Exchange rate: 1 Euro = \$1.1

1. Introduction and Calculation of European Suits (ES) sales after one year:

Growth rate g of the European Suits (ES) business = 4%

Initial sales S_0 for ES = 75 million Euros

The new sales S_e can be calculated using the growth formula:

$$S_e = S_0 \times (1 + g/100)$$

Where:

- S_e is the new sales for ES after one year
- S_0 is the initial sales for ES
- g is the growth rate

Substitute the values into the formula:

$$S_e = 75 \times (1 + 4/100)$$

Calculate inside the parenthesis first:

$$S_e = 75 \times (1 + 0.04)$$

$$S_e = 75 \times 1.04$$

$$S_e = 78 \text{ million Euros}$$

Explanation: The new sales for the European Suits business after accounting for a 4% growth rate over the year results in total sales of 78 million Euros.

2. Convert new sales of ES to dollars:

New sales in Euros $S_e = 78$ million Euros

Exchange rate $ER = 1$ Euro = \$1.1

Convert Euros to dollars using the formula:

$$\text{Sales in Dollars} = S_e \times ER$$

Substitute the values:

$$\text{Sales in Dollars} = 78 \times 1.1$$

$$\text{Sales in Dollars} = 85.8 \text{ million dollars}$$

Explanation: By converting the new sales of the European Suits business from Euros to dollars using the exchange

rate, the total sales amount in USD is found to be 85.8 million dollars.

3. Calculation of Asia-Pacific unit sales after one year:

Sinking rate r of the Asia-Pacific arm = 3%

Assuming initial sales S_A , the reduction in sales will be:

$$S_A \text{ (after reduction)} = S_A \times (1 - r/100)$$

Where:

- S_A is the initial sales for the Asia-Pacific unit
- r is the sinking rate in percentage

However, more concrete information about the initial sales in the Asia-Pacific region is needed to determine the actual figures. But proportionately:

$$\text{New Sales for Asia-Pacific Unit} = S_A \times 0.97$$

Explanation: The new sales for the Asia-Pacific unit, considering a sinking rate of 3%, could be proportionately calculated using the above formula.

4. Summary:

The total dollar sales after accounting for growth:

- European Suits (ES) after 1 year, with a 4% increase in sales, converts to 85.8 million dollars.
- Asia-Pacific unit has its sales decrease by 3%. Exact dollar figures depend on initial sales information.

Explanation: The results show that after factoring in growth and exchange rate for the European Suits (ES) business, the new total sales in USD is 85.8 million. For the Asia-Pacific unit, sales decrease proportionately by 3%, but specific figures need more input regarding the initial sales.