

NHH  ACPE

ARGENTUM CENTRE *for* PRIVATE EQUITY



Private Equity – An Introduction

Private Equity?

- What is Private Equity and why should we care about it?
- By definition, we are considering *equity* investments in private or closely held firms.
- Typically either start-ups (VC) or mature firms (LBO).
- PE works as an alternative source of capital for firms.

How can one invest into PE?

- There are three ways
 - Direct investment
 - Investment into a PE fund
 - Investment into a PE fund-of-fund
- Trade-off between increasing fees and increasing diversification

How are PE funds structured?

- Normally PE firms raised closed-end, finite maturity funds
 - Funds last for ten years, can be extended though.
 - Investors pledge money, funds are drawn down once investments are made.
 - Funds are usually invested during the first five years of a fund.
 - Any return from an investment is paid back to investors
 - 2-20 rule for fees and returns
- After ten years any remaining funds are returned to investors.
- A PE firm will typically attempt to raise a follow-up fund after all funds of the previous fund have been invested
- Limited fund life serves as a performance evaluation tool.

Fees

- How are PE Fund managers compensated?
 - There's a two-tiered compensation structure
 - 1.5%-2.5% annual management fee
 - 20%-30% Carry (success component)
- Incentives are aligned by several mechanisms
 - Carry is not received before all fees and a hurdle return have been paid out to investors
 - Fund managers typically own a fraction of their own funds

Most important

- Why should an LP invest into PE? What are the potential benefits?
- What should a minimum requirement be? What would be desirable?
 - (Risk adjusted) returns should compensate for risk and fees
 - We'd like to get additional diversification for our portfolio
 - We'd like the investments to be “politically correct”

Returns

- There's an intense discussion about the absolute magnitude of PE returns
 - Consensus that net-of-fee VC returns outperformed public markets in the 90's and underperformed afterwards
 - Buyout returns the results are more varied
 - Initial research showed net-of-fee underperformance relative to S&P 500
 - Newer papers however attribute this result to the data-source and claim that returns are higher than the S&P 500.
- There is also a discussion on whether there is persistence in returns
 - Possibly for VC funds, probably not for Buyout funds
 - Negative relation between size and persistence has been documented

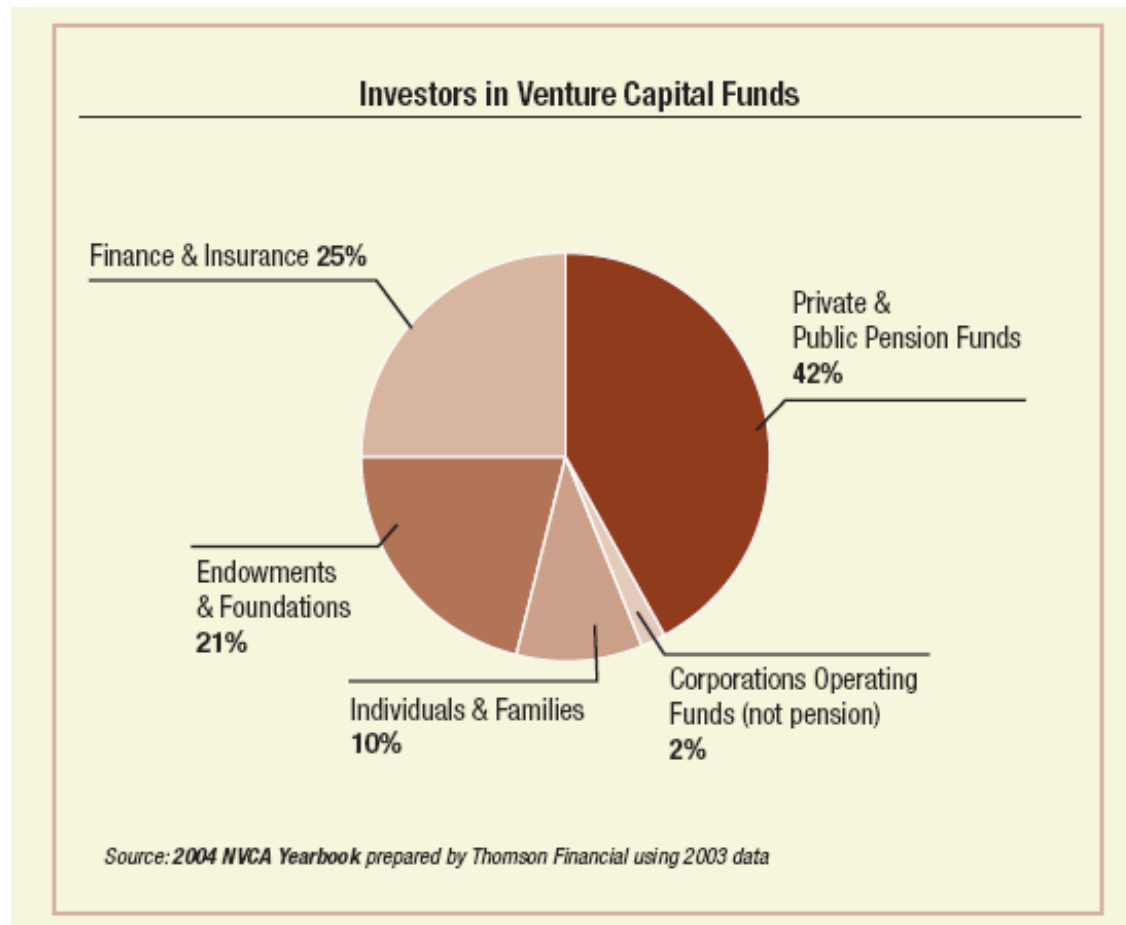
Return measurement

- Returns tend to be measured either in multiples or IRR's.
 - Mostly a data-problem. Difficult to get cash-flow data
 - Also, one seldom gets accurate valuations. Data is stale.
- Both measures are problematic
 - Difficult to control for investment duration
 - IRR can be “gamed”
 - More importantly they do not allow to control for risk
- Also, often investors do not seem to understand the difference between *absolute* and *risk-adjusted returns*.

Open Questions

- The research field has still many unanswered questions:
 - What net-of-fee returns can we achieve in PE? Or to put it differently: is PE worth it for its investors?
 - How can we quantify risk in PE?
 - Does PE, in particular LBOs, improve firms in the long run?
 - How can we build a successful VC market? How much state support do we really need?

Who invests?



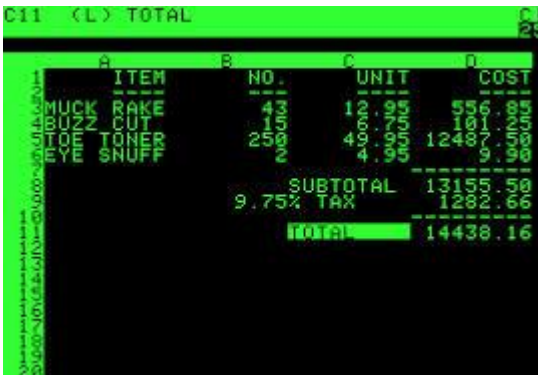
How do PE deals work?

- Venture Capital and Leveraged Buy-Out Deals work in a similar but not identical fashion.
 - A VC deal is characterized by an initial equity investment of 20-40% and subsequent financing rounds.
 - The VC receives extensive control rights
 - In a LBO deal the buyer acquires the whole firm and finances the deal with a mixture of debt and equity.
 - The debt is raised from external sources (i.e. banks)
 - The firm's managers receive a large stake (often around 10%)
- After 3-5 years the investor sells his stake to another firm/investor or via an Initial Public Offering (IPO).

Would you invest into this product?



- CPU: 8bit MOS Technology 6502 – 1MHz
- 4 KB of RAM,
- an audio cassette interface for loading programs and storing data,
- Integer BASIC programming language built into the ROMs
- Screen: 40 columns by 24 lines of monochrome, upper-case-only, 560x192 Resolution
- It even has apps!



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Example LBO Balance Sheet before

| | | | |
|-------------|-------|-------|--------|
| Asset Value | 1,250 | 1250 | Equity |
| | 1,250 | 1,250 | |

Example LBO Sheet after

| | | | |
|-------------|-------|-------|--------------|
| Asset Value | 1,250 | 550 | Bank Debt |
| Goodwill | 200 | 300 | Senior |
| | | 250 | Junior |
| | | 700 | Bonds |
| | | 400 | Senior |
| | | 300 | Subordinated |
| | | 1250 | Total Debt |
| | | 200 | Equity |
| | <hr/> | <hr/> | |
| | 1,450 | 1,450 | |

Private Equity - Implications

- Public Equity can be easily sold via the stock exchange
- PE investments are illiquid.
 - One strand of theory believes this leads to more monitoring
 - It may lead to less pressure from stock markets:

Dell in \$24 Billion Deal to Go Private

By MICHAEL J. DE LA MERCED and QUENTIN HARDY

9:22 p.m. | Updated

For Dell, a \$24.4 billion deal to take itself private is a bold move out of Wall Street's harsh spotlight as it tries to remake itself in a world where personal computers are no longer the big business in technology.

Source: NYT, 5.2.2013

Private Equity - Implications

- VS Banks: what are the implications of such an investment?
 - Shareholders have rights that differ from creditors
 - Dividends instead of interest payments
 - Voting rights
 - Different rights require different governance structures
 - PE Investors often require board seats and/or other contractual arrangements that separate ownership from control

Incentive Effects

- There's a second effect at work here
- An equity stake is not fixed in its size – its value can change
 - Gives PE investors the incentive to increase the net worth of their investment
- Dividends depend upon the firm's profits – and the voting rights in the firm's boards and shareholder meetings.

Implications for Firms/Owners

- Obviously these are strong differences to bank loans
- Why should owners accept such terms?
- “Maximize the total pie instead of minimising the part that you give away”
 - Ideal for firms with negative initial cash-flows, such as start-ups. Additionally these firms have often inexperienced managers.
 - Also ideal for firms in need of restructuring. New owners will “re-engineer the firm”
 - Typically both the firm’s operations and governance structure will be evaluated.