



Course overview

Venture capital plays a critical role in the founding and development of new enterprises, and in stimulating the growth of economies. Over the past 40 years, there has been an enormous surge in the financial resources allocated to venture capital. According to the National Venture Capital Association (NVCA), the pool of funds dedicated to investing in startups has grown from roughly \$1.8 billion in 1980 (in 2018 dollars) to more than \$130.9 billion in 2018, a record. Private equity partnerships have also been expanding around the globe as a model for the financing of high-growth firms. In 2018, these firms deployed roughly \$207 billion worldwide.

In this course, we will review all aspects of starting and operating a venture capital firm or a growth private equity firm. At the end of the course, your ability to answer the following questions should have improved:

- How can I attract investors into a fund?
- How can I best select among potential equity investments?
- How can I value early-stage and high-growth companies?
- How can I best structure a financing agreement with a private company?
- As an investor, how can I choose among different ‘exit’ options?

To address these questions, we will draw on recent advances in competitive strategy, organization theory, financial economics, and economic sociology. Though built on rigorous theory and evidence, the focus of the course is nonetheless highly practical. Please note that, while I teach the course from the perspective of the investor (the venture capitalist or private equity partner), potential entrepreneurs, investors in funds (i.e. limited partners), and policymakers should also find useful a better understanding of the industry.

I have one main goal for the course: I wish to give you a nuanced view of the structure of the venture capital industry and the relationships between venture capitalists and both limited partners and the firms in which they invest. By doing so, I hope to prepare you: (i) to manage venture capital funds, (ii) to raise capital for entrepreneurial ventures, and (iii) to choose among private equity investments.

Assessment

I will evaluate your performance in the course on four components: class discussion, one problem set, three individual write-ups, and one group assignments. I will weight them as follows in determining the final grade.

Component	Weight
Class participation	25%
Problem set	25%
Individual write-ups	30%
Group assignment	20%

Class participation: Through effective class discussion, we will all learn more about the industry and its operations. You add value when you (i) listen to others, (ii) *constructively* critique others' arguments, (iii) ask questions or pose arguments that improve our understanding of the materials, (iv) describe and connect related personal experiences to the discussion, and (v) integrate ideas from other courses.

Laptops: The usage of laptops imposes a negative externality on the entire class. I therefore do not allow their use during class (unless explicitly stated otherwise).

Problem set: All students must complete the valuation problem set, which I will distribute on September 11. You should submit your answers by the beginning of class on **September 16**.

Write-ups: Each student must complete **three** of the (five) case write-up options. Write-ups ask you to focus on a piece of analysis associated with one of the cases (see WRITEUP OPTIONS in bold among the study questions below). Your write-up should consist of no more than two pages explaining your conclusion and how you arrived at it. To receive credit, you must submit your write-up before the class in which I plan to discuss the case that your write-up considers.

Group assignments: For **September 23**, each group will need to prepare a position sheet and negotiate out terms with another group. A more detailed description of this assignment appears in the daily schedules below.

Instructor

You can reach me by e-mail (olav.sorenson@yale). If you wish to meet with me in person, I will hold regular office hours on Tuesdays from 2:30pm-3:30pm. Each week, I will also have additional time slots available on signup.com.

Schedule

1. COURSE INTRODUCTION (AUGUST 28).

- Reading: Sahlman, William (1990), “The structure and governance of venture-capital organizations.” *Journal of Financial Economics*, 27: 473-521
- Case: *Carmichael Roberts: To Create a Private Equity Firm?*

Study questions:

- (a) If Roberts raises a fund, would *you* want to invest in it?
- (b) Where should Roberts base his fund?
- (c) What sorts of investments should he focus on?
- (d) Should his departure concern his colleagues at North Bridge?

2. RAISING A FIRST FUND (AUGUST 30).

- Reading: Harris, Robert S. Tim Jenkinson, Steven N. Kaplan, and Ruediger Stucke (2014), “Has persistence persisted in private equity? Evidence from buyout and venture capital funds.” Working paper, University of Virginia
- Case: *Weston Presidio Offshore Capital*

Note that in the second part of Exhibit 5 that the “Capital gains” column refers to the amount invested and the “Company valuation” column to the exit value of those investments.

Study questions:

- (a) Does Weston Presidio’s proposed investment strategy seem attractive to potential limited partners? Why or why not?
- (b) **WRITEUP OPTION:** How successful have Cronin and Lazarus been as investors? How would you compare their performance to private equity investors?
- (c) As an investor, would you have any concerns about the relationship with Mercury Asset Management?

3. ACCESSING DEAL FLOW (SEPTEMBER 4).

- Reading: Cohen, Susan L. (2014), “Accelerating startups: The seed accelerator phenomenon.” Working paper, University of Richmond
- Case: *Pear VC*

Study questions:

- (a) Is Pear a VC or an accelerator?
- (b) How does VC investing differ from angel investing?
- (c) How did Mar Hershenson and Pejman Nozad arrive at their investment thesis? Does it seem like a good strategy?

4. SELECTING INVESTMENTS (SEPTEMBER 9).

- Reading: Bentsson, Ola, and David H. Hsu (2015), “Ethnic matching in the U.S. venture-capital market.” *Journal of Business Venturing*, 30: 338-354
- Case: *PunchTab, Inc.*
- Case: *PunchTab, Inc. Investor Presentation Deck*

Study questions:

- (a) Is the pitch deck compelling?
- (b) Is this an attractive industry for a venture capital investment?
- (c) Does PunchTab have a good business model?
- (d) Does PunchTab have the right team?
- (e) Should Katherine Barr offer PunchTab a term sheet?
- (f) **WRITEUP OPTION:** If Barr offers to invest, how much should she invest and how much equity should she request in exchange?

5. VALUING INVESTMENTS (SEPTEMBER 11).

- Reading: Sorenson, Olav (2017), “Valuing new ventures.”
- Reading: Gompers, Paul, Will Gornall, Steven N. Kaplan, and Ilya Stebulaev (2016), “How do venture capitalists make decisions?” Working paper, Harvard Business School

6. VALUATION AND DEAL TERMS (SEPTEMBER 16).

- **PROBLEM SET: Valuation Problem Set Due**
(To be distributed: September 11)
- Case: *OutReach Networks: First Venture Round*

Study questions:

- (a) How much money does OutReach Networks need?
- (b) Is Everest Partners justified in asking for a 30% equity stake?
- (c) What should Pete Perez do?

7. INVESTING IN EMERGING ECONOMIES (SEPTEMBER 18).

- Case: *The Awethu Project*

Study questions:

- (a) What challenges would a traditional VC face in the South African context?
- (b) How does Awethu solve these problems?
- (c) Would you want to join Yusuf and Rob at the Awethu Project?
- (d) Why does SAB want to invest in Awethu?

8. NEGOTIATING DEAL TERMS (SEPTEMBER 23).

- Reading: Kawasaki, Guy (2006), "The top ten lies of entrepreneurs."
https://guykawasaki.com/the_top_ten_lie-1-3/
- Reading: Kawasaki, Guy (2006), "The top ten lies of venture capitalists."
https://guykawasaki.com/the_top_ten_lie-3/
- Case: *Rebel Technologies Series Seed Negotiations*

- **GROUP ASSIGNMENT: Term sheets**

Each team will either play the role of Emperor Ventures or of the management of Rebel. I will provide additional information to teams (distributed on September 18). You should use that information to determine your BATNA. I will also pair teams to engage in a negotiation, with one side playing the role of the investors and the other the role of the entrepreneurs in a negotiation. You should come to a deal (or agree that you cannot find common ground) and hand in your assignment sheets by 5pm on **September 22**. Class time will focus on debriefing the issues and the negotiations.

9. FOLLOW-ON AND IMPACT INVESTING (SEPTEMBER 25).

- Case: *Blue Haven Initiative*

Study questions:

- (a) Is Blue Haven an impact investor?
- (b) How does it choose investments?
- (c) Is PEG an attractive investment?
- (d) Should Cochran and Pritzker Simmons recommend a follow-on investment in the Series B to the IC?
- (e) Was the proposed valuation reasonable?

10. INVESTING THROUGH DEBT (SEPTEMBER 30).

- Case: *Avid Radiopharmaceuticals and Lighthouse Capital Partners*

Study questions:

- (a) As one of Barnes' colleagues, why might you oppose lending to Avid?
- (b) How do the proposed terms mitigate the risks inherent in lending to companies with few assets and negative cash flow?
- (c) What sorts of conflicts might arise among management and the various investors? How would you mitigate them?
- (d) Should Skovrosky take the venture debt? Why or why not?

11. EXITING INVESTMENTS I (OCTOBER 2).

- Reading: Loughran, Tim, and Jay Ritter (2004), "Why has IPO underpricing changed over time?" *Financial Management*, 33: 5-37
- Case: *Square, Inc. IPO*

Study questions:

- (a) Is now the right time for Square to go public?
- (b) Should Square pursue an acquisition instead?
- (c) Why did Square's stock price go up so much on the first day?
- (d) **WRITEUP OPTION:** Create a waterfall analysis for Square. Who wins and loses in the IPO?

12. EXITING INVESTMENTS II (OCTOBER 7).

- Case: *ComplexAminos*

Study questions:

- (a) If you had been a venture investor in ComplexAminos, how would you have felt about the roll-up strategy proposed by Harper?
- (b) When does a roll-up strategy make sense?
- (c) **WRITEUP OPTION:** How much would the investors earn in an acquisition for \$300 million versus in an IPO for a similar amount? (Assume that the investors have put \$70 million into the company in participating preferred shares.) As an investor, which would you prefer?

13. EXITING INVESTMENTS III (OCTOBER 9).

- Case: *Exits in Emerging Markets: Actis' Investment in Umeme*

Note that Umeme has two loans, both denominated in U.S. dollars. One has a balance of \$27 million, the other \$21.6 million. Both have interest rates of roughly 12%.

Study questions:

- (a) Would you have been in favor of the original investment in Umeme?
- (b) Why is it difficult to find a strategic acquirer for Umeme?
- (c) How can a private equity investor exit in less developed capital markets?
- (d) **WRITEUP OPTION:** Estimate the amount that Actis might earn in an IPO versus the amount that it could earn in a dividend recapitalization.

Materials

1. Sahlman, William A. (1990), "The structure and governance of venture-capital organizations." *Journal of Financial Economics*, 27: 473-521
2. Carmichael Roberts: *To Create a Private Equity Firm*, HBS Case 9-317-079
3. Harris, Robert S. Tim Jenkinson, Steven N. Kaplan, and Ruediger Stucke (2014), "Has persistence persisted in private equity? Evidence from buyout and venture capital funds." Working paper, University of Virginia
4. *Weston Presidio Offshore Capital: Confronting the Fundraising Challenge*, HBS Case 9-296-055
5. Cohen, Susan L. (2014), "Accelerating startups: The seed accelerator phenomenon." Working paper, University of Richmond

6. *Pear VC*, Stanford GSB Case E-630
7. Bentsson, Ola, and David H. Hsu (2015), "Ethnic matching in the U.S. venture-capital market." *Journal of Business Venturing*, 30: 338-354
8. *PunchTab, Inc.*, HBS Case 9-812-033
9. *PunchTab, Inc. Investor Presentation Deck*, HBS Case 9-812-172
10. Sorenson, Olav (2019), "Valuing new ventures."
11. Gompers, Paul, Will Gornall, Steven N. Kaplan, and Ilya Stebulaev (2016), "How do venture capitalists make decisions?" Working paper, Harvard Business School
12. *OutReach Networks: First Venture Round*, University of Virginia Case UV6569
13. *The Awethu Project: Values-Driven Decisions for Profit and Social Impact*, Ivey Case W17257
14. *Blue Haven Initiative: The PEGAfrica Investment*, HBS Case 9-318-003
15. *Avid Radiopharmaceuticals and Lighthouse Capital Partners*, HBS Case 9-810-054
16. Loughran, Tim, and Jay Ritter (2004), "Why has IPO underpricing changed over time?" *Finanacial Management*, 33: 5-37
17. *Square, Inc. IPO*, HBS Case 9-817-054
18. *ComplexAminos*, Stanford GSB Case E-565
19. *Exits in Emerging Markets: Actis' Investment in Umeme*, Stanford GSB Case F-311