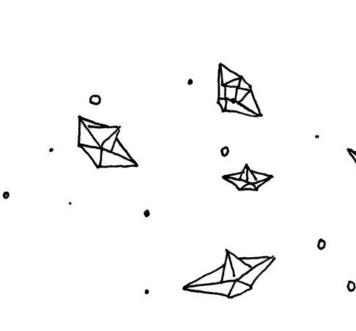
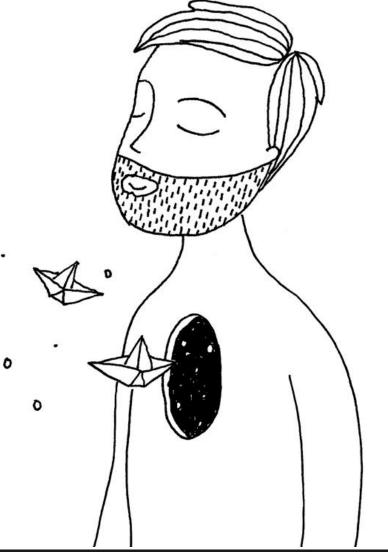


IPO underpricing

Advanced Financial Management

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IPOs costs

Direct Costs

Costs due to IPO underpricing

The underwriting spread:

- The underwriting spread is the fee paid by the firm to the underwriters.
- Typically this about 7% of the issue price.

- IPOs issue prices tend to be below the closing price on that day.
- The difference between closing price and issue price is lost by issuers.



Empirical evidence on IPOs

Short-term returns:

- Day 1 returns average 16%
 - i.e. Day 1 closing price is on average 16% higher than the IPO price
 - Indicates underpricing: Firms could have sold the shares for 16% more.
- Returns are risky
 - Returns vary widely by year (1960-1987)
 - The worst year was 1973 when IPOs returned -18%
 - The best year was 1968 when the return was +56%



Empirical evidence on IPOs

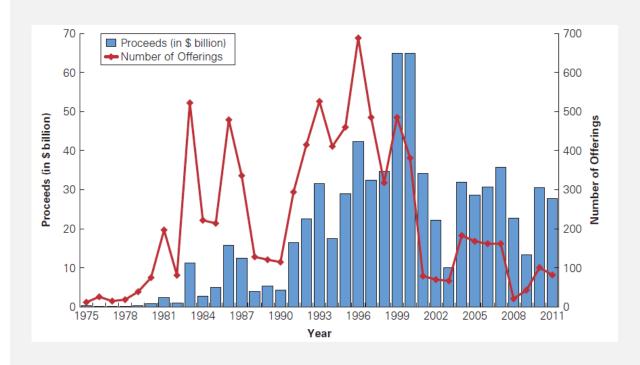
Short-term returns:

- Underpricing varies with uncertainty about the stocks value
 - Larger firms are underpriced less. Firms with sales less than \$1M when they go public had initial excess returns of 31%.
 - Firms with sales exceeding 25M had initial excess returns of only 5%
 - Underpricing is smaller for older firms.
- International results similar
 - Not just a US phenomenon. Underpricing occurs in every country with IPOs.
 - Smaller issues are again underpriced more than bigger issues



Empirical evidence on IPOs

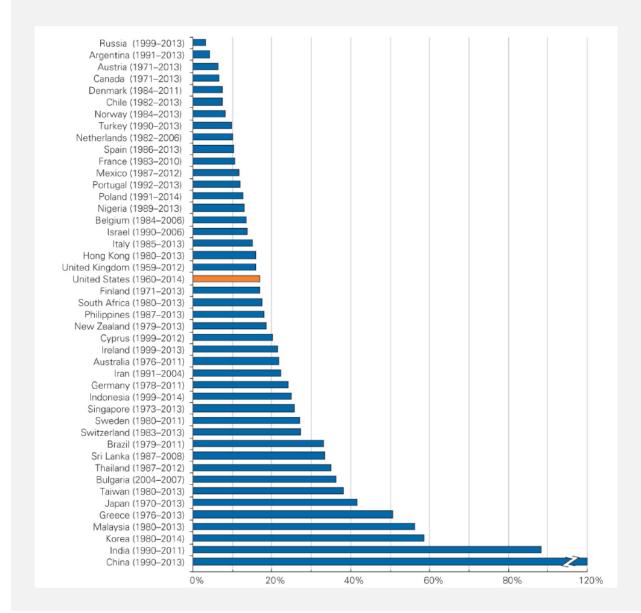
- IPO activity is cyclical (comes in waves). This should not be surprising:
 - There should be greater need for capital in times with more growth opportunities than in times of fewer growth.
- Long-run returns are low:
 - Poor relative performance in the subsequent 3-5 years





Average first day IPO returns

- Who benefits from underpricing?
 - Underwriters by controlling their risk
 - Investors who buy the stocks
- Who looses?
 - Pre-IPO shareholders of issuing firms.





Why are IPOs underpriced?

Underwriter price supports

Underwriters can support the price of an IPO by buying shares at IPO price or lower

Benefit the underwriter

Favors for the clients of the underwriters

Risk averse owners

Once-in-a-lifetime very positive NPV project

Information asymmetry (Winner's curse)

- Form of adverse selection: an auction's winner (i.e. the highest bidder) may have overestimated the object's value
- You win (get all the shares you requested) when demand for the shares by others is low and the IPO is more likely to perform poorly.
- We need all types of investors to buy the shares of an IPO, otherwise there may not be enough demand for the issues.



Winner's curse: intuition

Assume that, on average, your estimate of the value of a firm is correct and you are an uninformed investor (that is, you cannot distinguish between the good and bad deals):

If you bid at your estimate, then:

If IPO is a good deal

- Informed investors know the deal is good and want to subscribe to the deal.
- Uninformed investors also want to participate.

The deal is over subscribed. You receive a small (or no) allocation

If IPO is a bad deal

- Informed investors know the deal is bad and withdraw.
- Uninformed investors subscribe to the deal.

The deal is under subscribed. You receive a large allocation

On average, when you `win' in the IPO share allocation, which it's more likely to be a bad IPO (`winner's curse')

⇒ Bidding strategy: In order to break even, you bid at a discount.