COURSE OBJECTIVES: B40.3173.030

For students to learn how to make good investment decisions and how to structure the terms of the investment when financing entrepreneurial companies, especially start-up and early-stage ventures

1. Provide overview for each lecture of a VC course (6 lectures x 3 hours each)
   - One case study to be analyzed (handed out in class and discussed in class)
   - Two to three key articles to be read ahead of each class (in coursepack)
   - Four take home cases or problems to be read and analyzed to reinforce classes each with graded assignment(s)

2. Focus on VC aspects (not buyout)
   - Excludes private equity/buyouts/hedge funds
   - Excludes detailed review of VC by corporate entities
   - Excludes focus on distressed venture investments

Focus on practitioner considerations (within academic framework)

3. Grading structure
   - 60% - closed book, in-class exam (final class, 90 minutes)
   - 20% - class attendance & participation for each of first five classes
   - 20% - 4 mini-assignments based around set HBS cases or set problems
     - To be completed individually, each assignment worth 5%
Course Orientation: Class 1, Part I

Framework and context of venture capital

List course objectives, grading and structure

Invisible Wires case study (to be handed out in class)

Define steps/cycle for investing in private businesses (VC CYCLE)
- Recognize Opportunity & Evaluate its Potential Fit/Risk-Return
- Identify Key Parties/Players Associated with Opportunity
- Value Opportunity
- Negotiate Terms of Investment
- Manage the Investment
- Harvest/Exit the Investment

Compare private v. public equity
- Identify stages of company’s development (S-curve)
  - Seed/start-up, development, beta, shipping, profitable, critical mass
- Nature of the underlying asset for early stage investments
  - Little tangible assets, information asymmetries, weaker price data, different agency problems, uncertainty
- Venture Capital v. Other forms of Private Equity

Learning Objectives
- What makes private equity so different from public equity?
- Where does VC fit into private equity?
- What is the VC cycle?

Classroom exercise
- Invisible Wires (hand in class)
- Market opportunity

Article Reading (for this class)
- The Entrepreneurs, Smith
- Some Thoughts on Business Plans, HBS Note
- What do VC’s do? McKinsey/HBS Note
**Economics of an opportunity**

1. **Identify an opportunity v. an idea**
   - Initial screening (lasts anywhere from 5-minutes to 3 hours)
     - Is it more than a concept on “paper”?
     - Who do I know that is involved or knows about this? (mgmt, investors)
     - Who is it aimed at?
       - Customers (& propensity to spend), market (size, growth, margins, competitors, barriers), cash requirements v. generation
     - What will it take for it to get to the market? (Cost, time)
     - How much do they want? (funding requirement & timing)

2. **Conduct due diligence to establish risk-return & fit**
   - Look at each element of a potential deal – to assess risk-return:
     - Closer look at the opportunity
       - What are its flexible options, what are the exit routes
     - Closer look at the people behind the opportunity
       - Any track record, have people worked together before?
     - Closer look at the external environment/context
     - Closer look at funding requirement
       - For investing in the opportunity is it likely to achieve its targeted return

3. **Communicating opportunity & funding requirement to investors**
   - Table of contents of business plan
   - Questions business plan must answer
   - Relevance of financials in a business plan (flexibility & adaptability more important than reliability)

**Learning Objectives**
- What makes an idea into an opportunity?
- What are investors looking for?
- What does a business plan cover?
- How important are the financials?

**Assignment 1** (to be handed in next class)
- Problem a & b, to be posted on Blackboard
Key Parties: Class 2, Part I

Negotiating with different mindsets & interrelationships

1. Company & its Founder/Management
   - Company and Founder (often not different) at beginning
   - Different from shareholder v. management of publicly listed companies
   - Mindset: “My baby, my idea, my decisions”

2. Family, Friends and Fools (Angels)
   - Mindset: “We are totally behind our friend [upto a point]”

3. Fund (GP)
   - Venture Fund, Private Equity Fund and Hedge Fund
   - Capital not as constrained as good opportunities
   - But each brings different connections and control requirements
   - Mindset: “Must protect downside, [have control?] and capture upside”

4. Limited Partners (LP)
   - Least visible set, but now treating this as an asset class
   - Mindset: “Closely monitor GP as returns are long-term and unclear”

Negotiating: Understanding Interrelationships & Mindset

- Entrepreneur and VC
- VC (GP) and LP
- Externals: Macro-economic environment & timing of capital market cycle
- Changes over time (as more investors come in, relationships change)

Learning Objectives
- Who are the key players in private equity?
- What are their key mindsets?
- How does that effect any negotiations between parties?

Classroom exercise
- Invisible Wires (hand in class)
- Participants

Article Reading (for this Class)
- Venture capital negotiations, HBS note
- Angel investing, HBS note
- A note on Private Equity Fund Raising Process, HBS note
Estimate Whose Return? Class 2, Part II

Multiple investment points for returns (that needs to be defined)

1. Assess each component of return (IRR) relative to valuation (mirror image)
   - Initial investment and follow-on investment(s)
     - Identify quantum and timing of investments/funding
     - Negative cashflow for multiple periods
   - Return (time + structure + multiple + uncertainty)
     - From cash flows of business
       - Requires structuring (preferred, common)
       - Time to breakeven (path to profitability, uncertainty reduces)
     - From exiting business (sale (primary, secondary), IPO, liquidation)
       - Changing ownership profile (dilution)

2. Compute IRR & interpret
   - Changing risk & uncertainty profile
   - Changing ownership profile (dilution principle)
   - Structure of investment (preferred, common)
   - IRR v. multiple tables (role of time)
   - IRR from whose perspective:
     - founder, GP, LP (J-curve)
     - expenses, carry and fees
     - IRR theoretically becomes more “stable” as business matures (and options realized)

Learning Objectives
- How much money does a venture need?
- What are the investment points in a company?
- How do you compute return (IRR)?
- How do you interpret IRR and from whose perspective?

Assignment 2 (to be handed in next class)
- Hotmail, HBS
- Problem 2, to be posted on Blackboard
Value Opportunity: Class 3, Part I

Valuing companies with no profits or history

1. Understand nature of business (& funding requirements)
   - No profits, little history
   - Few tangible assets, likely strong intangible base
   - Likely many options

2. Role of valuation throughout VC cycle
   - Used in all stages
   - Recognition: to invest or not?
   - Performance evaluation: continue funding
   - Exit decision: sale, IPO, liquidate

3. Revisit common valuation techniques for applicability
   - Comparables: What is a comparable? What ratios?
   - DCF: Garbage in, garbage out? What discount rate, why?
   - Venture Method: Relevance at all VC stages?

Learning Objectives
- What makes early stage companies so unique?
- What is the role of valuation in the VC cycle?
- What are the methodologies to value these entities? (outline, strengths & weaknesses)

Classroom exercise
- Invisible Wires (hand in class)
- Valuation Issues

Article Reading (for this Class)
- The Dark Side of Valuation, Damodaran
- A note on valuation in private equity settings, HBS Note

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Value Opportunity: Class 3, Part II

Valuing companies with no profits or history BUT with many options

1. Describe nature of options
   - Revisit flexibility in business plan
   - Scale, product diversification, bolt-on – real options
   - Treatment of uncertainty v. risk
   - Focus on intangibles

2. Explain underlying parameters for real options
   - Description of exercise, price, yield, expiration, current value, volatility
   - Applicability to different models: binomial, BS, jump diffusion
   - Strengths v. weaknesses

3. Relationship of valuation of business to funding flexibility
   - DCF v. Options
   - Staging: Release of capital, instruments used to match risk-return
   - Assess each component of return (IRR) relative to valuation

Learning Objectives
- How do you account for options in valuation?
- What impact does valuation have on funding flexibility?

Assignment 3 (to be handed in next class)
- Trendsetter, HBS
- Problem 3, to be posted on Blackboard
Negotiate Terms of Investment: Class 4

Formulating and navigating around a term sheet and subsequent agreements

1. Document terms of an investment – The Term Sheet
   - Specifying the intention
   - Avoiding agency/intermediation problems
     - Adverse selection, due diligence, moral hazard, monitoring

2. Formulate the key clauses from both VC and investee company perspectives
   - Security type
   - Staging
   - Anti-dilution
   - Liquidation preferences

3. Key binding documents resulting from Term Sheet
   - Shareholder Agreement
   - Share Purchase Agreement

Learning Objectives
- What are the agency/intermediation problems with funding an opportunity?
- What is the purpose of a term sheet?
- What are the key clauses in a term sheet?

Classroom exercise
- Invisible Wires (hand in class)
- Negotiations

Article Reading (for Next Class)
- Term Sheet Glossary, Smith
- A note on private equity securities, HBS note

Assignment 4 (to be handed in next class)
- Immulogic, HBS
- Problem 4, to be posted on Blackboard
Manage the Investment: Class 5, Part I

Subsequent financings & maturing of company/investment

1 A Recap of the Opportunity & Financing Challenge
   - Information: Asymmetry reduced after initial investment
   - Nature of Assets: Becoming more defined with time
   - Uncertainty: Options changing (and solidifying) over time
   - Market conditions: Will change (for better or worse)

Learning Objectives
   - What are the key monitoring issues after making an initial investment?
   - What are the key criteria for continuing funding v. exit?

2 Market Conditions
   - Role of market conditions on subsequent financings
   - Understanding demand v. supply side of private equity market
   - Timing of exit
     - To go to round D v. sale today
     - Impact of a down round

Classroom exercise
   - Invisible Wires (hand in class)
   - Interim period, then IPO or sale

3 Monitoring business performance through:

Staging, CEO transition, recruitment
   - Purposes (= control, monitoring)
   - Impact of an up or down round (on valuation, morale etc)

Syndication
   - Purpose (= risk sharing, buy-in, safeguards)
   - Changing mix of investor mindset
   - Introduction of mezzanine/debt into capital structure

Article Reading (for Next Class)
   - A note on IPO Process, HBS note
   - Harvesting the entrepreneurial venture, Journal of Applied Finance

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Exit the Investment: Class 5, Part II

**Going Public (IPO)**

1. List and compare exit options
   - IPO
   - Sale
   - Liquidation

2. Understand: Why go public?
   - Importance of market conditions & timing
   - Valuation multiples (IPO v. Sale)
     - Limited access to only best companies
   - Access to different forms of capital

3. Review IPO Process
   - Role of Bankers
     - Nature of offering
     - Timetable, roadshow & create book
       - Pricing and allocation
     - Underwriting
   - Regulation & Costs
     - Registration filings and time required
     - Sarbanes-Oxley
   - People Issues
     - Founder's ability to transition to CEO
     - Options
     - Investor relations

Learning Objectives
- What are the main exit options?
- How do you choose between them?
- Why go public?
- What is the process involved in an IPO and what are the issues? (costs and benefits)
Exit the Investment: Class 5, Part II

**Sale (M&A)**

1. **Understand different sale options**
   - Sale of company to another entity (M&A trade sale)
   - Sale of company to management or founds (MBO/MBI)
   - Sale of interest in a company (secondary sale)

2. **Process of a sale of whole company**
   - Identification of interest parties
   - Information Memorandum
   - Due diligence
   - Key differences between trade sale and MBO

3. **Process of sale of an interest in a company**
   - Liquidation of VC fund (ie. 8-10 years from inception)
   - Key differences between other forms of sale

**Learning Objectives**
- What are the different sale alternatives available to a company and investor?
- How do you choose between them?
- What is the process of a sale of company v. an interest in the company?
Exam and Other Areas of VC Finance: Class 6

1. Exam (90 minutes, closed book)
   - Closed book
   - In class
   - 60% of grade for course

2. A look at other areas in VC financing
   - International VC investing
   - Corporate VC investing
   - Opportunities in VC v. intermediaries v. other investing

Learning Objectives
- Examination
- Discussion about other areas of VC financing not covered in detail