Lecture 12

Investment Banks, Security Brokers and Dealers, & VC Firms

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Agenda

- Investment Banks
- Security Brokers and Dealers
- Regulation of Securities Firms
- Relationship Between Securities Firms and Commercial Banks
- Private Equity Investments
- Private Equity Buyouts

Investment Banks

- Investment banks perform a variety of crucial functions in financial markets
  - Underwrite the initial sale of stocks and bonds
  - Deal maker in mergers, acquisitions, and spin-offs
  - Middleman in the purchase and sale of companies
  - Private broker to the very wealthy

Investment Banks

- Investment banks were essentially created in the U.S. by the passage of the Glass-Steagall Act. Prior to this, investment banking activities were part of large, money-center commercial banks.
- The lines between investment banks and commercial banks again begins to blur as legal separation between investment banks and commercial banks is no longer required.

Investment Banks

Investment banks play many roles in both the primary and secondary markets. We will focus on their role in three areas:

- Underwriting Stocks and Bonds
- Equity Sales
- Mergers and Acquisitions

But first, let's look at the largest U.S. underwriters.

Top Underwriters

Top 10 U.S. Underwriters of Global Debt and Equity Issues, 2013

Rank	Underwriter	Proceeds ($ million)
1	Goldman Sachs	$5,218.4
2	Morgan Stanley	5,036.7
3	J.P. Morgan	3,879.1
4	BofA Merrill Lynch	3,870.9
5	Barclays	3,652.9
6	Credit Suisse	2,993.4
7	Citi	2,110.6
8	UBS Investment Bank	987.2
9	Deutsche Bank	431.5
10	Baird	270.0

Source: Renaissance Capital.

Underwriting Stocks and Bonds

- The investment banker *purchases* the entire offering at a predetermined price and then resell the offering (securities) in the market. The services provided during this process include:
  - Giving Advice
  - Filing Documents
  - Underwriting, Best Efforts, or Private Placement

Underwriting Stocks and Bonds

- Giving advice
  - Explaining current market conditions in to help determine why type of security (equity, debt, etc.) to offer
  - Assisting in determining when to issue, how many, at what price (more important with IPOs than SEOs)

Filing Documents

– SEC registration (filing) is required for issues greater than $1.5 million and with a maturity greater than 270 days.

– A portion of the registration statement known as the **prospectus** is made available to the public.

– Debt issues require several additional steps, including acquiring a credit rating, hire a bond counsel, etc.

– For equity issues, the investment banker may also arrange for the securities to appear on one of the exchanges.

Underwriting Stocks and Bonds

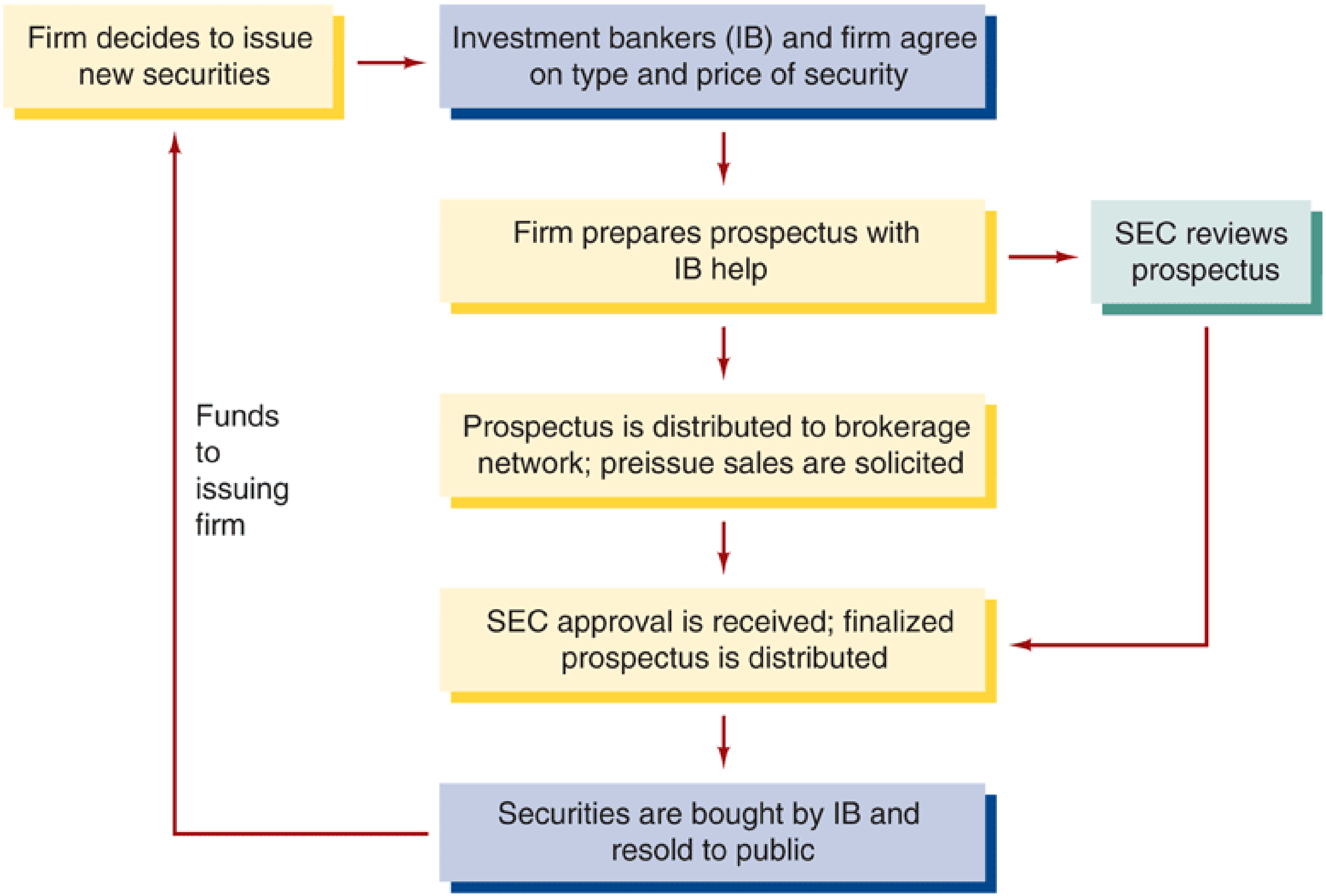
- Underwriting (firm commitment)
  - The investment banker purchases the entire offering at a fixed price and then resells the offering to the market.
  - An underwriter may form an underwriting **syndicate** to diffuse part of the underwriting risk.
  - Placement of a **tombstone** in the financial press.

Underwriting Stocks and Bonds

- The goal of underwriting is for all of the shares in an offering to be spoken for. However, this may not occur.
  - **Fully subscribed**: all shares are spoken for
  - **Undersubscribed**: underwriting syndicate unable to generate interest in all of the available shares
  - **Oversubscribed**: interest in more shares than are available (may lead to rationing).

Underwriting Stocks and Bonds

Using Investment Bankers to Distribute Securities to the Public



Underwriting Stocks and Bonds

- Best Efforts: An alternative to a firm commitment, the underwriter does not buy the issue, but rather makes its "best effort" to sell the entire issue.

- Private Placements: The entire issue is sold to a small, select group of investors. This is rarely done with equity issues.

Underwriting Stocks and Bonds

- Equity Sales: when a firm sells an entire division (or maybe the entire company), enlisting the aid of an investment banker.
  - Assists in determining the value of the division or firm and find potential buyers
  - Develop confidential financial statements for the division for prospective buyer (**confidential memorandum**)
  - Prepare a **letter of intent** to continue, assist with **due diligence**, and help reach a **definitive agreement**

Mergers and Acquisitions

- Investment bankers may assist both acquiring firms and potential targets (although not both in the same deal).
- Deal may be a *hostile* takeover, where the target does not wish to be acquired.
- Investment bankers will assist in all areas, including deal specifics, lining up financing, legal issues, etc.

Securities Brokers and Dealers

Securities firms with **brokerage services** offer several types of services:

- Brokerage Service
- Other services
- Full-Service Brokers versus Discount Brokers

Securities Brokers and Dealers

- Securities Orders: when you call a brokerage house to buy or sell a security, you essentially have three options:
  - Market Order: buy or sell security at current price
  - Limit Order: you specify the most you are willing to pay (buy) or the least you are willing to accept (sell) for a security
  - Short Sales: sell a security you don’t own with the intent of buying it back at a later date (hopefully at a lower price)

Securities Brokers and Dealers

- Other Services
  - Insurance against loss of actual security documents
  - Margin credit for purchasing equity with borrowed funds
  - Other services driven by market demand (e.g., the Merrill Lynch cash management account)

Securities Brokers and Dealers

- Full Service Brokers: offer clients research and investment advice, but usually charge a higher commission on trades.

- Discount Broker: provides facilities to buy/sell securities but offers no advice. Many on-line discount brokerage firms do have significant research available

Securities Brokers and Dealers

- Securities Dealers
  - Hold inventories of securities on their own account
  - Provide liquidity to the market by standing by ready to buy or sell securities (**market maker**)
  - Especially important for thinly traded securities

MINI-CASE:
The Limit-Order Book

- The limit-order book for Circuit City might look like this:

Unfilled Circuit City Limit Orders			
Buy Orders		Sell Orders	
37.00	100		
37.12	300		
37.25	100		
		37.37	200
		37.50	500
		37.62	100

- No transactions will occur because buy and sell orders do not cross.

MINI-CASE: The Limit-Order Book

- The specialist receives a 200-share market order to buy. She then receives a 300-share limit order to sell at 37.12. Finally, a limit order to buy 500 shares at 36.88 is received. The book will reflect these orders, as follows:

Unfilled Circuit City Limit Orders			
Buy Orders		Sell Orders	
36.88	500		
37	100		
37.12	100		
		37.50	500
		37.62	100

Regulation of Securities Firms

Two acts passed in 1933 and 1934 provide the primary basis of today's markets. The major provisions include:

- Establishment of the SEC
- Registration requirement for new securities
- Reporting requirements for companies and insiders
- Prohibition of market manipulation

Relationship Between Securities Firms and Commercial Banks

- Glass-Steagall stipulated that investment banking and commercial banking would be separated.
- G-L-B Act removed some of these barriers.
- Commercial banks are slowly gaining regulatory permission to engage in the full range of services offered by investment banks.

Private Equity Investments

- An alternative to investing via public securities is private equity (PE) investments. PE is a limited partnership raises funds to invest in new companies, to buyout existing divisions, etc.
- Most common types of PE are venture funds and capital buyouts.
- PE got a boost in 1978 when pension funds were permitted to invest in PE firms.

Venture Capital Firms

- These firms provide funds for start-up companies
- Often become very involved with firm management and provide expertise

Venture Capital Firms

- Description of Industry
  - Typically limited partnerships
  - Examples of venture-backed firms include Apple Inc, Cisco Systems, Starbucks, etc.

- Next we see the level of venture involvement in companies in 1990-2012.

Venture Capital Investments

Venture Capital Investments Made from 1990–2012

Year	Number of Companies Funded	Investment Total ($ millions)
1990	1,317	3,376.21
1991	1,088	2,511.43
1992	1,294	5,177.56
1993	1,151	4,962.87
1994	1,191	5,351.18
1995	1,327	5,608.30
1996	2,078	11,278.60
1997	2,536	14,903.00
1998	2,974	21,090.60
1999	4,411	54,203.70
2000	6,342	104,986.80
2001	3,787	40,686.70
2002	2,617	21,824.00
2003	2,414	19,678.30
2004	2,571	22,117.40
2005	2,646	22,765.80
2006	3,746	26,315.36
2007	4,027	30,518.26
2008	3,985	27,992.29
2009	2,795	17,680.25
2010	3,625	23,311.33
2011	3,964	29,551.45
2012	3,770	26,874.14

Source: http://www.nvca.org/index.php?option=com_content&view=article&id=78&Itemid=102.

Venture Capitalists Reduce Asymmetric Information

- Managers of start-ups may have objectives that differ significantly from profit maximization.
- Venture capitalists can reduce this information problem in several ways
  - Long-term motivation
  - Sit on the board of directors
  - Disburse funds in stages, based on required results
  - Invest in several firms, diversifying some risk

Origins of Venture Capital

- First U.S. venture capital firm was established in 1946.
- Most venture capital firms in the 1950s and 1960s funded development in oil and real estate.
- Funding has shifted from wealthy individuals to pension funds / corporations. This is one of the few *risky investments* pension funds are permitted.

Structure of Venture Capital Firms

1. Most are limited partnerships
2. Source of capital includes wealthy individuals, pension funds, and corporations
3. Investors must be willing to wait years before withdrawing money

Life of Venture Capital Deal

1. Fundraising
   - Venture firm solicits commitments, usually less than 100 per deal
2. Investment phase
   - Seed investing
   - Early stage investing
   - Later stage investing
3. Exit
   - Usually IPO as merger

Venture Profitability

- The 20-year average return is over 16.5%, with seed investing providing the highest average (20.4%) and later stage funding providing the lowest (13.9%).

- Despite some phenomenal years (1999), venture capital has had negative returns in recent years.

Private Equity Buyouts

- A public company is taken private.

- For example, in mid-2007, Thompson Corp. (NYSE: TOC) sold its Thompson Learning division to Apax Partners and OMERS Capital Partners in a private equity buyout. The price tag? $7.76 billion in cash!

Private Equity Buyouts

- Why go private?
  - Avoid SEC regulation, such as Sarbanes-Oxley.
  - Provides flexibility and ability to avoid public scrutiny of earnings. Also helps attract top talent no longer interested in the life of a public-company CEO.
  - Tax advantages, and high compensation for partners.

Private Equity Buyouts

- Lifecycle of a Private Equity Buyout
  - Investors pledge money (usually $1 million or more) and intent to leave money in partnership for 5+ years.
  - Partners identify an opportunity, buy it, and then manage its future (typically hire a CEO for day-to-day operations).
  - The company is then sold to the public via an IPO.

Private Equity Buyouts

- Implications of the Ownership Structure
  - As the market for underperforming firms becomes more competitive, PE may not perform as well, or industry will shrink.
  - High risk and high returns are involved, as can be seen in the next slide.

E-FINANCE: Venture Capitalists Lose Focus with Internet Companies

- In the mid-1990s, too much VC money was chasing too few good deals, many in the internet industry. Also, quality management was lacking with spread focus.

- A good example is Webvan, which received $1 billion in financing, and later declared bankruptcy in 2001. The $1b? Gone!