



KOZMINSKI UNIVERSITY

Investment Banking

3. Initial Public Offering



KOZMINSKI UNIVERSITY

IPOs

Introduction
Phases of an IPO
Pros and Cons
Underpricing & Greenshoe

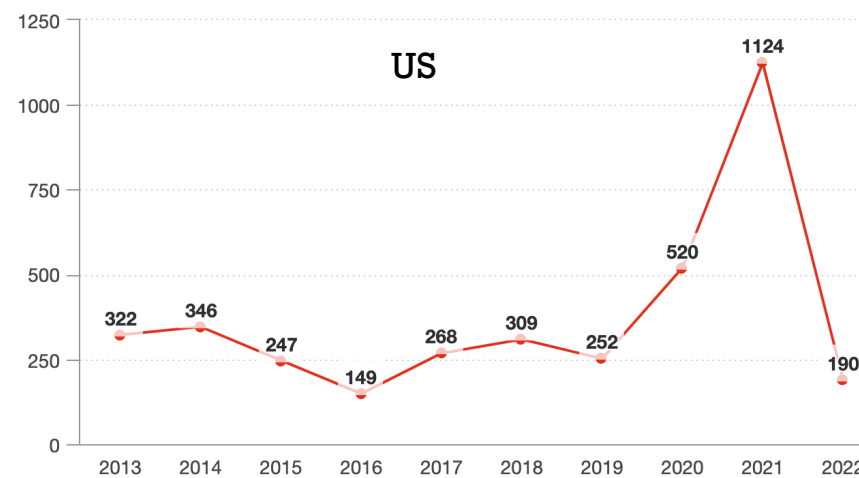
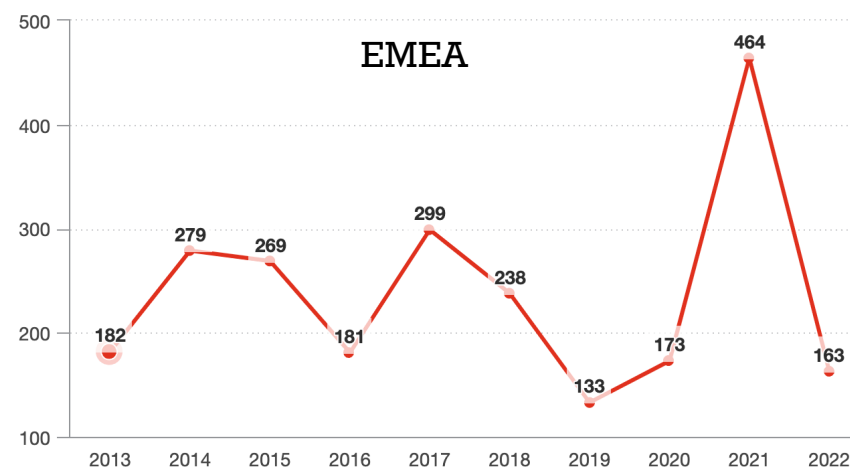


KOZMINSKI UNIVERSITY

Introduction

IPO

... in numbers



◆ Number of IPO deals

Source: Dealogic with PwC analysis



KOZMINSKI UNIVERSITY

Introduction

IPO

- It happens when the company shares are sold for the first time to the public, in the capital markets;
- The offer may involve:
 - New shares issued by the company, resulting in an increase in share capital, and/or
 - Existing shares held by present shareholders, not resulting in any change in share capital;
- After the IPO, all shares (either they have been object of the offer or not) may be traded in the secondary market, and their price will fluctuate according to the movements of demand and supply, as they were a financial commodity.



KOZMINSKI UNIVERSITY

Phases of an IPO

IPO

1. Find the support of an investment bank/underwriter

- Major activities of an investment bank
 - Advising through the whole process;
 - Marketing of the operation;
 - Underwriting (or not) of the shares [Firm Commitment or Best Effort];
 - In case of underwriting, shares not sold will be taken by the underwriter;
 - Determination of the offer final price and number of shares to offer;
 - Distribution of shares;
 - Market making after the IPO;
 - Follow-up of the company by analysts:
- Reputation works as a guarantee of quality of the offer.



KOZMINSKI UNIVERSITY

Phases of an IPO

IPO

2. Company valuation, price determination and number of shares to sell and method of sale:

- **Methods of sale**
 - Fixed price – the final price of the offer is decided when the offer is registered (phase 3);
 - Bookbuilding – Only the minimum and maximum prices of the offer are established. The final price is decided one day before the actual offer, after the lead manager appraises demand by investors (phase 4)
 - Auction - Investors inform their interest and the final price is the highest possible so that all shares are sold– single price [Dutch auction]. (Ex.: Google)



KOZMINSKI UNIVERSITY

Phases of an IPO

IPO

3. Register of preliminary prospect of the offer through the regulator

- SEC – United States
- FCA – UK
- The Polish Financial Supervision Authority (PFSA) (Polish: Komisja Nadzoru Finansowego (KNF) - Poland

4. Roadshow

- The company and the lead manager present the operation to investors (institutional) in order to stimulate their interest in buying shares;
- According to opinions and buying intentions (not committed) expressed by investors, the company and the lead manager decide on the final price of the offer.



KOZMINSKI UNIVERSITY

Phases of an IPO

IPO

5. Final registration and definition of the price of the offering price

- To determine the offering price is a difficult task for the lead manager and a critical issue for the company; there are no historical data to consider;
- Overpricing – may lead to a failure or may disappoint investors ex-post;
- Underpricing – shareholders bear an opportunity cost;
- Underpricing is one of the most studied phenomena in IPOs.

6. Distribution of shares

- Fixed price – shares are distributed pro-rata of shares demanded;
- Bookbuilding – shares are distributed by the lead manager;
- Auction – share distribution is not a problem.



KOZMINSKI UNIVERSITY

Phases of an IPO

IPO

7. Start of trading

- First day closing market price represents the first valuation of the shares by the market;
- Usually, shareholders accept not to sell the shares detained before the IPO and not included in the offer, during a period of 6 months to one year [lockup period];

8. The day after

- The lead manager becomes commonly responsible for:
- Prevent shares market price fall below the offering price;
- Market making;
- Follow-up of the company by analysts [research].



KOZMINSKI UNIVERSITY

Pros and Cons

IPO

■ Advantages of market listing

- Access to alternative sources of financing;
- Prestige;
- Risk diversification;
- Favours exit strategies of venture capital companies or initial reference shareholders;
- Allows changes in ownership structure;
- Independent and objective valuation of the company by the market;
- Activates the market for corporate control;
- Induces the company to adopt better corporate governance practices.



KOZMINSKI UNIVERSITY

Pros and Cons

IPO

■ Disadvantages of market listing

- Issuing costs;
- Listing fees;
- Market information costs;
- Additional auditing costs;
- Agency costs;
- Loss of confidentiality;
- Loss of control;
- Legal risks;
- Underpricing;
- Greenshoe.



KOZMINSKI UNIVERSITY

Underpricing

IPO

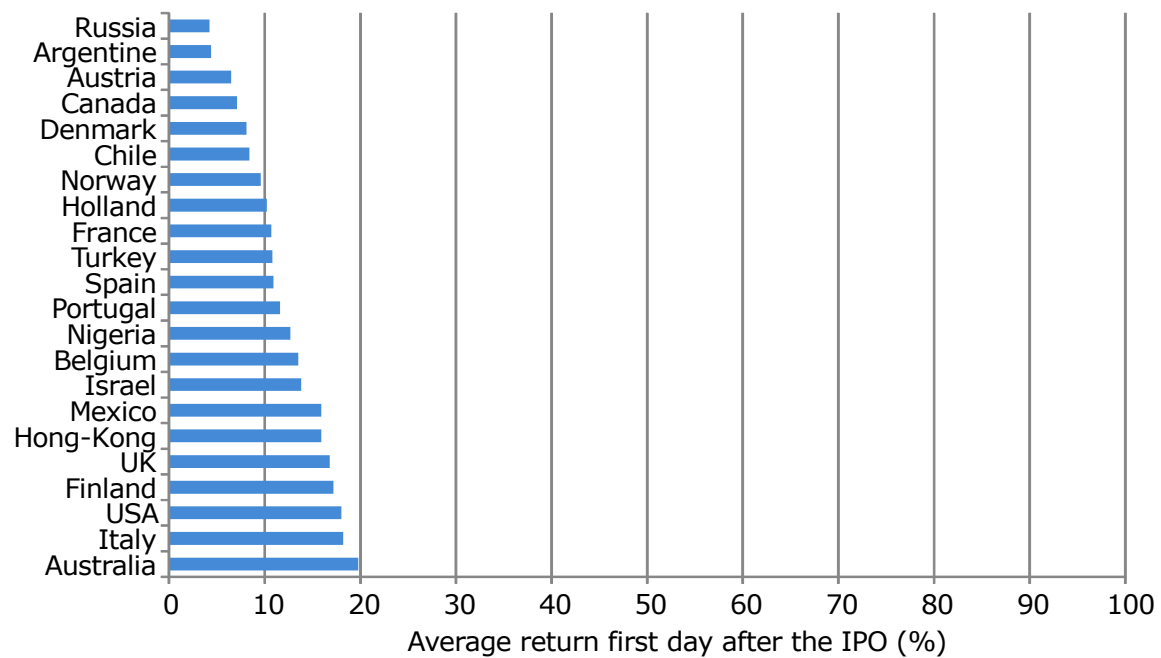
- Opportunity cost resulting from a first day closing market price higher than offering price;
- This problem has been first mentioned by Ibbotson (1975) and then widely confirmed;
- Underpricing makes shareholders “leave too much money on the table” with an IPO;
- There is no single explanation for underpricing. It is persistent and costly for shareholders.
- Lead managers lose commission with underpricing but the benefit from:
 - A lesser selling effort and lower underwriting risk (in case of firm commitment);
 - Lower market making costs, after the IPO;
 - Possibility of allocating a larger number of shares to the best clients, when underpricing is more significant (in case of bookbuilding);
 - Higher benefits from exercising the greenshoe option.



KOZMINSKI UNIVERSITY

Underpricing

IPO



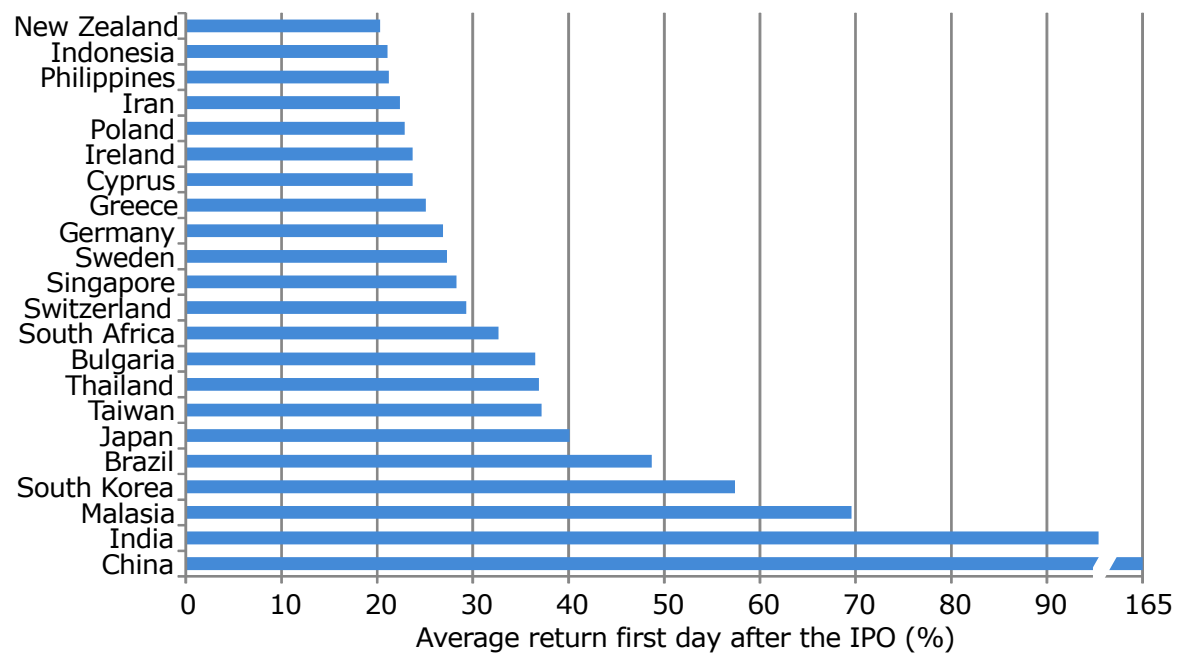
Source: Ross, Westerfield and Jaffe, Corporate Finance (9th Edition)



KOZMINSKI UNIVERSITY

Underpricing

IPO



Source: Ross, Westerfield and Jaffe, Corporate Finance (9th Edition)



KOZMINSKI UNIVERSITY

Underpricing

IPO

Possible explanations

- **Winner's curse**

- Underpricing arises from a need to ensure small (not informed) investors do not abandon the IPO market;

- **Signalling**

- Good companies are prepared to incur in a high cost by defining an offering price below actual share value, in order to open the door to future more favourable offers;
- “Good taste in the mouth”. If the offer is overpriced disgruntled investors may ignore the issuer's next issue

- **Cascade effect**

- Investors tend to invest in securities with a great demand;
- The decision for a price below actual share value will attract significant buying orders by investors and ensure the success of the IPO.



KOZMINSKI UNIVERSITY

Underpricing

IPO

Possible explanations

- **Insurance against legal liability**
 - If the IPO tanks, disgruntled investors may sue.
- **Marketing**
 - Underpricing (specially if large tend to be report on main newspaper)
- **Compensate investors for information costs**
 - In bookbuilding price is a function of demand, then investors will be cautious in their demand for shares, except when lead manager allocates more (underpriced) shares to more interested investors.
- **Agency problems between issuer and underwriter**
 - Underwriter underprice IPOs to give their favoured clients (hedge funds, institutions) a good deal at the issuer's expense.
 - Low price facilitates the sale and attracts clients to the bank;



KOZMINSKI UNIVERSITY

Underpricing

IPO

Possible explanations

- **Looking for a greater ownership dispersion**
 - Avoiding the formation of shareholders blocks;
 - Increase market liquidity;
- **Motivate the lead manager to act in the interest of the company**
 - High price might imply direct (underwriting) or indirect (reputation) costs for the lead manager;
- **Market inefficiency**
 - Markets are irrational and tend to overprice shares in first day after IPO;
 - Evidence shows that first day gains are absorbed within one year after IPO;
 - Windows of opportunity: companies use IPO when investors are more optimistic. This optimism is reflected on first day shares market price.



KOZMINSKI UNIVERSITY

Greenshoe

IPO

- Option given to the lead manager to increase the number of shares offered, usually, 15% (option expires, commonly, 30 days after the IPO);
 - If market share price after the IPO is higher than offering price, the lead manager exercises the option;
 - May also be used to maintain the market share price after the IPO close to the offering price.