CHAPTER 21
CREDIT AND INVENTORY MANAGEMENT

21.1 CREDIT AND RECEIVABLES

Components of Credit Policy
1. Terms of sales
2. Credit analysis
3. Collection policy

Terms of sale

basic form:
(take this discount off the invoice price)/(if you pay in this many days), (else pay the full invoice amount in this many days)

2/10, net 30 means take a 2% discount from the full price if you pay within 10 days, or else pay the full amount in 30 days

Example: Assume that you are purchasing $1,000 with terms of 2/10, net 30. **What is the effective annual rate of not taking the discount?**

$$\mathbf{EAR} = \left(\mathbf{1} + \mathbf{i}_{\mathbf{periodic}}\right)^{\mathbf{m}} - \mathbf{1.0}$$

21.3 ANALYZING CREDIT POLICY

Credit policy effects:
1. revenue effects
2. cost effects
3. the cost of debt
4. the probability of nonpayment
5. the cash discount

Credit analysis

5 Cs of credit

a. character
b. capacity
c. capital
d. collateral
e. conditions

Collection policy

21.7 INVENTORY MANAGEMENT

Inventory types:
1. raw materials 2. work-in-progress 3. finished goods

Inventory costs:
<u>Inventory carrying costs</u>
1. storage and tracking costs
2. insurance and taxes
3. losses due to obsolescence, deterioration, or theft
4. the opportunity cost of capital on the invested amount

<u>shortage costs</u>
1. restocking or order costs
2. costs related to safety reserves

**Goal is to minimize the sum of inventory carrying costs and shortage costs

21.8 INVENTORY MANAGEMENT TECHNIQUES

The Economic Order Quantity Model

$$\mathbf{Q^* = \sqrt{\frac{2T \times F}{CC}}}$$

where T is the firm's unit sales per year,
F is the fixed cost per order, and
CC is carrying costs per unit

Example: Annodale Manufacturing starts each period with 10,000 "Long John" golf clubs in stock. This stock is depleted each month and reordered. If the carrying cost per golf club is $1, and the fixed order cost is $5, is Annondale following an economically advisable strategy?