IPO Market

- Private Equity and Venture Capital
- Initial Public Offering

Private Equity Placements

- For start-up firms and firms in financial trouble, the public equity market is often not available.
- Avoid the costly procedures associated with the registration requirements that are a part of public issues.
- The SEC restricts private placement issues to no more than a couple of dozen knowledgeable investors including institutions such as insurance companies and pension funds.
- The biggest drawback is that the securities cannot be easily resold.

Venture Capital

- Venture capital is money provided by professionals who invest alongside management in young, rapidly growing companies that have the potential to develop into significant economic contributors.
- Venture capital is an important source of equity for start-up companies.
- Professionally managed venture capital firms generally are private partnerships or closely-held corporations funded by private and public pension funds, endowment funds, foundations, corporations, wealthy individuals, foreign investors, and the venture capitalists themselves.

Managing Risk for Venture Capital

- Venture capitalists (VCs) mitigate the risk of venture investing by developing a portfolio of young companies.
- VCs also provide funding in stages.
- VCs tend to use very high cost of capital when evaluating companies.

Stages of Financing

1. Seed-Money Stage:
   Small amount of money to prove a concept or develop a product.
2. Start-Up
   Funds are likely to pay for marketing and product refinement.
3. First-Round Financing
   Additional money to begin sales and manufacturing.
4. Second-Round Financing
   Funds earmarked for working capital for a firm that is currently selling its product but still losing money.
5. Third-Round Financing
   Financing for a firm that is at least breaking even and contemplating expansion; a.k.a. mezzanine financing.
6. Fourth-Round Financing
   Financing for a firm that is likely to go public within 6 months; a.k.a. bridge financing.

Venture Capital

- Venture capitalists will help companies grow, but they eventually seek to exit the investment in three to seven years.
- The venture investment is neither a short term nor a liquid investment, but an investment that must be made with careful diligence and expertise.

Initial Public Offering (IPO)

- Initial Public Offering (IPO) - First offering of stock to the general public
  - Underwriter: Firm that buys an issue of securities from a company and resells it to the public. They are investment banking firms that act as financial middlemen to a new issue.
  - Spread: Difference between public offer price and price paid by underwriter.
  - Prospectus: Formal summary that provides information on an issue of securities.
  - Tombstone: Newspapers advertisement by investment bankers for an IPO.
  - Underpricing: Issuing securities at an offering price set below the true value of the security.

The Public Issue

- The Basic Procedure
  - Management gets the approval of the Board of Directors.
  - The firm prepares and files a *registration statement* with the SEC.
  - The SEC studies the registration statement during the *waiting period.*
  - The firm prepares and files an *amended* registration statement with the SEC.
  - If everything is copasetic with the SEC, a price is set and a full-fledged selling effort gets underway.

The Process of A Public Offering

Steps in Public Offering	Time
1. Pre-underwriting conferences	Several months
2. Registration statements	20-day waiting period
3. Pricing the issue	Usually on the 20th day
4. Public offering and sale	After the 20th day
5. Market stabilization	30 days after offering

The Cash Offer

- There are two methods for issuing securities for cash:
  - Firm Commitment
  - Best Efforts

Firm Commitment

- Under a firm commitment underwriting, the investment bank buys the securities outright from the issuing firm.
- Obviously, they need to make a profit, so they buy at "wholesale" and try to resell at "retail".
- To minimize their risk, the investment bankers combine to form an underwriting syndicate to share the risk and help sell the issue to the public.

Best Efforts

- Under a best efforts underwriting, the underwriter does not buy the issue from the issuing firm.
- Instead, the underwriter acts as an agent, receiving a commission for each share sold, and using its "best efforts" to sell the entire issue.
- This is more common for initial public offerings than for seasoned new issues.

The Announcement of New Equity and the Value of the Firm

- The market value of *existing* equity drops on the announcement of a new issue of common stock.
- Reasons include
  - Managerial Information
    Since the managers are the insiders, perhaps they are selling new stock because they think it is overpriced.
  - Debt Capacity
    If the market infers that the managers are issuing new equity to reduce their debt-equity ratio due to the specter of financial distress the stock price will fall.
  - Falling Earnings

The Cost of New Issues

1. Spread or underwriting discount
2. Other direct expenses
3. Indirect expenses
4. Abnormal returns
5. Underpricing
6. Green Shoe Option

The Costs of Public Offerings

Proceeds (in millions)	Equity Direct Costs SEOs	Equity Direct Costs IPOs	Equity Underpricing IPOs
2 - 9.99	13.28%	16.96%	16.36%
10 - 19.99	8.72%	11.63%	9.65%
20 - 39.99	6.93%	9.70%	12.48%
40 - 59.99	5.87%	8.72%	13.65%
60 - 79.99	5.18%	8.20%	11.31%
80 - 99.99	4.73%	7.91%	8.91%
100 - 199.99	4.22%	7.06%	7.16%
200 - 499.99	3.47%	6.53%	5.70%
500 and up	3.15%	5.72%	7.53%

Initial Public Offering

- Ibbotson [1975] called the IPO underpricing a "mystery."

Theories

- Winner's Curse Model
- Signaling Theory
- Market Feedback Hypothesis
- Litigation Hypothesis

Winner's Curse Model

- The winner's curse model is developed by Rock [1986].
- Information asymmetry among investors
  - Informed investors assumed to have superior knowledge about true value of the new IPO issue.
  - The issuing firm is regarded as 'the uninformed', because, even though the issuing firm knows more about itself, the market has better idea of assessing the firm's relative value.
  - Informed demand is assumed to be not sufficient.

Winner's Curse Model

- Rationing process
  - Informed investors participate in the IPO only when the offering price exceeds its true value.
  - Uninformed investors, therefore, confront adverse selection problem.
  - If the issue is underpriced, informed investors will come to the IPO market, so the issue must be rationed.
  - If the issue is overpriced, uninformed investors will end up with the total amount of the issue.
- Unless IPO issues are underpriced on average, uninformed investors will not participate in the IPO process.

Reputation of Underwriter

- Since firms go public only once, they have an incentive to "cheat" - in other words, not to underprice their shares. However, the underpricing is enforced by the active role of investment banks.
- Three conditions:
  - The investment banker is uncertain what the market price of the stock once it starts trading will be.
  - The investment banker has non-salvageable reputation capital at stake, on which it can earn a return. (Lower distribution costs, higher underwriting fees)
  - The ability to earn a return on this non-salvageable reputation capital drops if the underwriter 'cheats' by underpricing too much or too little.

Winners Curse Model

- Fly in the ointment If informed are making abnormal profits then over time they should have sufficient wealth to purchase all shares of all firms wishing to go public.

Signaling Theory

- Alternative underpricing theory: Signaling Theory
- The issuer is deliberately 'leaving a good taste in investors' mouth' in order to facilitate subsequent seasoned offering.

Signaling Theory

- Underpricing, in addition to the fraction of equity retained, is used for signaling firm quality. Otherwise, investors cannot differentiate 'high quality' IPO issues from 'low quality' ones.
- In the signaling model, the issuer is assumed to have best information about the firm's quality, while the winner's curse model assumes that information asymmetry resides among investors.
- In addition, the issuer is assumed to maximize his utility over IPO and succeeding seasoned offerings (SOs), and, therefore, IPO underpricing is related to the likelihood of additional equity offerings.

Signaling Theory

- Implications from the signaling theory

Firms offering more IPO underpricing tend to:

1. have high probabilities of subsequent SO,
2. issue additional equity rather immediately after the IPO,
3. offer larger volume of SOs, and
4. undergo a smaller price decline when SO is declared.

Signaling Theory

- Empirical evidence is not very supportive of this hypothesis.
- Using IPO data from 1980 to 1986, Jagadeesh, Weinstein and Welch [1993] found 23.93% of the firms in the highest IPO underpricing quintile returned to the stock market for SO within 3 years of the IPO, while 15.62% of the firms in the lowest quintile reissued additional equity.
- However, their regression model demonstrated aftermarket returns were better indicators for following SOs and the initial return on the first trading day has little strength in forecasting subsequent SOs.
- **Signaling theory is inconclusive in explaining the IPO underpricing.**

Other Explanations

- Market Feedback Hypothesis
  - Market is better informed than the issuer.
  - High return on the IPO date implies that the issuer has underestimated the quality of their projects.
  - The issuer will need additional funds in the future to grow.
- Litigation Hypothesis
  - An initial positive return is less likely to lead to future litigation by shareholders of firms whose share price declines substantially.