Current Asset Management

Learning Objectives

Current asset management is an extension of concepts discussed in the previous chapter and involves the management of cash, marketable securities, accounts receivable, and inventory. Cash management and minimizing nonearning cash balances.

Cash management involves control over the receipt and payment of cash so as to minimize nonearning cash balances. Management of accounts receivable requires credit policy decisions for maximizing profitability.

The management of marketable securities involves selecting between various short-term investments.

Accounts receivable management requires credit policy decisions aimed at maximizing profitability.

Inventory management requires determining the level of inventory necessary to enhance sales and profitability.

An overriding concept is that the less liquid an asset is, the higher the required return.

Chapter Opening 1

Companies that manage current assets well establish competitive advantage

- Helps increase market share
- Creates increase in shareholder value through rising stock price

Requires careful allocation of resources among current assets of firm

- Cash, marketable securities, accounts receivable, and inventory

Chapter Opening 2

Managing cash and marketable securities

- Primary concern is safety and liquidity
- Secondary attention is on maximizing profitability

Managing accounts receivable and inventory

- Investment level should not be result of happenstance or historical determination
- Must meet same return-on-investment criteria applied to any decision

Different decision techniques applied to various forms of current assets

Cash Management

Financial managers actively attempt to keep cash (nonearning asset) to minimum

- Critical to have sufficient cash for emergencies
- To improve overall profitability of firm
  - Minimize cash balances
  - Have accurate knowledge of when cash moves in and out of firm

Reasons for Holding Cash Balances

Transactions balances

- Payments towards planned expenses

Compensating balances for banks

- Compensate bank for services provided rather than paying directly for them

Precautionary needs

- Emergency purposes when cash inflows are less than projected
- Important in seasonal and cyclical industries

Cash Flow Cycle 1

Cash moves through a firm on a daily, weekly, and monthly cycle

Relies on:

- Payment pattern of customers
- Speed at which suppliers and creditors process checks
- Efficiency of banking system

Inflows and outflows of cash must be synchronized properly for transaction purposes

Cash Flow Cycle 2

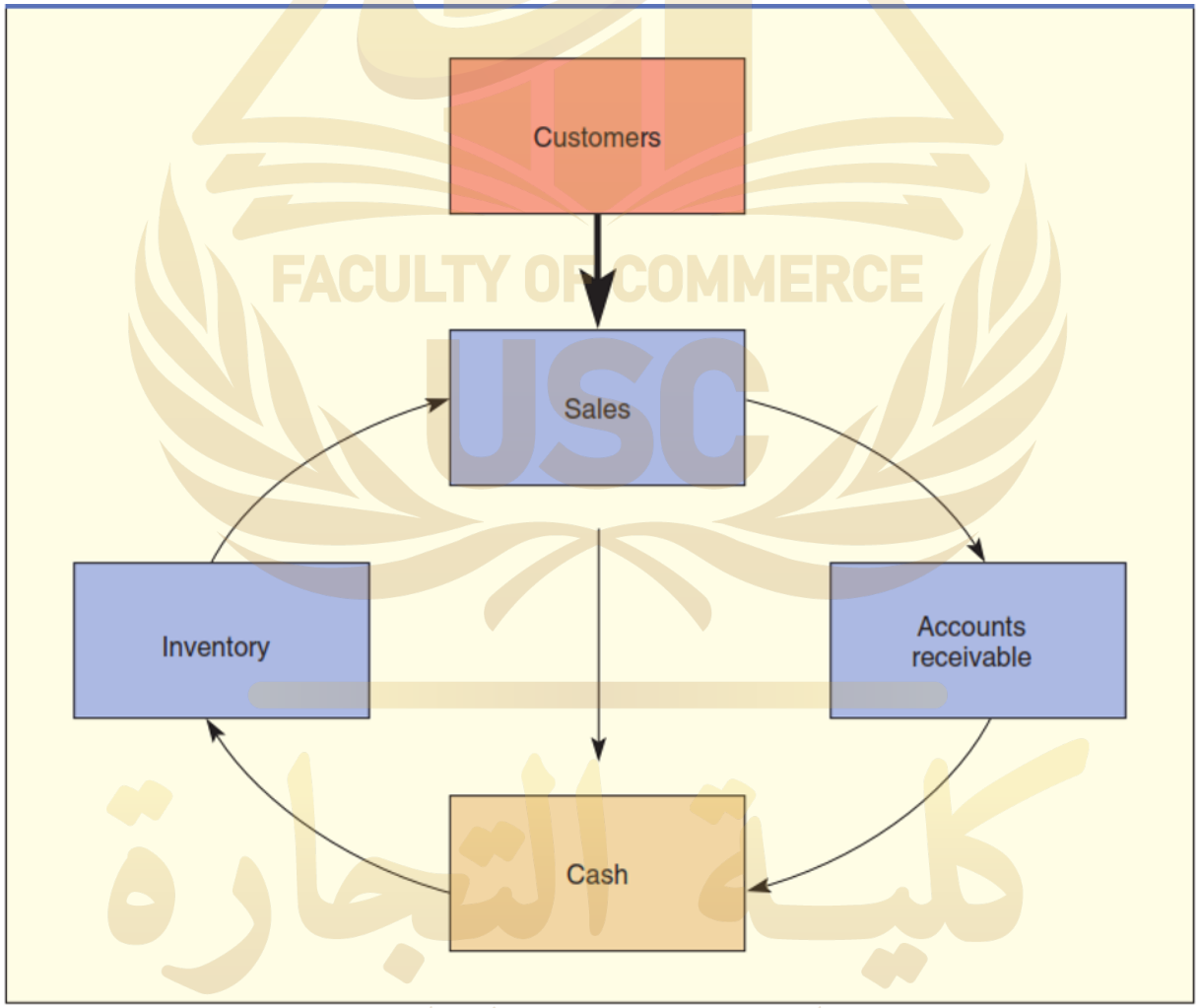
Cash inflows driven by sales and influenced by

- Type of customers
- Customers' geographical location
- Product being sold
- Industry

Firms use cash to make various payments to

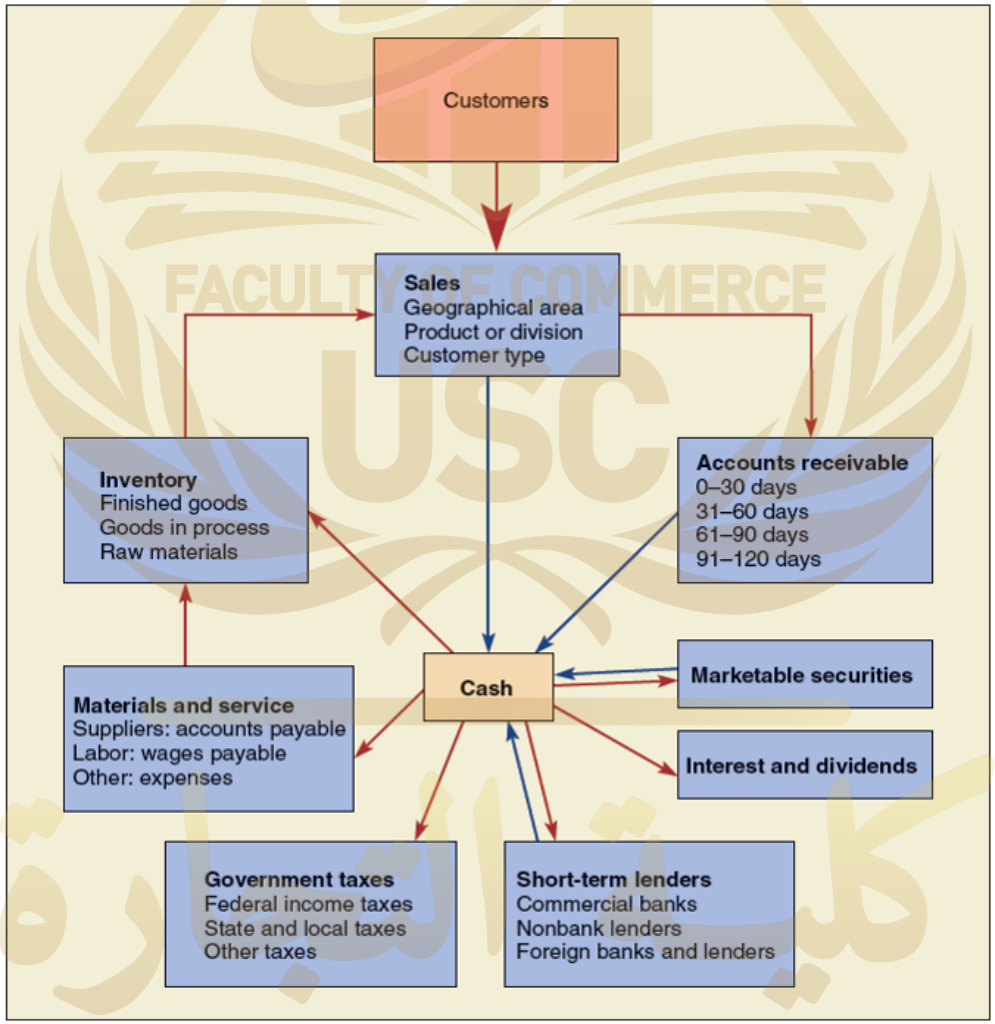
- Interest to lenders
- Dividends to stockholders
- Taxes to the government
- Accounts payable to suppliers
- Wages to workers and replace inventory

Figure 7-1 The Cash Flow Cycle



Access the text alternative for these images

Figure 7-2 Expanded Cash Flow Cycle



Access the text alternative for these images

Collections and Disbursements

Critical function of financial manager is managing cash inflows and payment outflows

- Electronic transfer mediums change time period between payment and collection
- Cash flow cycle still affected by collection mechanisms
  - Lockboxes
  - U.S. mail system
  - International sales, etc.

Collection Policy

A number of quantitative measures are applied to asses credit policy:

- Average collection period
  - An increase would indicate poor credit administration

$$\text{Average collection period} = \frac{\text{Accounts receivable}}{\text{Average daily credit sales}}$$

- Ratio of bad debts to credit sales
  - An increasing ratio may indicate too many weak accounts or an aggressive market expansion policy
- Aging of accounts receivable

An Actual Credit Decision

Brings together various elements of accounts receivable management

Additional sales	$10,000
Accounts uncollectible (10% of new sales)	1,000
Annual incremental revenue	$ 9,000
Collection costs (5% of new sales)	500
Production and selling costs (77% of new sales)	7,700
Annual income before taxes	$ 800
Taxes (40%)	320
Annual incremental income after taxes	$ 480

$$\text{Accounts receivable} = \frac{\text{Sales}}{\text{Turnover}} = \frac{\$10,000}{6} = \$1,667$$

An average investment of $1,667 is fetching an aftertax return of $480, which is approximately 28.8%.

Inventory Management

Inventory has three basic categories

- Raw materials—used in products
- Work in process—partially completed products
- Finished goods—ready for sale

Amount of inventory affected by

- Sales
- Production
- Economic conditions

Inventory is least liquid of current assets; should provide highest yield

Level versus Seasonal Production

Level (even) production

- Allows maximum efficiency in manpower and machinery usage
- May result in high inventory buildup before shipment, particularly in seasonal business

Seasonal production

- Eliminates inventory buildup problems
- May result in unused capacity during slack periods
- May result in overtime wages and inefficiencies arising out of overused equipment

Inventory Policy in Inflation (and Deflation)

Inventory position can be protected in an environment of price instability by

- Taking moderate inventory positions
- Hedging with a futures contract to sell at a stipulated price some months from now

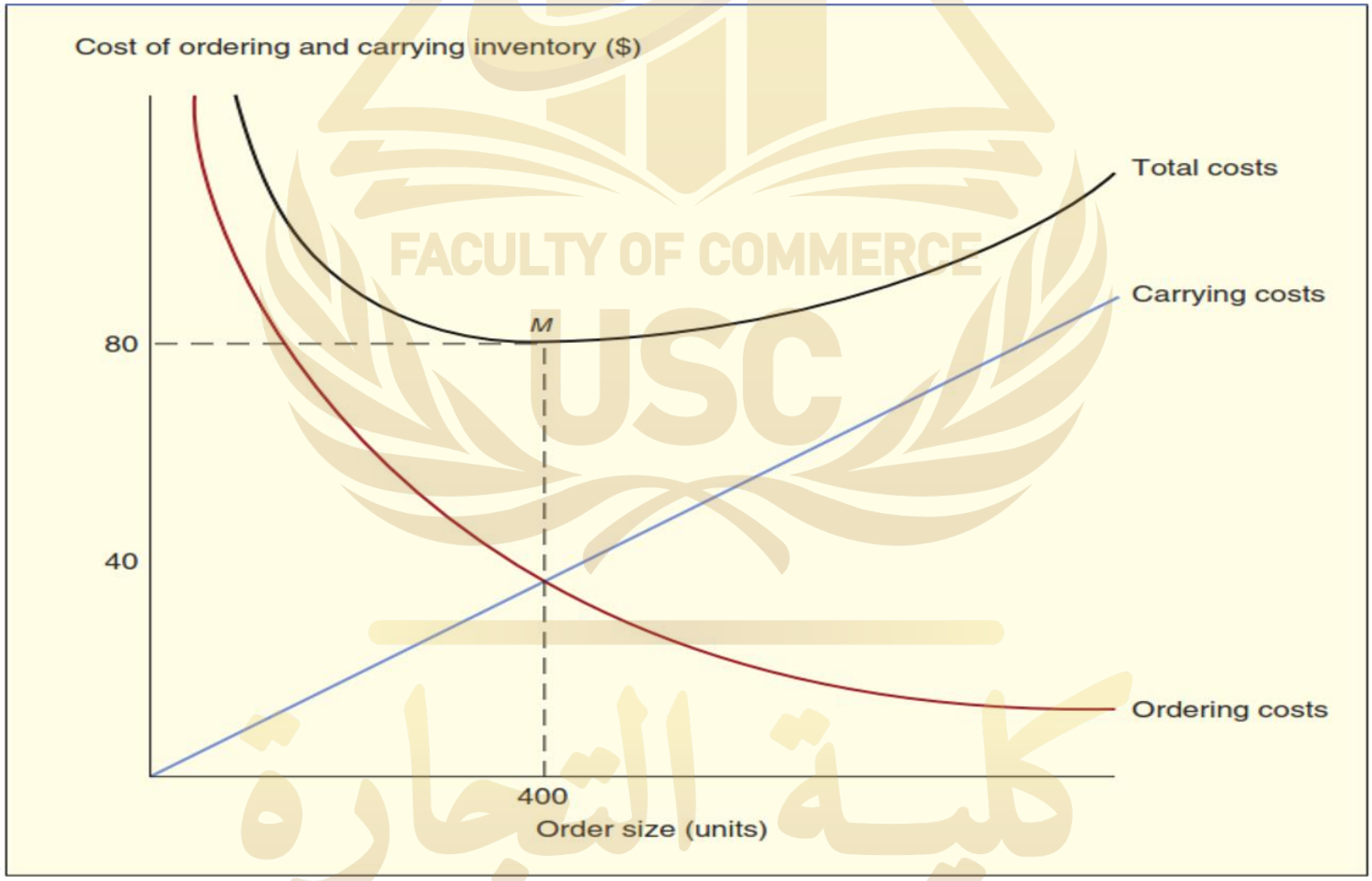
Rapid price movements in inventory may have a major impact on the reported income of the firm

The Inventory Decision Model

Two basic costs associated with inventory

- Carrying costs
  - Interest on funds tied up in inventory
  - Cost of warehouse space, insurance premiums, and material handling expenses
  - Implicit cost associated with the risk of obsolescence or perishability and price change
- Ordering costs
  - Cost of ordering
  - Cost of processing inventory into stock

Figure 7-8 Determining the Optimum Inventory Level



Access the text alternative for these images

Economic Ordering Quantity

$$\text{EOQ} = \sqrt{\frac{2SO}{C}}$$

Where,

S = Total sales in units

O = Ordering cost for each order

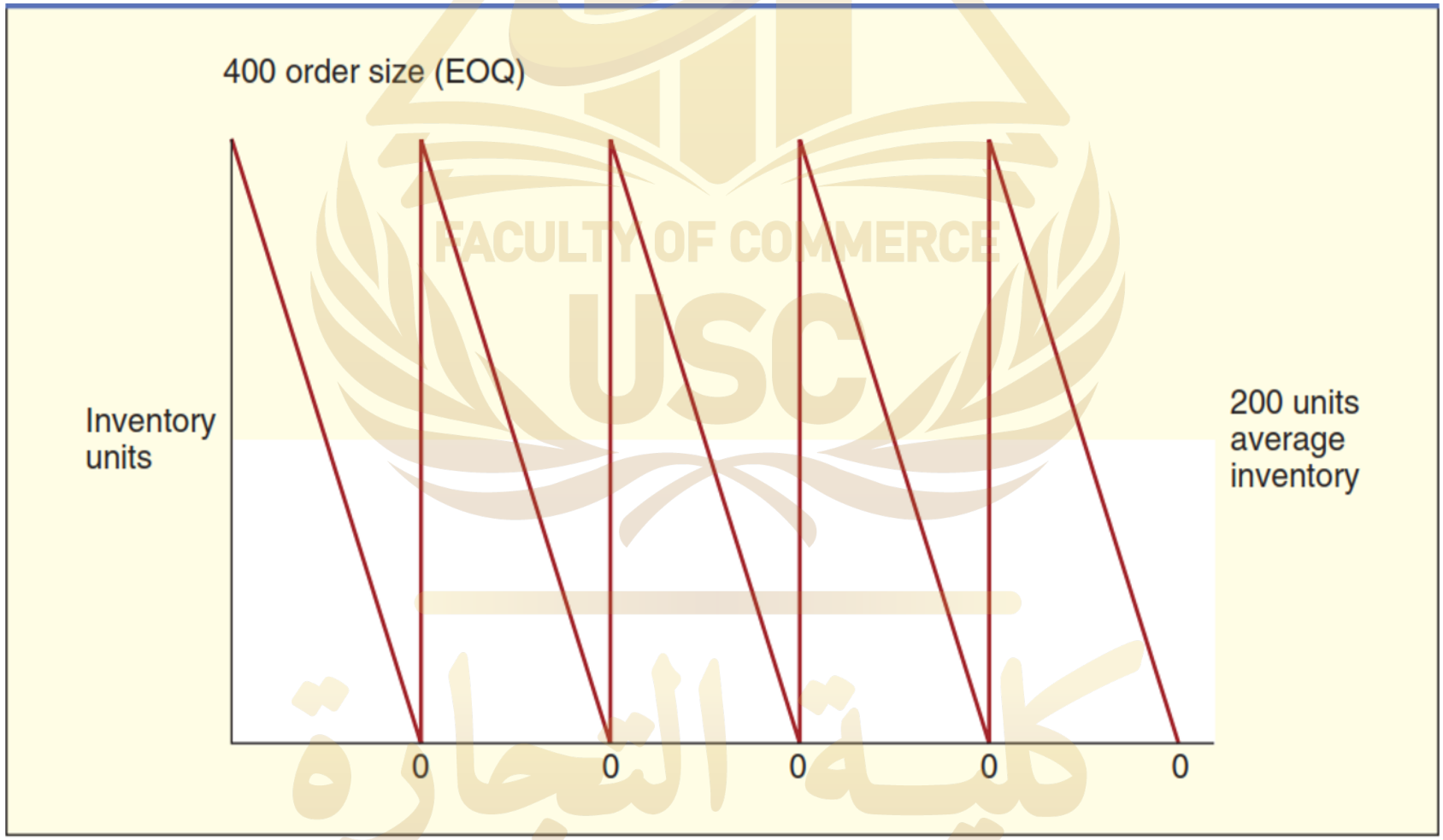
C = Carrying cost per unit in dollars

Assuming:

S = 2000 units; *O* = $8; *C* = $0.20;

$$\text{EOQ} = \sqrt{\frac{2 \times 2,000 \times \$8}{\$0.20}} = \sqrt{\frac{\$32,000}{\$0.20}} = \sqrt{160,000} = 400 \text{ units}$$

Figure 7-9 Inventory Usage Pattern



Access the text alternative for these images

Safety Stocks and Stockouts 1

Stockout occurs when firm is

- Out of specific inventory item
- Unable to sell or deliver product

Safety stock of inventory reduces risk of losing sales

- Increases cost of inventory due to rise in carrying costs
- Cost should be offset by
  - Eliminating lost profits due to stockouts
  - Increased profits from unexpected orders

Safety Stocks and Stockouts 2

Assuming that EOQ = 400 units and safety stock = 50 units

$$\text{Average inventory} = \frac{\text{EOQ}}{2} + \text{Safety stock}$$

$$\text{Average inventory} = \frac{400}{2} + 50$$

The inventory carrying costs will now increase to $50

$$\textbf{Carrying costs} = \textbf{Average inventory in units} \times \textbf{Carrying cost per unit}$$

$$= 250 \times \$0.20 = \$50$$