General Motors

Buick Cadillac Cheverolet GMC

Foreign Exchange hedging strategies at General Motors Competitive Exposure

Group 7

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Current Scenario

- In **2001**, General Motors was the world’s leading automaker
  - **Market share** of 15%
  - **Annual sales** of $184.6 billion
  - **Earnings** of $4.4 billion
- **Manufacturing operations** - more than 30 countries, **vehicles sold** - around 200 countries
- Majority of sales to end customers - **North America**, international operations are growing.
  - **result** - currency risks and competitive exposures
- **Concern** - Japanese automakers
  - The **depreciation of the yen** lowered their relative cost structure compared to U.S. and European automakers
  - Japanese firms’ advantage of lower costs could **erode GM’s market share and market value**

- **Key objectives of GM’s foreign exchange (FX) risk management policy**:
  - Reduce cash flow and earnings volatility
  - Minimize management time and costs dedicated to FX management
  - Align FX management with how GM operated its automotive business
- **Passive hedging strategy**: hedge 50% of all significant foreign exchange exposures from cash flows associated with ongoing business

Why is GM worried about the level of the yen?

- Due to GM's international operations, the firm is vulnerable to:
  - **Currency Exposure**: investment in a foreign currency is subject to the changes in value of that currency
    - E.g.. GM's foreign operations
  - **Investment exposure**: equity stakes in Japanese auto
  - **Commercial Exposure:** Forecasted receivables less pa
  - **Financing Exposure:**
    - Yen-denominated loans
    - Bond issue of $500 million worth of outstanding yen-denominated bonds
  - **Competitive Exposure**: exposure resulting from competing against companies with different currencies
    - E.g.. Japanese automakers and the depreciation of the Yen

Affiliate	Exposure Long/(Short) $ Billions	GM Ownership Stake
Fuji	(1.50)	20%
Isuzu	(1.02)	49%
Suzuki	(0.09)	20%

Impact of the Yen Depreciation

- Major Japanese automakers had large portions of their cost structure denominated in yen
  - Any depreciation lowers their cost structure in comparison to foreign competitors (eg. GM)
  - Lower prices can achieve normal profitability levels for Japanese firms
- GM's operations would be affected by **currency risk, eroding market share and market value**
- **Example:**
- Cost of Manufacturing a Car = $40,000
- Selling Price of Car = $50,000
- 45% of components sourced from Japan
- Old Exchange Rate: $1= ¥100
- New Exchange Rate: $1= ¥120
- Additional margin passed to customers (45%)
  - $3,000 x 0.45= $1350
- New Selling Price: $50,000-$1350 = $48,650
- Price Decrease: 2.7% (1350/50,000x100)

Old exchange rate

($1= ¥100)

- Components: 45% of $40,000
- Cost ($)= $18,000
- Cost (¥) =$18,000 x ¥100 =¥1,800,000

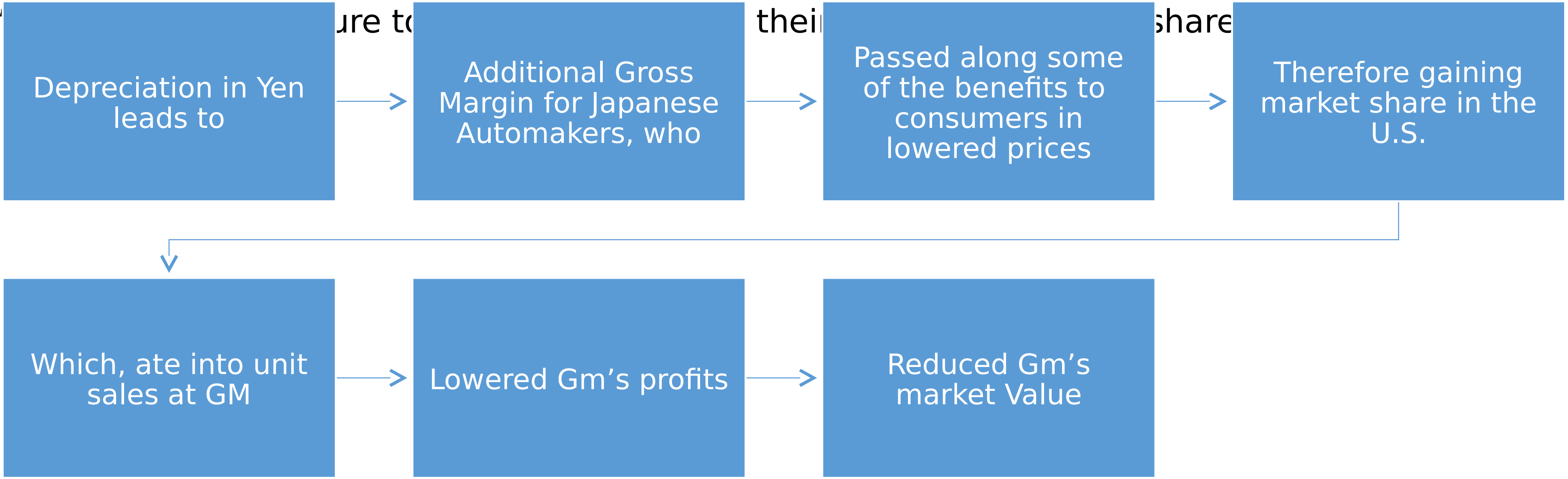
New exchange rate

($1= ¥120)

- Cost in Yen: 1,800,000
- Cost ($) =¥1,800,000 ÷ ¥120 = $15,000
- Change $18,000 - $15,000 =$3,000

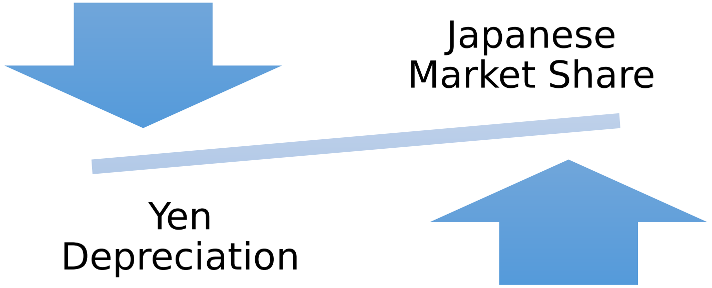
How Important is GM’s Competitive Exposure to the Yen?

- Japanese automakers derived 56% and 43% of their revenues from the U.S. Market in 1999 and 2000 respectively.
- Feldstein noted: For every **one-yen depreciation** against the dollar, Japanese competitors’ collective operating **profit grew by more than $400 million**
- GM’s exposure is a competitive one, rather than a financial one
  - No projected receivable or payable and no capital investment or loan to be repaid, yet there was still a bottom-line impact due to foreign exchange fluctuations
- GM’ … ure t … thei … share



Competitive interaction with Japanese manufactures to value exposure of GM

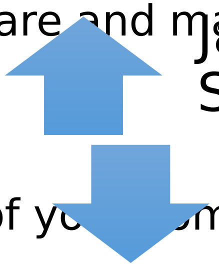
- Value Exposure GM faces
  - Eroding:
    - Market share
    - Profitability / Unit Sales



- **Market Share**

Examine how changes in the exchange rate change the market share of your company

GM faces currency risk due to lower costs for Japanese firms would lead to lower required prices to achieve the normal profitability levels, thus eroding GMs market share and market value



- **Unit Sales**

Examine how changes in the exchange rate change the unit sales of your company

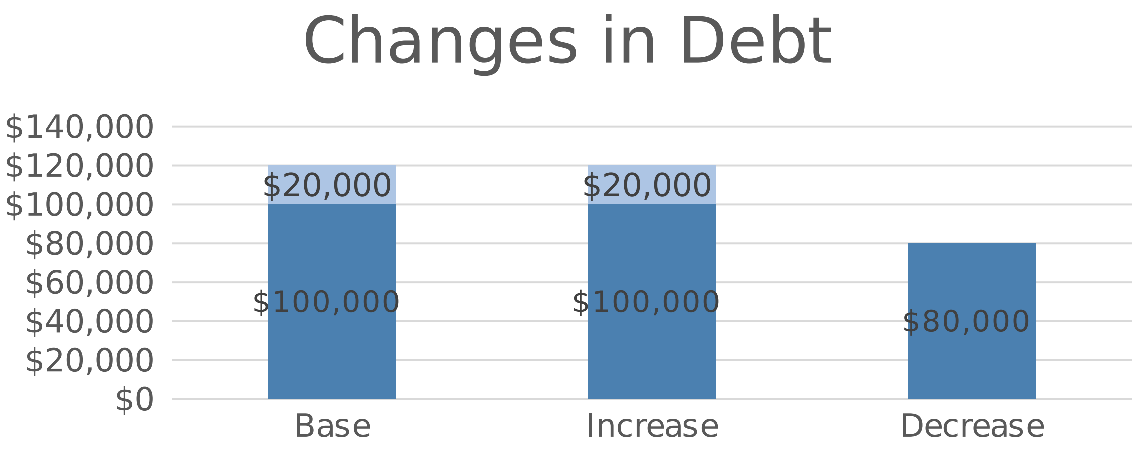
5% in price could be expected to lower unit sales by 10% (sales elasticity of 2)

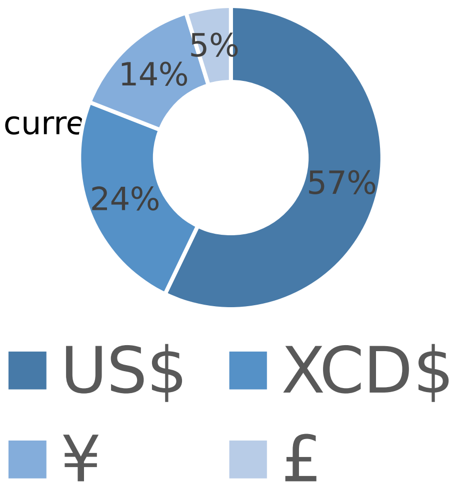
Solution - In an effort to isolate the impact on GM, they assumed that any market share losses to Japanese automakers would be shared equally among and entirely by 3 Big automakers in Detroit.

Other methods to assess the competitive exposures of GM, specifically, or other firms generally

- **What is competitive exposure?**
  - Exposure resulting from competing against companies with different currencies
- Less information-intensive methods
- Examine how FOREX volatility affects
  - Market Share
  - Cost Base
  - Debt
  - Revenue
  - Unit Sales
  - Profit

- **Market Share**
- Examine how changes in the exchange rate change the market share of your company
- Look at how your market share expands and contracts in response to changes in the exchange rate
- If you notice that you lose market share as your currency appreciates against another currency that your competitor uses, you can identify an exposure
- **Cost Base**
- Examine how changes in the exchange rate change the cost base of your company
- Identify what currencies your costs are denominated in
- Compare the share of foreign currency to your functional currency and there is where your exposure lies
- **Debt**
- Examine how changes in the exchange rate change the debt of your company
- Look at the currencies that you incur debt in
- As the exchange rates change, your debt will also change if you are repaying it with another curre
- That is where your exposure lies





- **Revenue**
- Examine how changes in the exchange rate change the revenue of your company
- Identify how revenue changes at different exchange rates
- If you sell soursop ice-cream to parlors in Europe, your revenue will decrease as the Euro becomes weaker against the EC dollar even if the unit sales remain the same
- This is where you can see your exposure
- **Units Sales**
- Examine how changes in the exchange rate change the unit sales of your company
- As exchange rates change, your product will become more expensive or more affordable to your customers
- Your product may then be subject to the laws of supply and demand.
- This is where you will see your exposure
- **Profit**
- Examine how changes in the exchange rate change the profit of your company

Analysis of Depreciation of Yen on Net profit and Market value of GM

Microsoft Excel
Worksheet

Thank You