IPO Underpricing

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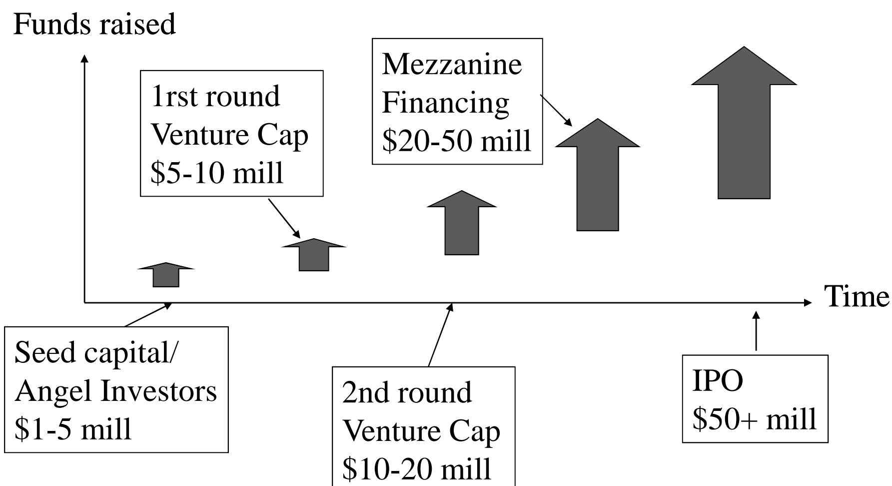
Market for new issues

- New issue markets are characterized by asymmetric information
  - Issuer is better informed than market about true value of securities sold
- This causes investors (the uninformed) to discount the issuer's secondary market price
- Firms adjust to the cost of external financing through the pecking order

Why “market” securities?

- “Marketing” securities is an attempt to overcome the discounting by uninformed investors
- The “best” marketing procedure minimizes the cost to the firm while maximizing the issue proceeds
- Will now turn to the marketing procedure itself

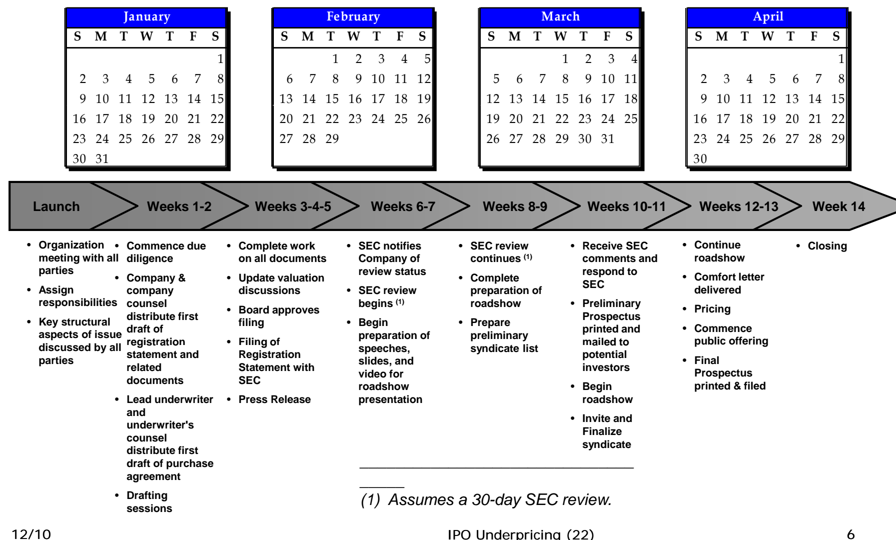
Early Stage funding and IPO



Later Stage IPOs

- Equity carve-out
- Spinoff
- Tracking stock
- Leveraged buildup (LBU) and “poof” IPO
- Reverse LBO
- State privatization

Typical IPO time table



IPO pricing

- Common to use a “IPO earnings multiple discount” of 10-20% to an industry estimate of the P/E
- 95% of all IPOs priced in the $10-25 range
- Narrow price range in preliminary prospectus: $1.5 on each side at most

Partial offer price adjustment

At the pricing meeting:

- 10% set the offer price above the initial price range, 65% within the range, 25% below the range
- Initial returns (underpricing) average 20% when price is above range, and only 0.6% when offer price is set below the range

⇒ partial adjustment to excess demand

Price stabilization

- (1) Underwriter shorts the stock (sells extra) at the offering (10-20%)
- (2) If investors bid up price, cover the short position with "Green Shoe" (overallotment) option (standard 15% extra shares)
- (3) If investors bid down the price, cover the short position by purchases in the market
- Bids placed by underwriter for price stabilization must be at or below offer price

Takeaways on selling procedure

- SEOs and IPOs are sold primarily through a book-building process
- This process is directed towards institutional clients and large investors
- Bank's reputation used to support pricing of largely unknown issuer
- Multiples-valuation using comparables
- Pricing meeting: partial price adjustment
- Price stabilization using Green Shoe option

IPO underpricing: Banker's pitch

- "The IPO must be a positive event"
  - Branding event, "free" advertising
  - Never get a second chance to make a 1st impression on institutional investors, research analysts
  - Effect on views of suppliers and potential customers
- "Capital markets have a memory"
- "Cost to developing a proper investor mix"

Expensive "advertising"

- In 1999, 110 IPOs doubled on their first day of trading, compared to 39 from 1974-98
- Money "left on the table" (first day return):
  - 2000: $29 billion
  - 1999: $34 billion
- Figures dwarf underwriting fees
  - 2000: $4.2 billion in fees on 451 IPOs
  - 1999: $3.8 billion in fees on 550 IPOs

Largest one-day returns (mill.)

- 1,597 UPS 11/99
- 1,540 Corvis 7/00
- 1,312 Palm 3/00
- 1,200 Linux 12/99
- 1,097 Sycamore 10/99
- 1,073 Akamai 11/99
- 970 Aligent tech 11/99
- 959 Gold. Sachs 5/99
- 949 AT&T Wirel. 4/00
- 835 Free Markets 12/99
- .....
- #42: 355 Lucent 4/96
- #44: 327 Ass. First Cap. 5/96

One-day returns: Tech IPOs

High-tech:

- 85-90: 13.6%
- 91-98: 18.3%
- 99-00: 73.7%

Not high-tech:

- 85-90: 6.1%
- 91-98: 10.6%
- 99-00: 15.6%

One-day returns: VC backing

VC-backed:
- 85-90: 12.8%
- 91-98: 15.5%
- 99-00: 82.6%

Not VC-backed:
- 85-90: 5.7%
- 91-98: 12.8%
- 99-00: 33.7%

One-day returns: Upgrading

Offer price upgraded
- 85-90: 15.3%
- 91-98: 28.9%
- 99-00: 119.4%

Not upgraded
- 85-90: 6.1%
- 91-98: 9.3%
- 99-00: 19.1%

Market share vs. underpricing

First Quarter, 2000.

Underwriter	Market Share	Av. 1st Day IPO Gain
MSDW	20.7%	178.3%
Goldman	18.2%	141.3%
Merrill	15.3%	103.1%
Salomon	10.2%	83.8%
CSFB	8.4%	78.5%

Summary on IPO underpricing

- First-day initial IPO returns average 15% or a total of $29 billion in 2000
- The cost of this underpricing swamps the investment banking fee of 7%
- Underpricing greatest for IPOs where offer price has been adjusted upwards
- Major issue to control underpricing
- Auctions?

IPO underpricing

Why are IPOs underpriced?

- Smart to “advertise” follow-on issues?
  - But, virtually no correlation between underpricing and subsequent issue success
- “Payment” to institutions for revealing their true demand when book-building?
  - Maybe, but then why not auction?

IPO underpricing

- Need to attract uninformed investors?
  - But, then why are underpricing greatest when issue is oversubscribed (just worsens adverse selection problem)?
- Avoid legal liability?
  - True, but cost is too large, and direct price stabilization cheap
- Lock-up expiration issue?
  - Perhaps, but then it’s a governance issue as well (some shareholders bear the cost for others to time their lock-up sale)

Prospect theory?

Two-part idea:

- Issuers bargain hard over the offer price when the lead underwriter expects under-subscription
- Issuers are easy pushovers in bargaining over the offer price when the lead underwriter expects over-subscription

IPO auctions

- Alternative to the book-building, underwriting process
- WR Hambrecht uses a Dutch Auction system to achieve full pricing on first day
- "We created the OpenIPO auction to balance the interests of companies and investors"
  - Bill Hambrecht, Chairman and CEO
- Mixed success, so far