

## Corporate Finance

Dr Cesario MATEUS

[www.cesariomateus.com](http://www.cesariomateus.com)

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## Session 4 – 21.12.2014

Process of raising capital

Private Equity and Venture Capital

Going public vs. staying private

Equity choices for public firms

Rights Issues: Do Investors Dislike Large Price Discounts?

# Process of raising capital

Private firm expansion

From private to public firm: The IPO

Choices for a public firm

## Equity

Equity can take different forms:

For very small businesses: it can be owners investing their savings

For slightly larger businesses: it can be venture capital

For publicly traded firms: it is common stock

# Equity choices for private firms

Private firms have fewer choices for raising equity capital

Owner's Equity

Retention and plow back of company's earnings

Similar in nature to retained earnings of a public company in terms of taxability, residual claim, management control.

## Private Equity

Broadly term that commonly refers to an equity investment in a potential successful company or asset not publicly traded on capital market.

**Private Equity Investments:** Equity investments that are not traded in exchanges.

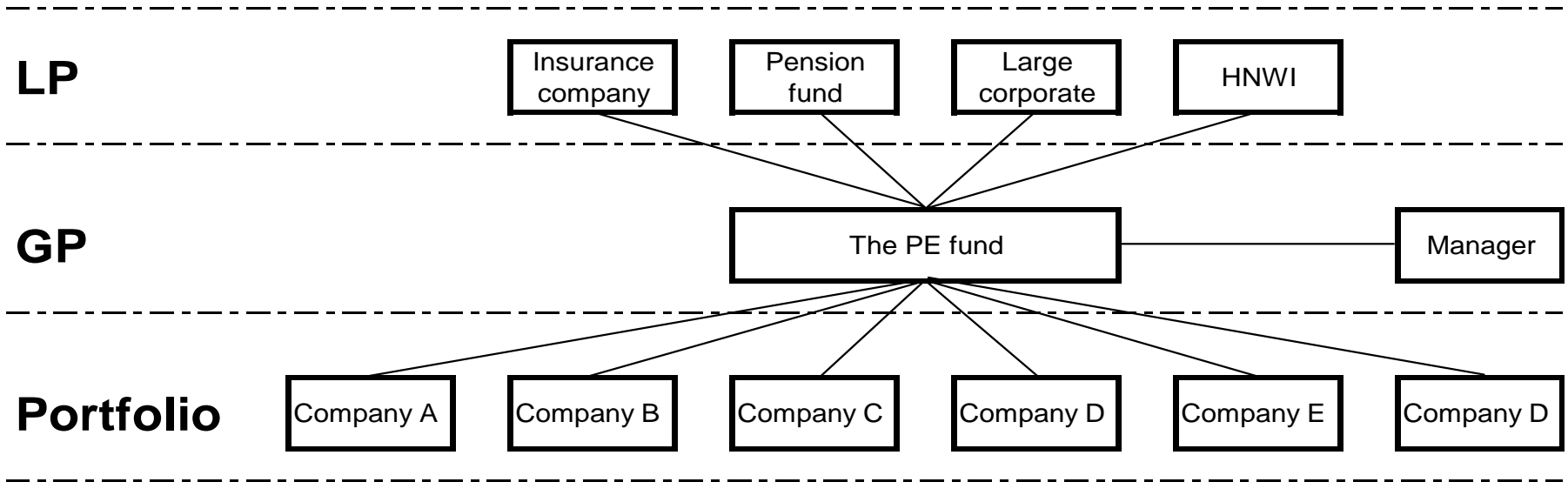
Asset class representing the companies not publicly traded (vs. public equity traded on stock exchange);

PE funds are raised from pension funds, insurance companies, large corporate, HNWI (High-net-worth-individual), etc...;

Investors in PE funds are called “**Limited Partners**”;

PE funds are managed by the “**General Partners**”

# Structure of private equity participations



## Private Equity

Institutional and Individual investors usually invest in private equity through limited partnerships, which allow investors (the limited partners) to participate in a portfolio of private equity projects while preserving limited liability (the initial investment) and leaving management to the general partners, who are private equity experts.

The limited partnership is often called the fund and the general partners are sometimes designed as the management company.

Funds of Funds are also offered that pool investments in several private equity funds.

Three main categories of private equity funds:

- Venture capital
- Leveraged Buyout investing, and
- Distressed Investing

## Leveraged Buyout

**Buyout investors** typically take a majority control in acquired companies. These companies are often publicly traded. In buyouts, investors put up an equity stake, typically between 20-40 percent of total purchase price and borrow the rest (hence the term leverage).

After purchase the company is **taken private**.

The objective is to **resell the acquired company**, or part of it, within a few years at a higher price.

The sale is done **privately** or through an **IPO**.

**Management Buyout** is a special form of LBO in which managers of the acquired company become large investors of the company after its privatization.



# Distressed Investing

Also called **special situations** or **vulture investing**.

Investing in equity and debt of companies in **financial distress**.

The concept is to **invest** in operationally sound, financially distressed companies and reorganize them.

# Venture Capitalist

VCs provide equity financing to small and risky businesses in return for a share in ownership of the firm

VC ownership is a function of  
Capital contribution  
Financing options available to the business

VC provides  
Managerial and organizational skills  
Credibility of venture to potential capital providers

# Venture Capital

One of the main categories of private equity investing and the most traditional one.

## Stages of Venture Capital Investing:

**Seed-Stage** financing is capital provided for a business idea. The capital generally supports product development and market research.

**Early stage** financing is capital provided for companies moving into operation and before commercial manufacturing and sales have occurred.

**Start-up** is capital provided for companies just moving into operation but without any commercial product or service sales. The capital generally supports product development and initial marketing

**First-stage** financing is capital provided to initiate commercial manufacturing and sales.

# Venture Capital

**Formative-stage** financing includes seed stage and early stage

**Later-stage** financing is capital provided after commercial manufacturing and sales have begun but before any initial public offering.

**Second-stage** financing refers to capital used **for initial expansion of a company** already producing and selling a product but perhaps not yet profitably.

**Third-stage** financing is capital provided **for major expansion**, such as physical plant expansion, product improvement, or a major marketing campaign.

**Mezzanine (bridge)** financing is capital provided to **prepare for the step of going public** and represents the bridge between the expanding company and the initial public offering (IPO)

# Venture Capital

Expansion-stage financing includes second and third stage

Balanced-stage financing is a term used to refer to all stages, seed through mezzanine

# Characteristics of Venture Capital

Illiquid

Long-term commitment

Difficult to value

Little historical risk and return data

Limited information upon which to base estimates

Entrepreneurs and VCs can clash

Manager incentives can distort objectives

Competitive structure is volatile or uncertain

Vintage cycles create periods of excess VC funds and shortages

VCs bring financial expertise and business experience to the venture

## Investment Characteristics

**Illiquidity:** Venture capital do not provide an easy or short-term path for cashing out. Liquidation or divestment of each venture within a portfolio is dependent on the success of the fund manager in creating a buyout or IPO opportunity.

**Long-term commitment required:** investors with a longer than average time horizon can expect to profit from this liquidity premium.

**Difficulty in determining current market values:** Because there is no continuous trading of the investments within a venture fund portfolio, there is no way of determining the current market value of the portfolio. This poses a problem for reporting the market value exposure of the current venture capital portion of an investor's portfolio.

**Limited historical risk and return data:** Because there is no continuous market in venture capital, historical risk and return data have limitations.

## Investment Characteristics

**Limited information:** Because entrepreneurs operate in previously uncharted territory, there is little information on which to base estimates of cash flows or the probability of success of their ventures.

**Vintage years:** Some years are better than others. Both entry and exit are factors here. Thus, some years provide better firm planting and growing conditions than others.

**Extensive operations analysis and advise may be required:** More than financial engineering skill is required of fund managers. A venture capital manager **who can add value** will be the one who has both financial and operating experience, and knowledge of the emerging industry in which the entrepreneur is operating.



# Valuation of Venture Capital

Requires three assessments:

Exit value of the firm

Time until exit (IPO)

The probability of failure

Compute an expected NPV based on the probability of success and the probability of failure

$$E(NPV) = NPV_{\text{SUCCESS}} \times P(\text{SUCCESS}) + NPV_{\text{FAILURE}} \times P(\text{FAILURE})$$

$$P(\text{success}) + P(\text{failure}) = 1.0$$

## Venture Capital Valuation and Risk

Investor estimates that investing \$1 million in a particular venture capital project will pay \$16 million at the end of 7 years if it succeeds. The investor is considering an equity investment in the project and the cost of equity for a project with this level of risk is 18 percent.

Project may fail at any time between now and the end of seven years.

Year	1	2	3	4	5	6	7
Failure Probability	0.25	0.22	0.20	0.20	0.20	0.20	0..20

**Note:** the payoff structure of actual projects is generally more complex than that of this example. Practitioners may use a multiple-scenario approach to valuation.

- Determine the probability that the project survives to the end of the seventh year
- Determine the expected NPV of the project
- Make a recommendation

## Venture Capital Valuation and Risk

a.

*Probability of Success*  $(1 - 0.25) \times (1 - 0.22) \times (1 - 0.20)^5 = 0.192$  or 19.2%

b.

$$NPV_{SUCCESS} = -\$1 + \frac{\$16}{(1.18)^7} = \$4.02$$

$$NPV_{FAILURE} = -\$1$$

$$E(NPV) = (\$4.02 \times 0.192) + (-\$1 \times 0.808) = -\$ = 36,106$$

c.

Based on its negative NPV, the recommendation is to **decline the investment**.

# Going public vs. staying private

The benefits of going public are:

- Firms can access financial markets and tap into a much larger source of capital
- Owners can cash in on their investments

The costs of going public are:

- Loss of control
- Information disclosure requirements
- Exchange listing requirements

## Initial Public Offering (IPO) process

Most public offerings are made with the assistance of **investment bankers (IBs)** which are financial intermediaries that specialize in selling new securities and advising firms with regard to major financial transactions.

# Initial Public Offering (IPO) process

## The role of the investment banker

### Origination:

- Design of a security contract that is acceptable to the market;
- Prepare the state and federal Securities and Exchange Commission (SEC) registration statements and a summary prospectus,

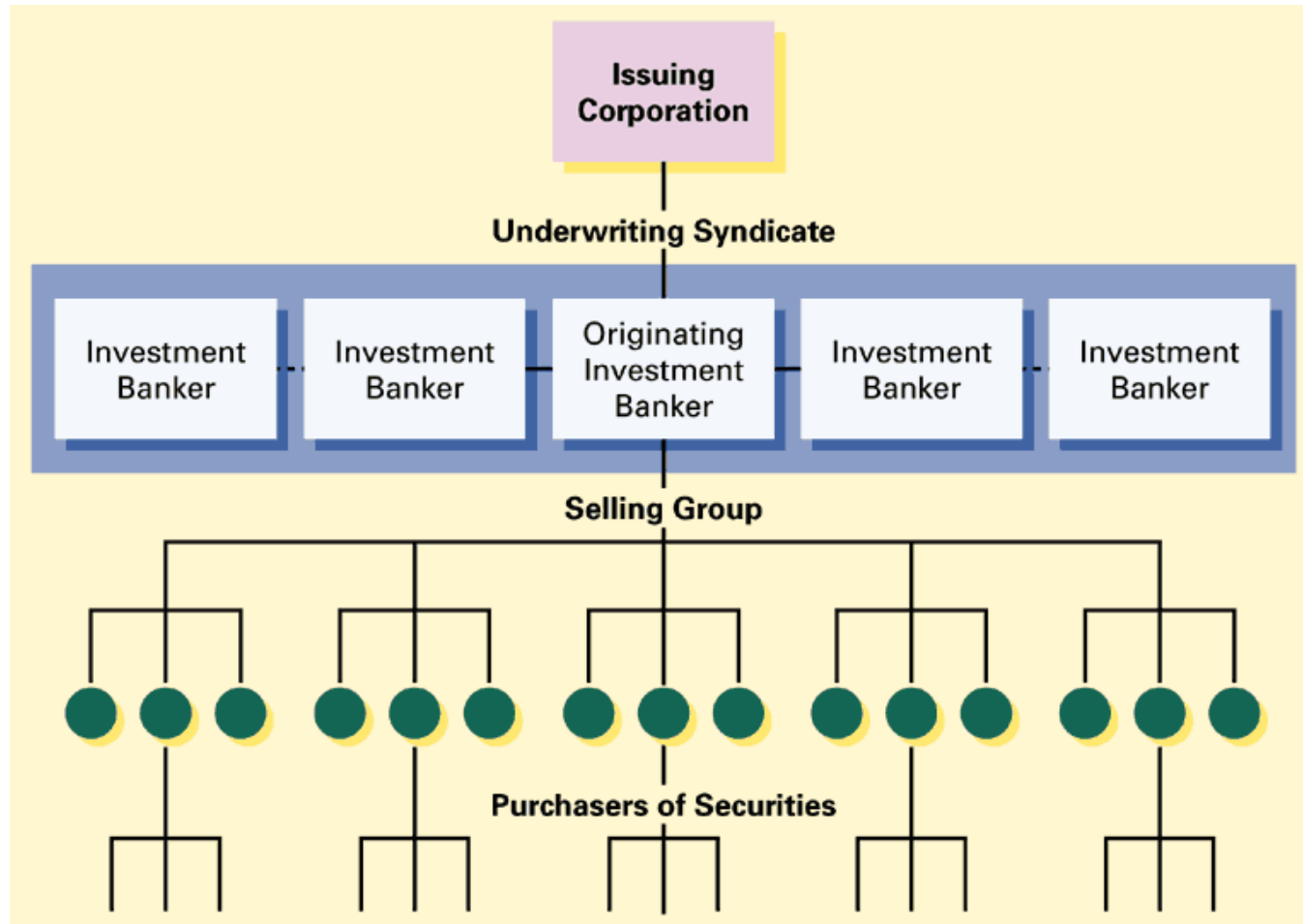
### Underwriting:

- The risk-bearing function in which the IB buys the securities at a given price and turns to the market to sell them.
- Syndicates are formed to reduce the inventory risk.

### Sales and distribution:

- Selling quickly reduces inventory risk. Firm members of the syndicate and a wider selling group distribute the securities over a wide retail and institutional area.

# Initial Public Offering (IPO) process



# Initial Public Offering (IPO) process

## IPO costs

Underwriting commission (usually around 7%)

## Underpricing of issue

Represents the first day returns generated by the firm, calculated as

$$\frac{\text{Closing Price} - \text{Offer Price}}{\text{Offer Price}}$$

## Issues are underpriced to

Provide investors with a “good taste” about the investment banker and firm

Compensate investors for the information asymmetry between firm and investor



# Capital Market Trading

Occurs in either **primary market** or the **secondary market**

**Primary market:** where new issues of stocks and bonds are introduced. Investment funds, corporations, and individual investors can all purchase securities offered in the primary market. (*IPO – initial public offering*).

**Secondary market:** where the sale of previously issued securities takes place, and it is important because most investors plan to sell long-term bonds before they reach maturity.

## Equity choices for public firms

The public firm has more alternatives for raising equity:

Common Stock

Initial public offerings (IPOs): raising equity capital publicly for the first time

Sweat Equity Shares

Warrants

Seasoned equity offerings (SEOs): subsequent issues of common stock

Private Placements

Rights Offerings

# Equity choices for public firms

## Common Stock

Firms may issue common stock that is uniform in offering price and voting rights or;

Firms may create classes of shares to:

- Create differential voting rights so that owners maintain control of the firm

- Satisfy different clientele that are in different tax brackets

Common stock issues tend to decline as a means of raising capital as the firm matures

## Equity choices for public firms

**Sweat Equity Shares:** means equity shares issued by the company to employees or directors at a discount.

The term used to refer to a form of compensation by businesses to their owners or employees.

# Equity choices for public firms

## Warrants

Provides investors with the option to buy equity at a fixed price in the future in return for paying for the warrants today

### Can be attractive because

- No immediate financial obligation to firm
- No immediate dilution of ownership

## General subscription (SEO)

Although for IPOs the underwriting agreement almost always involves a **firm guarantee** from the underwriter to purchase all of the issue, in secondary offerings, the underwriting agreement may be a **best efforts guarantee** where the underwriter **sells as much of the issue as he can**

SEOs tend to have lower underwriting commissions because of **Investment Banking competition**.

The issuing price of an SEO tends to be **set slightly lower** than the current market price

# Private placement

Securities are sold directly to one or few investors

Saves on time and cost (no registration requirements, marketing needs)

Tends to be less common with corporate equity issues. Private placement is used more in corporate bond issues.

## Rights offerings

Existing investors are provided the right to purchase additional shares in proportion to their current holdings at a price (subscription price) below current market price (rights-on price)

Each existing share is provided one right.

The number of rights required to purchase a share in the rights offering is then determined by the number of shares outstanding and the additional shares to be issued in the rights offering.

$$\text{Rights Required to Purchase one Share} = \frac{\text{\# of Original Shares}}{\text{\# shares issued in RO}}$$



# Rights offerings

## Costs are lower because of:

- Lower underwriting commissions – rights offerings tend to be fully subscribed
- Marketing and distribution costs are significantly lower

No dilution of ownership

No transfer of wealth

## Rights Issues: Do Investors Dislike Large Price Discounts?

To test the **market reaction** on the announcement of the price discount in the equity issue (rights offering)

To analyse the **conditions** in which a firm set the price discount (market and firm's characteristics)

**Access:**

[http://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=2500844](http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2500844)

## Motivation

September 2009, two large UK housebuilders (Barratt Developments and Redrow), simultaneously launched two right issues to **raise a total of almost £850m in equity**.

Set up subscription prices at a heavy discount from closing prices before announcement (63% and 55%, respectively).

One analyst said of the moves: *"The size of the discounts to the market price shows how much these companies wanted the money."* (in business.scotsman.com 23.09.2009).

February, 2008, Societe Generale, announced a £4.1 billion rights issue, with a discount priced on the new shares of around 39%.

According to an analyst *"As they can't afford this operation to go wrong, they've decided to hit very low"* (in Times Online, February, 12, 2008).

## Literature Review

Announcement of rights issues in the UK is **seen as bad news by investors** in the stock market (Burton et al, 2000 and Slovin et al. 2000).

**Similar results in other countries** (Singh, 1997 for the US, Marsden, 2000 for new Zealand, Kabir and Roosenboom, 2003 for Netherlands)

# Main Results

## After Announcement

Price discounts are **negatively** related with CAR

Firm's positive returns before the announcement and growth opportunities **positively** affect CAR

Larger firms have higher CAR

## Before announcement

*For non-Financial firms*

Higher levels of debt, larger bid-ask spreads and recent losses **decreases** subscription price (higher discount).

*For Financial firms*

Leverage and recent losses are **negatively/positively** related with subscription prices (lower/higher price discounts)

Market conditions are not relevant