VIVACQUA CRANE

INTELLECTUAL PROPERTY LAW

UNDERSTANDING EQUITY DILUTION AND ITS EFFECTS ON UNIVERSITY START-UPS

WHY IS DILUTION IMPORTANT?

- Affects company ownership
  - How much of the company is owned by individuals and how much they will keep in the future
- Has to be considered when making an investment decision
  - After several rounds, owners can
- Can reduce the value of existing shares
  - Only if new shares are issued at a lower price

DEFINITION

- Dilution is the reduction of ownership percentages in a company as an effect of the issuance of new shares

FORMULA

- $Dilution = \frac{\#\ of\ shares\ newly\ issued}{Total\ \#\ of\ shares\ after\ issuance}$

- Example – For an investment round, a startup company with a total of 1000 shares issues 100 additional shares.

- Dilution = 100/1100 = 9%

HOW BIG WILL YOUR PIECE OF THE PIE BE?

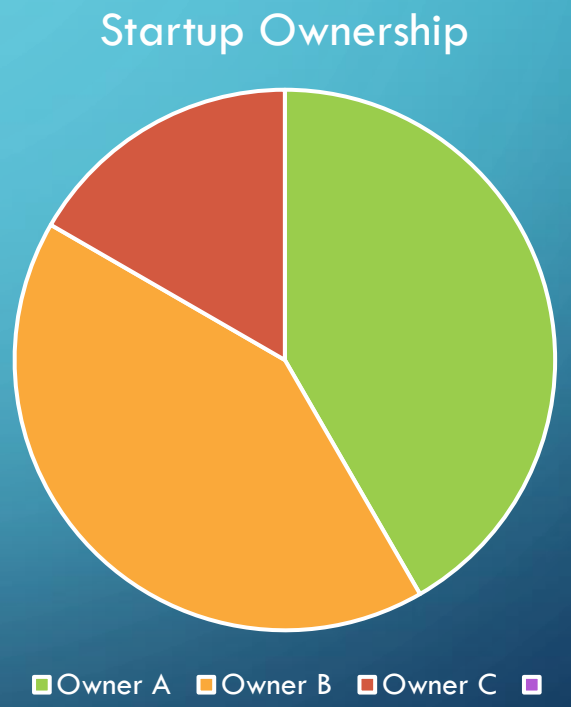
- $Diluted\ stake = (Initial\ Stake) * (1\ - Dilution)$
- Owner = 100% * (100% - 9%) = 91%
- (1 – Dilution) also referred to as the dilution coefficient

MULTIPLE INITIAL OWNERS?



Owner A has 500 shares and owns 50%

Owner B has 500 shares and owns 50%



Owner C now has a 20% stake – A and B still have original 500 shares

GO TO THE FORMULA!

- $Diluted\ stake = (Initial\ Stake) * (1\ - Dilution)$
- Each initial owner will now have a 40% ownership stake:
- 50% * (100% - 20%) = 50% * 80% = 40%

EVENTS MAKING STARTUP SUBJECT TO DILUTION

- Fundraising
  - Typical case
- Stock options or warrants
  - These are securities that do not trigger the issuance of shares at the time contract is signed – but imply that third parties will enter the capital structure in the future
- Convertible Debt
  - Debt holders can convert shareholders at a trigger event (think funding round or exit)

DILUTION IN FUNDRAISING

- Startups usually go through multiple funding rounds
- What happens if owners give up too much in the initial rounds? (e.g., giving away more than 20% in the first round)
- Risk too much dilution for the founding team
- Could push away future investors because they may fear founders do not have enough incentives to commit fully to startup

INVESTOR NEGOTIATIONS

- Some investors will begin with:

Future rounds will dilute me! Give me a larger share now to prevent this from happening.

- Percentage of shares for an investor allows for:
  - Control rights
  - Cash flow rights
- Control rights are affected the most (cash flow rights diminish in %)

CONTROL RIGHTS

- Get a larger initial share
  - Bough with more capital at the beginning – however, risk is very, very high
- Tag-along in future issuances
  - Buy in during future share issuances to maintain their percentage. Investors are putting up additional capital
- Obtain indirect control measures
  - Giving investor an executive board, specific contractual rights, shares of a different class, etc.

ANTI DILUTION RIGHTS

- Example of contractual investor protections from future “down-rounds”
- Typically referred to as “Full Ratchet” in term sheets
- Think about the events of valuation decreases – founders will bare the consequences based on higher dilution

THE “FULL RATCHET”

- Full ratchet clauses give inventors total protection from down-rounds
- If new shares are issued at a lower price per share, investors will receive additional shares to maintain their percentage in the startup

EXAMPLE

- Assume that Company ABC has 1,000,000 outstanding shares, out of which 100,000 shares are owned by Investor X. With a current market price per share of $10, the company is valued at $10,000,000. Investor X's stake in the company is valued at $1,000,000, which translates to an ownership stake of 10% in Company ABC.
- In a new issue of shares, the company offers 500,000 new shares to the public. This brings the total Company ABC shares to 1,500,000 and the total valuation to $15,000,000. The new stock issue dilutes Investor X's stake in the company – 100,000 shares – from 10% to 6.67%.
- If Investor X wishes to maintain their original percentage of ownership, then having a full ratchet provision attached to their original equity investment in Company ABC.

DISADVANTAGES

- Including a full ratchet provision in the company's charter documents may deter some potential new investors from investing in the company
- The company will appear less attractive to invest in since the anti-dilution provision only protects the current shareholders and puts any burden of dilution on the new shareholders
- However! The new investors are not suffering any actual loss – they are merely not receiving the additional benefits that original Investor(s) enjoy(s)!

"FULLY DILUTED BASIS"

- Essentially – letting future investors or other equity holders how much percentage they will hold if all securities are issued (e.g., full conversion of convertible or exercisable securities)
- In other words – take into account what could dilute ownership
- Contracts on a fully diluted basis are contracts in which assume the amount of shares from previous contracts have already been issued (even if the shares have not been issued)
- Arguably avoids a false representation of the capital structure

EXAMPLE

- Shares issued: 1000
- Share options: 100
- Shares from convertible notes: 500
- Total currently issued shares: 1000
- Potential total: 1600

- Investor wishes to enter for 30% of currently issued shares:
- 30% of 1000 = 300 shares
- But on fully diluted basis! 300/1600 = 18.75%

RECENT TIME PERIODS

- In recent years, more capital has been available to invest in private companies
- Increased supply = increased valuations that allows for larger amount of capital raised by companies
- However, when companies raise more money at higher valuations – results in current ownership selling more of the company

RECENT TIME PERIODS CONTINUED

- For example it sounds better to raise $5 million on a $10 million pre-money valuation (selling 33% of the company to investors) than $615,000 at a $2.4 million pre-money valuation (selling ~20% of the company to investors) – but it may not be since you are giving up more ownership
- Pre-money refers to value of a company not including external funding or the latest round of funding
- Think – how much a startup might be worth before it begins to receive any investments

QUESTIONS?

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