RSM 410H1S
Private Equity and Entrepreneurial Finance
Winter 2014
Course Meets: Thursdays / 9:00 – 11:00 a.m. / WO 35

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Course Objectives and Audience

The last decades have revealed a significant increase in the demand for and supply of private equity (e.g. Venture Capital and Leveraged Buyout Funds). The primary objective of the course is to improve students' ability to understand the concepts and institutions involved in entrepreneurial finance and private equity. Accordingly, the course will take a broad perspective. The course will provide students with skill sets so they can analyze and understand private equity from multiple perspectives: the perspective of the individual/firm seeking and receiving private equity finance; the perspective of the private equity fund; and, the perspective of the limited partners that provide finance for private equity funds.

The course is designed to be of interest to students interested in accessing finance for an entrepreneurial venture, and for those interested in a career in finance, consulting, and law. The course is likely to be of particular interest if you anticipate interactions with private equity firms as a provider of services (e.g. investment banking, consulting, law), a buyer of private equity services (e.g. as institutional investor) or working in a private equity firm. The course will take advantage of concepts from finance, economics, accounting and strategy to apply them to case situations.

Prerequisite: RSM 333H1

Required Readings

The course has a required textbook. This is:

Venture Capital and the Finance of Innovation, by Andrew Metrick and Ayako Yasuda, Wiley, Second Edition, 2011 (hereafter referred to as **MY**) [This book will be available at Koffler until the Innis store reopens in January.]

The course also has a ***required*** set of case studies. You cannot complete the course preparation without buying the materials. They can be purchased from HBS Publishing electronically. You can purchase the course packet here: **https://cb.hbsp.harvard.edu/cbmp/access/23308590** Purchasing the case studies normally includes the data in separate spreadsheets.
Additional cases and readings will be distributed in class or can be accessed via the portal or links noted in the syllabus below.

Evaluations and Grades

Grades are a measure of the performance of a student in individual courses. Each student shall be judged on the basis of how well he or she has command of the course materials.

		Due Date
Class Participation	25 %	Ongoing
Case Write Ups	10%	As indicated in syllabus
Problem Sets	5%	As indicated in syllabus
Financial Skills/Terms Evaluation	10%	Mid-term
Investment Committee exercise	20%	Near end of term
Final Exam	30%	5 day window during exam period.

I encourage you to evaluate the course not by the grade you get, but by how much it contributes to your understanding of business for now and in the long-term. Below I provide more detail on each of the 6 components:

1. Class participation (25% of your overall grade). I will judge your class participation based on the quality and the frequency of comments. You thus need to make comments in class, and these comments need to contribute to classroom discussion and understanding. The most effective comments involve listening to what others have said and making efforts to connect your comments to the flow of discussion and to the more important issues in the case. To aid in your preparation, I have study questions assigned for each case. I expect you to come to every class, be on time, and be prepared to participate. To help me out, you must bring your name cards to each class and, after the first class, stay in the seat you have chosen. I may not remember who said what without those cards. If this percentage of your grade sounds like a lot, remember that when you leave Rotman your 'grade' is based almost entirely on how well you communicate with your colleagues. This class is a low-risk opportunity for you to improve both your analytical and your presentation skills.

2. Case write-ups (10%).

   For seven classes in the course, I require a case write-up as a two-page memorandum of analysis and recommendations **due at the beginning of class**. The two-page limit is for text only. You may attach as many numerical calculations as you wish. *The memos may be done individually or as a group of up to 3 students*. If you are working in a group, I will accept one memorandum from the group and count it for credit for all students involved in the group.
   A memorandum will be given credit if it is handed in and no credit if it is not.
   Memoranda/problem sets will not be accepted after the class has met. Initially, I will not evaluate the memoranda/problem sets, however, I will use these as a 'tie-breaker' to determine final grades for students who are on the border of the next grade level.

3. Problem sets (5%)

   There are 2 problem sets. The first counts 1% to your final grade, the second 4%.

4. Mid-session quiz on VC terms and valuation skills (10%). This will be an individual evaluation of some of the financial skills/knowledge of terms. The problem sets will provide a strong indication of the type of questions and materials for the mid-session quiz.

5. Investment Committee recommendation (20%). In this group project (max number of 6 people), groups will be asked to imagine that their group is working for a private equity division of a Large Asset manager (e.g. CPPIB, Ontario Teachers) that makes direct investments in private equity. You will be given parameters (e.g. industry, size and leverage ranges) and asked to identify a PE target and produce an investment committee memo to pitch your recommendation to an 'investment committee'. This memo is in the form of a powerpoint deck. In the past we have had members of actual investment committees from PE firms join us. Your group grade will be based on the investment committee memo (which may be in the form of a powerpoint deck) and the oral

presentation to the investment committee. Further details, including copies of past investment committee memos of PE firms and past students, will be provided in class.

6. Final Exam (30% of your grade). The final exam will be an individual take-home case analysis. The case will be distributed and you will have 5 days in which to complete this assignment.

All assignments should be submitted to Blackboard that will be setup after the first class. Students should consult with the course TA to ensure all students in a group are given credit for assignments.

Course Organization

The course will be divided into three sections:

Users of private equity – This section focuses on the challenges entrepreneurs/managers face in attracting finance to fund their ideas. Students will be required to assess the qualitative attractiveness of an opportunity and to put a quantitative value on that opportunity including consideration of alternative exit possibilities.

Private equity partnerships – This section focuses on issues facing private equity partnerships in evaluating, choosing, and managing private equity investments, including the challenges of exits.

This section evaluates the methodologies and structures that have evolved as well as possible ways to improve them.

Investors (LPs) and private equity partnerships: This section will analyze issues in structuring private equity partnerships, and in raising funds for them.

Course Procedures

The class will be conducted in large part as a **case** discussion. For each session, I assign a case and will assume you have read the case. You will be asked to consider yourself as a protagonist in the case (or an investor). We will consider the study questions and other questions that pertain to the material in the case. I expect that all students will have read the case before class and have prepared answers to the study questions. **This also applies to the first class – come prepared.** I will ask for volunteers and cold-call students to generate class discussion.

In many sessions I will also list **required readings** and **suggested readings**. I will conduct the class assuming you have read all of the **required readings**. **Suggested readings** are as the title implies, suggested if you want to delve deeply into the topic but not required. Some of these readings involve academic articles as these articles are influential and widely read by leading PE professionals. The articles should help you to analyze the cases but should not necessarily be cited in the class discussion. You should argue as if you are in a funding meeting. Students should use the class discussion and the readings to discern what types of approaches and answers are better than others. I will not hand out 'right' answers because good cases rarely lend themselves to simple 'right' and 'wrong' answers and because handouts tend to be circulated from year to year (and class to class).

This course is designed to be time-consuming and challenging. Unless you have time to prepare one case a session and do the background readings I recommend not taking the course.

In addition to the regularly scheduled sessions, I have scheduled extra non-required sessions that complement the other class sessions and will take place outside of the regular times. These extra sessions will involve an assignment (usually a case study) and an outside speaker. The specific times will be finalized after the first class and try to minimize overlap with other classes and to accommodate availability of speakers.

POLICY AND PROCEDURE

Missed Tests and Assignments (including midterm examinations)

Students who miss a test or assignment for reasons entirely beyond their control (e.g. illness) may submit a request for special consideration. Provided that notification and documentation are provided in a timely manner and that the request is subsequently approved, no academic penalty will be applied.

In such cases, students must notify Rotman Commerce on the date of the missed test (or due date in the case of course work) and submit supporting documentation (e.g. Verification of Student Illness or Injury form) to the Rotman Commerce Program Office within **48 hours** of the originally scheduled test or due date. Students who do not provide Rotman Commerce or the instructor with appropriate or sufficient supporting documentation will be given a grade of 0 (zero).

Note that the physician's report must establish that the patient was examined and diagnosed at the time of illness, not after the fact. Rotman Commerce will not accept a statement that merely confirms a report of illness made by the student and documented by the physician.

If approval is granted, a resolution will be determined by the instructor and may take the form of an alternate deliverable, a re-weighted grade calculation, or a make-up exam**.**

Attendance Policy

An important part of your learning experience is what you learn from your classmates. I expect students to be in class. If you are not there, your classmates have lost this potential learning opportunity. You must inform me of any absences in advance of class. Failure to attend class, and/or to inform me will have a material impact on your class participation grade which accounts for 25% of your final grade.
Frequent and/or unapproved absences could result in an F (failing grade) or the need to withdraw from the course.

Guidelines regarding Group Work

Learning to work together in teams is an important aspect of your education and preparation for your future careers. You are therefore reminded of the following expectations with respect to behaviour and contributions to your team project.

1. Read the document entitled, "*Working in Teams: Guidelines for Rotman Commerce Students*" which is available on the RC portal under the Academic Services tab.

2. When working in a team, Rotman Commerce students are expected to:

- Treat other members with courtesy and respect;
- Honour the ground rules established by the team;
- Contribute substantially and proportionally to the final project;
- Ensure enough familiarity with the entire contents of the group project/assignment so as to be able to sign off on it as original work;
- Meet the project timeline as established by the team.

3. Resolving differences:
Conflicts can – and do – occur. Conflicts are part of the team's process of learning how to work together effectively and can actually generate exciting debate and creative solutions if managed appropriately. Student teams are collectively expected to resolve disputes or misunderstandings as soon as they arise (and prior to submission of the final project). In cases where teams are unable to reach a mutually agreeable solution, the entire team must meet with the Rotman Commerce Team Coach** as soon as possible. The Coach will listen to the team and help develop options for improving the team process. All members of the project team must commit to and utilize their action plans.

** The Rotman Commerce Team Coach, Nikoleta Vlamis, may be reached at nikoleta@nikoletaandassociates.com for an appointment. Nikoleta is an expert in team dynamics and facilitation. Note that Nikoleta's role is to provide guidance, support and advice on team matters – not to formally evaluate or assess teamwork for academic purposes.

Accessibility Needs

The University of Toronto is committed to accessibility. If you require accommodations for a disability, or have any accessibility concerns about the course, the classroom or course materials, please contact Accessibility Services as soon as possible: disability.services@utoronto.ca or http://www.accessibility.utoronto.ca/.

Academic Integrity

Academic Integrity is a fundamental value essential to the pursuit of learning and scholarships at the University of Toronto. Participating honestly, respectively, responsibly, and fairly in this academic community ensures that the UofT degree that you earn will continue to be valued and respected as a true signifier of a student's individual work and academic achievement. As a result, the University treats cases of academic misconduct very seriously.

The University of Toronto's Code of Behaviour on Academic Matters

http://www.governingcouncil.utoronto.ca/policies/behaveac.htm outlines the behaviours that constitute academic misconduct, the process for addressing academic offences, and the penalties that may be imposed. You are expected to be familiar with the contents of this document. Potential offences include, but are not limited to:

In papers and assignments:

- Using someone else's ideas or words without appropriate acknowledgement.
- Submitting your own work in more than one course without the permission of the instructor.
- Making up sources or facts.
- Obtaining or providing unauthorized assistance on any assignment (this includes collaborating with others on assignments that are supposed to be completed individually).

On test and exams:

- Using or possessing any unauthorized aid, including a cell phone.
- Looking at someone else's answers
- Misrepresenting your identity.
- Submitting an altered test for re-grading.

Misrepresentation:

- Falsifying institutional documents or grades.
- Falsifying or altering any documentation required by the University, including (but not limited to), medical notes.

All suspected cases of academic dishonesty will be investigated by the following procedures outlined in the *Code of Behaviour on Academic Matters*. If you have any question about what is or is not permitted in the course, please do not hesitate to contact the course instructor. If you have any questions about appropriate research and citation methods, you are expected to seek out additional information from the instructor or other UofT resources such as College Writing Centres or the Academic Success Centre.

Email

At times, the course instructor may decide to communicate important course information by email. As such, all UofT students are required to have a valid UTmail+ email address. You are responsible for ensuring that your UTmail+ email address is set up AND properly entered on the ROSI system. For more information please visit http://help.ic.utoronto.ca/category/3/utmail.html

Forwarding your utoronto.ca email to a Hotmail, Gmail, Yahoo or other type of email account is not advisable. In some cases, messages from utoronto.ca addresses sent to Hotmail, Gmail or Yahoo accounts are filtered as junk mail, which means that important messages from your course instructor may end up in your spam or junk mail folder.

Blackboard and the Course Page

The online course page for this course is accessed through Blackboard. To access the course page, go to the UofT Portal login at https://portal.utoronto.ca/ and log in using your UTORid and password. Once you have logged in, look for the My Courses module where you'll find the link to all your course websites. If you don't see the course listed here but you are properly registered for the course in ROSI, wait 48 hours. If the course does not appear, go to the Information Commons Help Desk in Robarts Library, 1st floor, for help, or explore the Portal Information and Help at www.portalinfo.utoronto.ca/students and review the Frequently Asked Questions.

Recording Lectures

Lectures and course materials prepared by the instructor are considered by the University to be an instructor's intellectual property covered by the Canadian Copyright Act. Students wishing to record a lecture or other course material in any way are required to ask the instructor's explicit permission, and may not do so unless permission is granted (note: students who have been previously granted permission to record lectures as an accommodation for a disability are, of course, excepted). This includes tape recording, filming, photographing PowerPoint slides, Blackboard materials, etc.

If permission is granted by the instructor (or via Accessibility Services), it is intended for the individual student's own study purposes and does not include permission to "publish" them in anyway. It is absolutely forbidden for a student to publish an instructor's notes to a website or sell them in any other form without formal permission.

Turnitin.com

Normally students will be required to submit their course essays to Turnitin.com for a review of textual similarity and detection of possible plagiarism. In doing so, students will allow their essays to be included as source documents in the Turnitin.com reference database, where they will be used solely for the purpose of detecting plagiarism. The terms that apply to the university's use of the Turnitin.com service are described on the Turnitin.com website.

Regularly Scheduled Class Overview

Individual classes subject to change. It is your responsibility to check the Portal for possibility of revised cases/ assignments.

Topic	Case and Readings	Deliverable/Other
I - PE Partnership - LP Relationship Organization and Overview	Yale University Investments Office: February 2011 (CP)	
Concepts: Incentives in PE partnerships and PE returns	ACCEL (C)	Case write-up
II – Seeking Private Equity Financing *Concepts*: A Qualitative Framework for VC investments	Technical Data Business Plan (CP)	Case write-up
Concepts: VC Valuation, Team or Industry More Important?	Visible Interactive (C)	Case write-up Problem Set A on PE terms distributed
III –PE Partnership Perspective **Identifying, Evaluating and Structuring Investments** *Concepts*: Term Sheets, VC Valuation	Iron Gate Technologies (C)	Case write-up
Integrative Case: Term Sheets, Uncertainty	Horizon (C)	Case write-up Problem Set A – due
Private Equity in Practice: Optional session, reading week *Concepts:* Negotiation, Due Diligence, Term Sheets	Birchhill and Mastermind (C)	Wednesday February 19, 4:15 – 6:15pm Rotman Atrium
Concepts: A Qualitative Framework for LBO investment, Management Incentives	Brazos Partners and Cheddar's Inc. (CP)	Problem Set B on valuation distributed
Concepts: LBO Debt Modeling	Berkshire (CP)	Case write-up Problem Set B due
Closed-book Quiz on PE Terms and Valuation		
Concepts: IPOs, International	Warburg Pincus and emgs: The IPO Decision (CP)	
Investment Committee Presentations		Longer class – Tentatively scheduled March 28th, 1 – 5pm (no class on March 27th)
Concepts: Emerging Markets PE	Surya Tutoring(CP)	

Legend for course readings: CP -In Case Package from HBS publishing. C - Handed out in Class.

Potential Extra Sessions Overview – Private Equity in Practice
These extra sessions are designed to complement the regular sessions by bringing in a private equity professional to share their experiences. These sessions will be in addition to regular sessions and outside of regular class hours. Please check the portal for the dates and times of these classes.

TOPIC	Case/Material	Speaker
Investment Analysis Process and Valuation	tbd	tbd
Private Equity in Practice: LBO Investing *Concepts:* Evolving Approaches to LBO investing	OTP and GNC (C)	tbd
Alternative Investing options for Large Investors	Canada Pension Plan Investment Board (CP)	tbd

Part 1 –Private Equity Partnership and LP Relationship

To set the stage for the course, we look at PE from the perspective of the buy-side over an extended period of time. In particular we look at a leading investor in PE, the Yale University Investment Office. Yale has been seen as a 'model' PE investor. Changes in how it approaches PE are likely to predict changes more broadly among institutional investors and for the asset class.

Case: Yale University Investments Office: February 2011. 9-812-062 **(CP)**

1. Succinctly summarize Swensen's overall investment philosophy. This philosophy leads to a strategy including asset allocation choices. Comparing Yale's asset allocation choices with that of other investors, identify specific years' allocations that best illustrate this philosophy. How has the strategy performed?
2. Succinctly summarize Yale's PE strategy. What does Swensen view as critical to Yale's success as a PE investor? What is the best measure he could use to illustrate PE performance? How important has PE been to Yale's success?
3. Identify up to 3 important changes affecting PE in recent years raised in the case. Will these changes have a dramatic, or a more minor impact on Yale's success as a PE investor going forward? Can Swensen mitigate the challenges posed by these changes?
4. As of the time of the case, should Yale reduce its investment in illiquid assets? In PE specifically?

For investors in PE partnerships, the willingness to allocate funds depends on the absolute returns for PE investments, and on the fees investors pay. This session will tackle both of these issues. To increase understanding of how fee arrangements shift returns between the partnership and the LP, you will be asked to model the payouts under alternative fee arrangements. The class will finish by a lecture on the returns to PE featuring recent soon-to-be published papers on PE performance

Session 2: PE Returns and Fundraising

This is the first case requiring a write-up memo before class. In this write-up, you need only answer question 3. In other write ups you should provide answers to all of the study questions but can structure your answer as you see most convenient instead of being required to answer in sequence.

Case: ACCEL (**C**)

Required Reading: Robert Harris, Tim Jenkinson and Steven Kaplan, " Private Equity Performance: What do we Know?" http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1932316 (forthcoming Journal of Finance)

Suggested Readings:

Ch 3, "VC Returns," Chapter 5, "The Best VCs"

Andrew Metrick and Yasuda, "The Economics of Private Equity Funds," *Quarterly Journal of Economics*. http://papers.ssrn.com/sol3/papers.cfm?abstract_id=999910

Harris, Jenkinson, Kaplan and Stucke, "Has Persistence Persisted in Private Equity? Evidence from Buyout and Venture Capital Funds," http://faculty.chicagobooth.edu/steven.kaplan/research/HJKS.pdf

Sensoy, Wang and Weisbach, "Limited Partner Performance and the Maturing of the Private Equity Industry," http://fisher.osu.edu/fin/faculty/weisbach/LPReturnsSept2013.pdf

1. Why are the incentives to Private Equity Partnerships structured the way they are? Why are the incentives so similar across different PEPs (i.e. with a 20% carry)? How do these incentives compare to those for pension fund managers? For CEOs?
2. Why is Accel proposing a different fee structure from the standard one? As an institutional investor, would you invest in Accel?
3. ** WRITE-UP Question **What are the implications of the shift from a 20% carried interest and 2.5% annual management fee to a 30% carried interest and a 2.5% annual fee? In particular, what is the

present value of Accel's compensation and the IRR to the limited partners under the different fee structures as a function of Accel's gross returns. How much better does Accel have to be (in terms of IRR) from the typical VC fund in order to justify the greater carry.

Construct a spreadsheet to answer q 3 using the following assumptions:

a. the fund has a ten-year life, with committed capital (the total amount of funds that the investors have promised to provide) of $500 million.
b. funds are invested in four equal installments, at the beginning of the first four years of the fund.
c. management fee is 2.5% of committed capital, payable in advance at the beginning of the year.
d. the fund's invested assets grow at a steady rate each year. Representative rates are 5%, 25%, 45%, 65% and 85%.
e. at the end of each of the fourth through tenth years, 20% of the value of the partnership's assets at that time are returned to the investors. Finally, at the end of the tenth year, the remaining partnership assets are distributed.
f. Assume Accel does not receive its carry until the investors have received distributions equal to their committed capital ($500 million). What happens if Accel receives its carry as long as it invested assets are valued above cost (i.e., have not lost money)? (Use a 15% discount rate for Accel's compensation.)

II – Seeking Private Equity Financing

To build understanding of the PE market we turn to the perspective of the entrepreneur/manager who is interested in securing financing for their ideas. The cases in this section of the course examine alternative approaches, deepening understanding of their relative merits, and the factors associated with success and failure.

Session 3 Evaluating a Business Plan

The case contains excerpts from a business plan prepared in late 1980. The entrepreneur, Jeff Parker, proposes to start a company that will supply information to professional investors in the bond market.

Case: Technical Data Business Plan 9-283-073**(CP)**
Suggested Readings:
Ch. 1 – MY, "Chapter 1 **-** The VC Industry"

1. Would you advise Parker to pursue this entrepreneurial opportunity? What specifically about the opportunity do you like, do you dislike?
2. Suppose you had enough resources to make such an investment as laid out in the business plan. Would you invest in this deal? As part of your decision, did you perform a valuation using the data in Figure 1? (why or why not?) What was challenging in your valuation? What else did you think about?
3. Why has the deal been structured the way it has? (Note that Parker is selling equity for 10% of the firm in the units. The two directors with 1.5% each are buying 3 units each.)

The Long-term Treasury Bond is yielding 12%. Long run inflation is 8%. The market risk premium used at the time was around 8%. The tax rate was 48%.

Session 4 Evaluating investment opportunities. Role of ideas, people and timing.

This case provides another opportunity to apply the qualitative model for evaluating VC investment opportunities introduced in the previous class. In this class we will also spend more time on VC valuation. The class includes some suggested readings on valuation including those covering material that should be familiar from your first year finance classes, as well as applications of these concepts to VC. If this is familiar territory, feel free to skim these readings. These valuation topics will be explored over a number of classes and in the problem sets.

Case: Visible Interactive (A) (Chicago case) **(C)**

Required Readings: "How Venture Capitalists Evaluate Potential Venture Opportunities," 9-805-019 (**CP)**
MY Chapter 7.2"The Investment Process"
Suggested Readings: MY Ch 4, **"**Cost of Capital for VC", MY Ch 10"The VC Method", MY Ch 11 "DCF Analysis of Growth Companies" A Note on valuation in Private Equity Settings, 9-297-050 **(CP)**
Steven Kaplan, Berk Sensoy and Per Stromberg, "Should Investors Bet on the Jockey or the Horse? Evidence from the Evolutions of Firms from Early Business Plans to Public Companies," **http://faculty.chicagobooth.edu/steven.kaplan/research/kss.pdf**

1. Would you have started this company?
2. Would you invest in this company? Why or why not? What do you think of the economics of the idea? Of the management team?
3. What pre-money value would you place on the company? I.e., what value should Larry and Bill place on the company in December 1994 when they try to raise money?
4. How much money should Visible attempt to raise? Five hundred thousand dollars? One million dollars? Two million dollars?
5. How should the equity investment be structured? Should Larry and Bill simply sell a fraction of Visible's equity? Or should the financing be structured as an investment in convertible preferred stock or convertible debt that would pay a dividend or pay interest, but be convertible into a fraction of Visible's equity?
6. Should Visible go to a venture capitalist or should they attempt to raise the money from family, friends, and contacts?

III - Role of Intermediary in Private Equity: PE Partnership

The key intermediaries we look at in the course are the PE partnerships (i.e. VC and LBO funds). This section of the course examines the various sources of value such funds can bring to the table, and how they structure and value these investments. In particular the section will increase understanding of the economics of private equity, the role of term sheets and control rights, and the various valuation methods and exit options.

Session 5: Term Sheets and PE securities

Case: Iron Gate Technologies (Chicago Case) **(C)**
Required Readings:
MY Chapter 8, "Term Sheets" MY Ch 9 "Preferred Stock"
Suggested Readings: A Note on Private Equity Securities 200-027 (**CP**),
"A Note on Securities Law and Tax and Issues in Entrepreneurial Settings" (C)

1. What are the important economic aspects of Iron Gates business? Is it a good opportunity for investment (qualitatively)? What else would you like to know?
2. Have Beitler and Earley added value at Iron Gate? How? Will Beitler add more value in the future if he invests? How?
3. What is the purpose of each of the specific terms in the term sheet? Whom does each particular term protect / favour? Whom does the term hurt? Why is each term there? What would you want to change if you were Trident? If you were one of the Iron Gate Founders?
4. Should the investment committee of Trident go forward with this proposed investment on these terms?
5. If you were Earley, would you accept the Trident offer? How should he make this decision? How should he and Beitler deal with the milestone issue?

Session 6: Term Sheets and Uncertainty

Case: Horizon Communications (A). Chicago Case **(C)**
Suggested Reading:
"Characteristics, Contracts, and Actions: Evidence From Venture Capitalist Analyses," Kaplan and Stromberg. http://faculty.chicagobooth.edu/steven.kaplan/research/ksrisk.pdf

1. As the case notes, Horizon has decided to send the business plan to several venture capitalists.
    a. Assume your firm does telecom deals and receives this plan. What term sheet, if any, would you offer to Horizon? **Please come to the session with a term sheet**. ** FOR WRITE-UP** (assume Horizon's marginal tax rate is 36% and the expected inflation rate is 3%)

2. Would you invest in this company? Why or why not?
3. What do you think of the economics of the business model? How would you go about analyzing the business model? What due diligence would you do? How would you do it? (The information in the case was essentially the information Horizon put in the business plan.)
4. How should Horizon approach their fundraising process? How much money should they try to raise?
5. Should Horizon go to a venture capital firm or to family and friends? If Horizon decides to go to a venture capital firm, which firm or firms should they target? Can a venture capitalist add value to the Horizon team? How? How does the amount a venture capitalist can add compare to Iron Gate?

The term sheet should include the following:

- ☐ Dollar amount of the offer.
- ☐ The pre-money / post-money value of the offer.
- ☐ The type of security issued.
- ☐ Terms and conditions of the offer.

Optional Integrative Case in Reading Week: Due Diligence Term Sheets and Investing
Case: Birch Hill Equity Partners and Mastermind - (C) ** Visitors in class**

1. Come to class prepared to take on a role as either a Birch Hill partner, or one of the founders. In class you will be provided some additional information, you will be assigned one of the roles, and you will be asked to negotiate a mutually agreeable termsheet.
2. As part of your preparation for this, consider the following questions
    a. Consider yourself as another partner in Birch Hill. How strong is the investment thesis for the Mastermind investment? What are the biggest uncertainties? Have they done the best job they can of quantifying these?
    b. Does this investment fit with typical patterns at Birch Hill? does this matter? Does the timing in terms of fundraising matter?
    c. What aspects of the termsheet are most important for Birch Hill? How would adjusting these aspects influence the amount Birch Hill should be willing to pay for the asset. That is, conduct a sensitivity analysis around the key inputs and how they might be adjusted.
    d. Consider yourself one of the Levy's. What are the most attractive and least attractive aspects of the proposed deal with Birch Hill? What are the alternatives to agreeing to this deal? Conduct a sensitivity analysis around the key inputs and how they might be adjusted.

Session 7: Valuation in a Buyout Setting, Management Incentives

LBO funds have both similarities and differences with VC funds. This session focuses on LBO funds. We will discuss the sources of value they can bring and introduce a qualitative model for considering LBO targets. An important potential source of value for general partners in a PE fund is the ability to understand and structure incentives. This case explores the determination of management incentives. It also presents the first example so far where leverage is an important part of the transaction.

Case: Brazos Partners and Cheddars Inc. 9-806-069
Required Reading: Steven Kaplan, "Note on Operational Engineering" (C)
Suggested Reading: Michael Jensen, "Eclipse of the Public Corporation," Harvard Business Review http://papers.ssrn.com/sol3/papers.cfm?abstract_id=146149

1. As part of this class we will reexamine the qualitative model for VC investing and see what if anything needs to be modified in considering LBO investing. Consider what

are the key mechanisms for value creation in LBOs, are they the same or different from VC investments. What are desirable firm characteristics for candidates for LBOs?

2. What is Brazos investment strategy? Does it seem well suited for its position as a first time fund? How do you assess the merits of the GTT transaction?
3. Is Cheddar's an attractive investment? Did Brazos underpay, overpay or get it just right in their initial investment?
4. Should Brazos allow the company to sell the managers' stock? What is the appropriate price? Conduct a valuation using an APV approach.

Session 8 LBO Valuation and private-to-private exit

In LBOs a source of potential value is tax savings from a managed increase in leverage. The class will explore a case and reading on the types of debt financing and LBO modeling.

Case: "Berkshire Partners: Bidding for Carters" **(CP)**
Required Reading: "Note on LBO Capital Structure" 9-214-039 (**CP**)

1. How does Berkshire Partners create value? Does Carter's fit with the Berkshire investment philosophy? Why is Investcorp selling?
2. How much cash flow will Carter's generate in the next five years (2002-2006), based on management estimates? How realistic are the management forecasts, in light of Carter's historical performance?
3. What should the Berkshire team bid? Make an assumption about an appropriate capital structure and do a valuation. The spreadsheet posted on the portal will be helpful for this.
4. How does the proposed capital structure in the staple financing compare with typical capital structures at the time and today?
5. Given the bid you recommend, what is the expected IRR on the investment?

Session 9: Exit through IPO

An essential element of any proposed PE financing is consideration of the timing and nature of exit. In this class and the next we will consider the various options from an IPO, to a sale to a strategic investor, to a sale from one private equity partnership to another.

Case: Warburg Pincus and emgs: The IPO Decision (A) 9-807-092 **(CP)**
Suggested Readings:
A Note on the Initial Public Offering Process 9-200-018 **(CP)**
"A Review of IPO Activity, Pricing and Allocations," Ritter and Welch. http://papers.ssrn.com/sol3/papers.cfm?abstract_id=296393
Great data on IPOs, http://bear.warrington.ufl.edu/ritter/ipodata.htm
(if you are interested, Professor Ritter's web page provides lots of additional information http://bear.warrington.ufl.edu/ritter/ipodata.htm)
"Insider Ownership and The Decision to Go Public," Zingales.
http://faculty.chicagobooth.edu/luigi.zingales/research/papers/ownership.pdf

1. What is distinctive about Warburg Pincus and its approach? Are these sources of strength or weakness?
2. Has Warburg Pincus added value to emgs, or has this mostly been a financial play?
3. Is emgs ready to go public? Does it make sense to do so in Norway or in the US?
4. How much is emgs worth? What are the key sources of uncertainty about this valuation?

Session 10 Investment Committee Presentations.

Session 11: Private Equity in Emerging Markets

For the final class in the course, we return to the question raised in the Yale case. There are growing opportunities for PE in emerging markets. Will PE in these markets deliver as PE has in the past, and will funds like Yale be able to identify the better performing PE managers? To gain insight into these questions we will explore PE opportunities involving an opportunity in India.

Case: Surya Tutoring: Evaluating a Growth Equity Deal in India KEL 679
(**CP**)
Suggested Readings: Chapter 6: MY, "VC Around the world"
A Note on Private Equity in Developing Countries, 9-208-037 **(CP)**

1. Where would you place this deal on the private equity- venture capital spectrum? Which of the qualitative frameworks we have used in the course should be used to analyze it (LBO or VC qualitative valuation framework)?
2. Compare the approaches of ZenCap and Blackgem to deal sourcing and negotiation.
3. Describe the advantages that Zencap and Glackgem each bring to Surya as a potential investor.
4. Compare and contrast the contractual features in the term sheets offered by ZenCap and Blackgem. Why do you think certain contractual features are in the ZenCap term sheet but not in Blackgem's and vice versa?
5. Conduct an APV valuation of the company based on the pro forma financials. How does this compare to the pre and post money valuations in the two deals.
6. Which firm should R. K. Sharma choose to finance Surya's expansion? Why?
7. Does the answer to q 6 matter for the future success of Yale's PE strategy?

Study Questions for Potential Extra Sessions

Session on Thinking Like a PE professional: The Investment Analysis Process and Valuation Materials to be distributed

Integrative Case: The Evolving Investment Process in Private Equity: Lessons from Ontario Teachers Private Capital
Guest: Romeo Leemrijse, OTP

Required Readings:
'Heads Up' Memo for GNC Investment
Investment Committee Memo for GNC Investment

Come to class prepared to debate the advisability of pursuing the investment proposal laid out in the investment committee memo.

1. Does the qualitative framework for LBO investing laid out in the course capture the various value creation opportunities flagged in this memo?
2. Anything surprising about the heads up memo (e.g. things included or excluded)?
3. Anything surprising in the investment committee memo (e.g. things included, excluded, space devoted to particular topics)?
4. Would you have invested as OTP at this time on these terms? What questions would you ask? What would you flag as important issues going forward for monitoring?
5. If you were devising a process for evaluating investment opportunities at OTP, are there additional steps you would like to include in the evaluation process in addition to the heads up memo and the investment committee deck?

Integrative Case: Alternatives to investing through PE Partnerships?

Case: The Canada Pension Plan Investment Board: October 2012, 9-813-103 **(CP)**
Suggested Reading: Dyck and Pomorski, "Investor Scale and Performance in Private Equity Investments" (http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2192619
****Visitors in Class ****

1. What is your evaluation of the Canada Pension Plan Investment Board's strategy? How does it compare to the one of David Swensen? What are the most important points of similarity and difference? What accounts for them?
2. Focus on CPPIBs Private Equity Investment Strategy. What are the similarities and differences with the approach of Swensen? What is the best answer Wiseman could give to Swensen's trepidation with direct investing?
3. Should Wiseman be sleeping well at night? What are the major risks with this approach, and how does Wiseman attempt to mitigate them?