

NBA 678
Advanced Private Equity
Johnson Graduate School of Management
Cornell University
Fall 2008

SYLLABUS

Instructors

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Class Time and Location

Time: Wednesdays 1:25pm – 4:10pm, Fall Semester
Room: B08

Course Overview

Private Equity, which includes both venture capital transactions and buyouts, has been on the rise during the last decade, but has experienced significant turmoil in the last year (especially buyouts). Understanding how private equity financing differs from public financing has become increasingly important not only for students who will actually work for entrepreneurial companies or in private equity firms but also for students who will go into investment banking, consulting or other professional fields that are frequently working with private equity transactions. Private equity transactions are very complex, which means that if you understand why and how transactions are structured then you will be able to understand a range of other less complex financial transactions.

This course is an advanced MBA-level finance course in private equity. “Advanced” means that the level and pace of the course assumes that students (i) have core knowledge of primarily finance, but also of accounting, economics and Excel, and (ii) are willing to put in hours outside the classroom on case analyses and homeworks. “Advanced” also means that you will not learn lingo and vague definitions but get a fundamental understanding of how things work in Private Equity transactions. “Finance” means that the course builds on the traditional finance concepts such as risk and return tradeoffs, capital structure, and valuation. “Private Equity” means that the course studies both venture capital investments in risky early stage companies and buyout investments in large mature corporations.

The course has two primary goals. The first goal is to teach you how private equity transactions are structured and to give you an understanding of *why* this is the case. This goal is achieved via lectures, including two guest lectures by Mr. Bartlett, and cases. The second goal is to strengthen

your ability to apply theories and tools of finance to venture capital and buyout transactions. This goal is achieved via lectures, practice problems and homeworks in basic financial modelling. The class also has a secondary goal, which is to further your ability to review empirical evidence that support or refute a claim (for example: “the IPO window in the US is currently closed”).

Course Modules

(1) Overview of Recent Issues in Private Equity.

This module focuses on the recent developments in venture capital and buyout markets. We discuss recent newspaper articles with the purpose of understanding current events their implication on both private equity markets and public equity markets. Mr. Bartlett, who has 40 years’ experience of private equity, visits the class and gives his perspectives on recent trends in the industry.

(2) Risk and Return of Private Equity

This module examines the risk and return profile of private equity investments. We study the case *Yale University* and discuss how some large investors in private equity funds make their investment decisions.

(3) Contracts and Deal Structure

This module is the largest and covers the two main relationships in private equity. First, using the case *Accel Partners*, we study how contracts between investors (LPs) and private equity firms (GPs) are structured. These contracts determine how profits are split between the people who provide the money and the people who manage the money. This module has a homework problem where you will build a “Fund Model” that calculates returns to LPs and compensation to GPs.

Second, we study the design of venture capital contracts (between VCs and entrepreneurs). These contracts are complex financial instruments to which various contractual rights typically are added. We study in detail how these instruments work by doing two homework problems, and discuss why these complicated instruments are used. Using the case *Iron Gate*, we study a real-world example of a VC transaction. This module ends with a negotiation exercise where students first do a mock negotiation of a VC deal, and then observe an in-class mock negotiation between Mr. Barlett and Prof. Bengtsson.

(4) Valuation

This module begins with a recap of the standard finance valuation methods. We then apply these methods to early stage companies that receive financing from venture capitalists and to mature corporations that are targets of leveraged buyouts. We learn the valuation method used by most venture capitalists and discuss how this method compares to the NPV method. The insights of this module are reinforced by a homework problem and by studying the case *Horizon*. We also discuss the APV method and apply this to the famous of *RJR Nabisco* in 1988 (by KKR).

(5) Buyouts

The final module focuses on buyout transactions, also know as LBOs. We study the *Orangina* case and a recent deal by *ABRY Partners*. We discuss how buyout investors bid for public companies and how such investments are structured. Using our insights from the

valuation module, we discuss how buyout investors could add value to a portfolio company.

Schedule and Office Hours

The class meets in one classroom session per week, which will be on Wednesdays from 1:25pm-4:10pm. We meet every week except Thanksgiving week (November 26st). You are expected to come to class and lack of attendance could result in a grade penalty. A complete schedule is attached at the end of this syllabus. See course package for a schedule that describes topics, readings and deliverables for each class.

There are no scheduled TA sessions but Prof. Bengtsson has an open door policy so you can always stop by with any questions (Sage 401B, 4th floor facing Statler Hotel). Formal office hours are on Thursday 9:00-12:00. Please send an email in advance if you want to meet outside office hours. There are no TA sessions; homework solutions are discussed in detail during class time.

Prerequisites

The only formal requirements for this course are the Johnson School core MBA finance course or equivalent. You should feel comfortable with financial statement analysis, valuation methods, basic economic theory such as principal-agent analysis, and Excel (you don't have to be an Excel-wizard).

Relationship to Other Courses

This class has been designed to minimize overlap with other courses in the finance and entrepreneurship area. Relative to NBA 564 – *Entrepreneurship and Private Equity* – it gives a more in-depth analysis of the private equity industry, contract structures and valuation methods. Relative to NBA 557 – *Cases in VC Investing* – it does not study the VC due diligence in detail. Relative to NBA 689 – *Law for High-Growth Businesses* – it focuses not on the legal but the financial side of venture transactions. Some overlap with other courses on content is inevitable, but the perspectives taught in this course are different.

Course Materials

The course includes lectures by Prof. Bengtsson and Mr. Bartlett, and case discussions by Prof. Bengtsson. In addition to the classroom sessions you are expected to read and prepare solutions for 7 cases and do 6 homework problems. You are also expected to read the assigned textbook chapters, and familiarize yourself with the academic and newspaper articles.

Printed Material

- *Venture Capital and the Finance of Innovation*, by Andrew Metric (Book, Required)
- Media articles (Course Package and Distributed, Required)
- Practice problems (Course Package, Recommended)
- Academic articles (Course Package, Recommended)

- *Venture Capital – A Practical Guidebook*, by Daniel H. Aronson (Book, Required)
- *Fundamentals of Venture Capital*, by Joseph Bartlett (Book, summarized in Chapter 0 of *The Encyclopedia*, Recommended)
- *The Venture Capital Cycle*, by Paul Gompers and Josh Lerner (Book, Recommended)
- *Valuation – Measuring and Managing the Value of Companies*, by Tim Koller, Marc Goedhart and David Wessels (Book, Recommended)

On-line Material

An on-line access to the Wall Street Journal is recommended (free to all Johnson students). I strongly suggest that you during the course follow current events in the Private Equity (search words: private equity, buyout, venture capital).

A great source for material on Private Equity is VCExperts (founded by Joseph Bartlett). VCExperts offers streaming video segments and written materials from *The Encyclopedia of Venture Capital*. The self-paced tutorials covering a wide range of topics. As we are not always able to have guest speakers come to visit us at Cornell, the video tutorials will allow experts in various areas to lecture on a variety of topics, and will give you a practitioner’s view of the industry and its trends. All the material in VCExperts is recommended reading, and you will not be tested on it at the midterm or final exam. For the VCExperts website, *cornell.vcexperts.com*, a userid and password for the course VCExperts website will be provided to students registered for the course prior to the first week of class. A one year access code to VCExperts costs \$60. Questions regarding the VCExperts website should be addressed to Cory Buecker (cory@vcexperts.com).

Assessment of Your Work

This class could be taken for letter grade or Pass/Fail. The Johnson School faculty has adopted a suggested grade average of 3.5 for elective courses. This course will follow that guideline. The inputs to the final grade are as follows:

Class Participation	15%	(Attendance and participation)
Midterm	20%	(Closed book in-class multiple-choice)
Homeworks	20%	(5 individual, 1 group negotiation project)
Final exam	45%	(Closed book in-class cumulative)

Attendance and Class Participation

An important portion of your course grade will depend on attendance and class participation. You are expected to come to class and be active in the discussions. **I cold call students to make sure everyone in the classroom is mentally present.** You are expected to have read and prepared the material for each class (case, homework, newspaper articles, and academic articles). **You are not allowed to use your laptop in class.**

Midterm

The midterm is in-class and closed book. All midterm questions are of multiple-choice type which does NOT mean that they are trivial. The midterm covers readings, cases, homeworks and class discussions.

Case Memos

In the week of a case session, you must read the assigned case material. You should then in a group of 3-4 students answer the case questions and be prepared to answer them in class. Thus, while you are not required to write up the answers to the case questions, you are to be prepared to answer each of them in class. Note that answers to the cases will not be handed out, because there are no absolute right answers. The best cases are deliberately written to be ambiguous. If you are uncomfortable with ambiguity, do not take this class.

Homeworks

The course has a total of 6 homeworks, which are an essential part of the learning experience. The homeworks are graded. The solutions are discussed in detail during class time and distributed. Five of the homeworks are individual and cover finance-type problems relevant for venture capital and buyout transactions. Individual that you are not allowed to discuss these homeworks with anyone (if you do I consider it as cheating).

The sixth homework is the negotiation exercise where you form a group of 3 students and do a mock negotiation (with another student group) of the deal terms for a first round of venture capital financing. Each group is responsible for drafting a term sheet respecting the Newco case study, and also outlining the negotiation strategy and summarizing the actual negotiation process. This exercise aims at giving you a taste of how a real-world negotiation evolves. Also, it gives you a practical application of the insights from our discussions about deal terms.

Final Exam

The final exam is in-class, closed book and cumulative. The final exam covers readings, cases, homeworks and class discussions. The solution to the final will be posted on Blackboard.

Regrade Requests

The deadline for a regrade request is one week after the homeworks, midterm or final are returned to your mailfolder. The deadline for a course regrade request is two weeks after the final grade has been posted. All regrade requests have to be submitted in writing (email or paper format) where you outline the reasons for why your grade is wrong. I do not meet with students to discuss regrade requests.

Other Important Information

Each student in this class is expected to abide by the Cornell University Code of Academic Integrity. Any work submitted by a student in this course must be the student's own work. Collaboration in groups is allowed where stated but not otherwise. Case memos and the negotiation homework should be solved without consultation of anyone who is not a member of your group. The other three homeworks, the midterm and the final exam should be solved without consulting anyone. Violation of these rules is considered cheating. Remember to sign the attendance sheet for each class.

This course gives 3 credits, and can be taken for letter grade or Pass/Fail. The course is open to non-Johnson students, conditional on space and instructor approval.