CHAPTER 3
Securities Markets

Primary Versus Secondary Markets

- **Primary**
  - New issue
  - Key factor: issuer receives the proceeds from the sale

- **Secondary**
  - Existing owner sells to another party
  - Issuing firm doesn’t receive proceeds and is not directly involved

How Securities Are Issued

- Investment Banking
- Shelf Registration
- Private Placements
- Initial Public Offerings (IPOs)

Investment Banking Arrangements

- **Underwritten vs. “Best Efforts”**
  - Underwritten: firm commitment on proceeds to the issuing firm

- **Negotiated vs. Competitive Bid**
  - Negotiated: issuing firm negotiates terms with investment banker
  - Competitive bid: issuer structures the offering and secures bids

Figure 3.1 Relationship Among a Firm Issuing Securities, the Underwriters and the Public
Figure 3.2 A Tombstone Advertisement

Figure 3.3 Average Initial Returns for IPOs in Various Countries

Figure 3.4 Long-term Relative Performance of Initial Public Offerings

Shelf Registrations
- SEC Rule 415
- Introduced in 1982
- Ready to be issued – on the shelf

Private Placements
- Private placement: sale to a limited number of sophisticated investors not requiring the protection of registration
  - Allowed under Rule 144A
  - Dominated by institutions
  - Very active market for debt securities
  - Not active for stock offerings

Initial Public Offerings
- Process
  - Road shows
  - Bookbuilding
- Underpricing
  - Post-sale returns
  - Cost to the issuing firm
3.2 HOW SECURITIES ARE TRADED

Types of Secondary Markets
- Direct search
- Brokerged
- Dealer
- Auction

Types of Orders
- Market—executed immediately
  - Bid Price
  - Ask Price
- Price-contingent
  - Investors specify prices
  - Stop orders

Figure 3.5 Limit Order Book for Intel on Archipelago

Figure 3.6 Price-Contingent Orders

Trading Mechanisms
- Dealer markets
- Electronic communication networks (ECNs)
- Specialists markets
3.3 U.S. SECURITIES MARKETS

Nasdaq
- Nasdaq Global Select Market
- Nasdaq Global Market
- Nasdaq Capital Market
- Small stock OTC
  - Pink sheets

New York Stock Exchange
- Largest exchange in the U.S.
- Automated for small orders
- Floor brokers for large orders
- Specialists

York Stock Exchange
- Now a publicly held company
- Block sales
- SuperDot
- Bond Trading
  - 2006 NYSE obtained approval to expand bond trading
  - May provide OTH dealer market in bonds

Other Exchanges and Trading Systems
- American Stock Exchange (AMEX)
- Regionals
- Electronic Communication Networks (ECNs)
- National Market System

3.4 MARKET STRUCTURE IN OTHER COUNTRIES
Other Countries

- London - predominately electronic trading
- Euronext – market formed by combination of the Paris, Amsterdam and Brussels exchanges
- Tokyo Stock Exchange

Figure 3.7 Market Capitalization of Listed Firms, 2005

3.5 TRADING COSTS

- **Commission**: fee paid to broker for making the transaction
- **Spread**: cost of trading with dealer
  - **Bid**: price dealer will buy from you
  - **Ask**: price dealer will sell to you
  - **Spread**: ask - bid
- **Combination**: on some trades both are paid

3.6 BUYING ON MARGIN

- Using only a portion of the proceeds for an investment
- **Borrow remaining component**
- Margin arrangements differ for stocks and futures
Buying on Margin

- **Maximum margin** is currently 50%; you can borrow up to 50% of the stock value.
- Set by the Fed.
- **Maintenance margin**: minimum amount equity in trading can be before additional funds must be put into the account.
- **Margin call**: notification from broker you must put up additional funds.

Margin Trading - Initial Conditions

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
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</thead>
<tbody>
<tr>
<td>X Corp</td>
<td>$70</td>
</tr>
<tr>
<td>50%</td>
<td>Initial Margin</td>
</tr>
<tr>
<td>40%</td>
<td>Maintenance Margin</td>
</tr>
<tr>
<td>1000</td>
<td>Shares Purchased</td>
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**Initial Balance Sheet Position:**

<table>
<thead>
<tr>
<th>Stock</th>
<th>Borrowed</th>
<th>Equity</th>
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<tbody>
<tr>
<td>$70,000</td>
<td>$35,000</td>
<td>35,000</td>
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Margin Trading - Maintenance Margin

<table>
<thead>
<tr>
<th>Stock price falls to $60 per share</th>
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<tr>
<td><strong>New Balance Sheet Position:</strong></td>
</tr>
<tr>
<td>Stock</td>
</tr>
<tr>
<td>-----------</td>
</tr>
<tr>
<td>$60,000</td>
</tr>
<tr>
<td><strong>Margin%</strong> = $25,000/$60,000 = 41.67%</td>
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Margin Trading - Margin Call

How far can the stock price fall before a margin call?

Since $1000P - Amt Borrowed = Equity then:

$$(1000P - $35,000) / 1000P = 40\%$$

$$P = \$58.33$$

3.7 SHORT SALES

**Purpose**: to profit from a decline in the price of a stock or security.

**Mechanics**:

- Borrow stock through a dealer.
- Sell it and deposit proceeds and margin in an account.
- Closing out the position: buy the stock and return to the party from which it was borrowed.
**Short Sale - Initial Conditions**

- Z Corp
- 100 Shares
- 50% Initial Margin
- 30% Maintenance Margin
- $100 Initial Price

<table>
<thead>
<tr>
<th>Sale Proceeds</th>
<th>$10,000</th>
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<tbody>
<tr>
<td>Margin &amp; Equity</td>
<td>5,000</td>
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<tr>
<td>Stock Owed</td>
<td>10,000</td>
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**Short Sale - Maintenance Margin**

- Stock Price Rises to $110

<table>
<thead>
<tr>
<th>Sale Proceeds</th>
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</thead>
<tbody>
<tr>
<td>Initial Margin</td>
<td>5,000</td>
</tr>
<tr>
<td>Stock Owed</td>
<td>11,000</td>
</tr>
<tr>
<td>Net Equity</td>
<td>4,000</td>
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<tr>
<td>Margin % (4000/11000)</td>
<td>36%</td>
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</table>

**Short Sale - Margin Call**

How much can the stock price rise before a margin call?

Since Initial margin plus sale proceeds = $15,000, then:

\[
\frac{($15,000 - 100P)}{100P} = 30\%
\]

\[
P = \$115.38
\]

**3.8 REGULATION OF SECURITIES MARKETS**

**Major Regulations**

- Securities Acts of 1933
- Securities Acts of 1934
- Securities Investor Protection Act of 1970

**Self-Regulation**

- National Association of Securities Dealers (NASD) — Oversees participants in the Nasdaq market
- NYSE has its own regulatory arm
Regulation Response to Recent Scandals
- Sarbanes-Oxley Act

Circuit Breakers
- Trading halts
- Collars

Insider Trading
- Illegal
- Definition of insiders can be ambiguous
- SEC’s Official Summary of Securities Transactions and Holdings