New Venture Financing

General Course Information:

FINC-GB.3373.30-S2015 NEW VENTURE FINANCING Wednesdays 6-9pm Room: TBC

Instructor Information:

Professor Alexander Ljungqvist Room: KMC 9-59 (Salomon Center) E-mail:<u>aljungqv@stern.nyu.edu</u> Office Hours: TBC

Professor Ljungqvist holds the Ira Rennert Chair in Finance and Entrepreneurship at New York University's Stern School of Business, where he serves as the director of the NYU Salomon Center. He has taught at Harvard, Oxford, Cambridge, London Business School, and Tokyo, and joined NYU in 2000. He is a Research Associate of the National Bureau of Economic Research in Cambridge, a Founding Senior Fellow of the Asian Bureau of Finance and Economic Research in Singapore, and a Research Fellow of the Centre for Economic Policy Research in London. Dr. Ljungqvist is the recipient of the 2011 Ewing Marion Kauffman Prize Medal for Distinguished Research in Entrepreneurship and of several teaching awards.

Outside Stern, Dr. Ljungqvist serves on the Nasdaq Listing Council and the board of a European biotech company, and he is a member of the World Economic Forum's Expert Committee on Alternative Investments. He previously served on a World Economic Forum working group tasked with "Rethinking financial innovation." In the 2000s, he designed alternative investment strategies for Deutsche Bank Securities. Over the past 20 years, he has consulted widely on private equity, corporate finance, regulatory economics, and corporate strategy.

Prerequisites and Co-requisites

The *Foundations of Finance* core course (COR-GB.2311) or approved equivalent courses at the Law School etc. is a prerequisite. *Corporate Finance* (FINC-GB.2302) is a co-requisite, meaning it must be taken either before or concurrently with this course.

Past experience shows that this course is <u>not</u> suitable for first-year MBA or first-year Langone students, due to its integrative nature. You are strongly advised to wait until your have completed your first year before taking this course.

The course is not open to students taking, or having taken, *Entrepreneurial Finance* (FINC-GB.3361) or *Venture Capital* (FINC-GB.3173). Whilst these courses cover similar ground in some lectures, *New Venture Financing* focuses more heavily on start-ups and the workings of the venture capital industry than does *Entrepreneurial Finance*.

Course Overview and Objectives

This is a full-term course that focuses on financing entrepreneurial companies, especially start-up and early-stage ventures. Investing in such ventures is characterized by very high degrees of uncertainty and complex asymmetries of information between investors and the entrepreneur which can lead to misalignment of incentives and conflicts of interest. The twin aims of the course are for students to learn **how to make investment decisions** in these situations (i.e. which opportunities to pursue and which to pass up) and **how to structure the terms of the** **investment** in such a way as to cope with uncertainty and reduce conflicts of interest arising due to asymmetries of information.

The first aim requires you to master tools for screening investment opportunities in the absence of much 'hard' financial data. The requisite 'opportunity recognition' tools mainly draw on finance, strategy, and the economics of industrial organization. A good example is the importance of barriers to entry for achieving sustainable profit margins. The second aim requires you to develop an understanding of contract and deal design. For instance, deals are often structured in such a way as to make the valuation paid by the outside investor contingent on the subsequent performance of the venture (using options etc.).

At the end of the course, you should be able to demonstrate that you can make intelligent investment decisions regarding highly risky entrepreneurial ventures, and can structure investments with a view to incentivizing and motivating the entrepreneur while minimizing the investor's downside risk.

The course is structured into four modules. We begin with **Recognizing and Valuing Opportunities**. which covers qualitative opportunity recognition tools (how to tell a great opportunity from a mere 'good idea') as well as quantitative valuation techniques adapted to situations of high uncertainty. The second module covers **Doing Deals**. Here we will discuss how to negotiate funding, how to structure deals (so as to avoid conflict before it arises and optimize performance incentives), and how to manage private equity investments (e.g. by helping the entrepreneur in non-financial matters). The third module examines **Being a VC**. The final module deals with issues arising from the way in which outside investors **Exit** their venture investments (typically by taking them public or selling them to another corporation).

If we want to understand how private equity investors such as venture capitalists and entrepreneurs can create value despite high degrees of uncertainty and asymmetries of information, we also need to understand the VCs' own incentives and constraints. These are linked to the fund-raising cycle and the structure of a fund. VCs are continually raising new funds and the terms on which they do so influence their behavior. For an entrepreneur, it is critical to understand how. This implies that we will explore new venture financing from three different perspectives: the entrepreneur's, the venture capitalist's, and that of the investors backing the VC (such as pension funds and college endowments).

Unlike many other finance courses, the course incorporates both traditional quantitative elements and qualitative analysis. Examples of the former include spreadsheet models (on the valuation side and in understanding the securities and contracts used to fund new ventures). Examples of the latter include analysis of a VC's decision whether to fund a start-up company and a board's decision how to optimally raise funding. In general, the nature of the subject matter is such that you will encounter ambiguities and ambivalence which defy formulaic (i.e., mathematical) solutions. Making sound decisions under such conditions requires an analytical understanding of the problem in hand. **If you are uncomfortable with this, do not take this class.**

Instruction and Assessment

Grading - read carefully!

The educational emphasis throughout the course is on learning how to make good judgments about companies and investment opportunities under high degrees of uncertainty and potential conflicts of interest, and understanding the processes and techniques involved in financing startup and early-stage ventures. The course uses a mixture of cases, lectures, and student assignments.

Cases and written assignments

There will be several case studies in which you will be required to apply the principles covered in class to analyze real life situations. Teams will be asked to present their findings in class and case work will count towards the course grade. The cases should be completed in teams of **4** or **5** students. For some cases, you will hand in a group report and/or make a formal in-class presentation; for others, you will be asked to analyze certain points and submit answers to online quizzes. In general, solutions will not be handed out, but we will discuss the cases in class.

Sessions for which a written assignment is due are clearly marked in the <u>Assignments</u> section on NYU Classes.

It is your responsibility to keep track of the deadlines for online deliverables. Please note that online deliverables must be completed before class (unless otherwise noted); NYU Classes links to online deliverables will disappear when the class in question has begun, and credit cannot be given retroactively. You are strongly advised to "print screen" before submitting any online deliverables, so that you have a paper record of your answers (for future reference, not least the exam), and in case NYU Classes crashes before your submission is recorded.

Examinations

There will be a midterm and a final, in-class exam. The final will **not** be multiple-choice but instead will require you to *apply* the material covered in class. The emphasis will be on problem solving, not on recall. For instance, a major part of the final exam will consist of data on a certain deal which you will be asked to analyze qualitatively and quantitatively.

Course Grade

The course grade will consist of the following components:

- midterm: 20%
- graded assignments, submission of online deliverables, peer evaluations, and course participation: 40%
- final exam: 40%

However, there is one important over-ride criterion.

Over-ride Criterion: Intra-team Evaluation

For each of your four written group assignments, you will each allocate points to fellow group members, based on their contribution to your case work. The number of points you have to allocate is equal to the number of other group members x 10.

So, if there are 4 other people on your team, you will allocate 40 points between them. If everyone pulled their weight, an obvious allocation is 10 points to each member, in which event this element of the evaluation will disappear. You do not grade yourself.

If your team mates believe you have either not participated fully, or you have carried more than a proportional share of the work, I will take that into account in your case grade. Here is how. Say your group got 6+4+7+8 = 25 points in total for the four written case reports. This is your group case grade. I will adjust this to reflect your case team's evaluation of your individual contribution, to work out your individual case grade. Say that your group mates each gave you an intra-team evaluation of 12 for each of the four cases. I will then multiply your case grade of 25 by 12/10 =

1.2 = 30 points. If, on the other hand, your average intra-team evaluation was 5, I will give you 12.5 points for the cases (5/10*25 = 12.5). Of course, if everyone has contributed equally to the team effort, everyone will get 25 points for the cases (10/10 * 25 = 25).

It is your responsibility to submit the intra-team evaluations online and on time. For submitting each of the four intra-team evaluations on time, you get a total of 4 (4 times 1) points towards your course participation grade.

The Stern curve

This course is an Advanced Finance Elective and so is graded on the Stern curve.

Honor Code and Stern Default Policies

Students are required to adhere to the MBA Honor Code. Every student is obliged to report to the instructor any suspected violation of the code that he or she has observed. Full details can be

found at http://w4.stern.nyu.edu/scorp/committee.cfm?doc_id=4797.

All default policies for Stern courses apply by incorporation. See

http://w4.stern.nyu.edu/academic/affairs/policies.cfm?doc_id=7511.

Reading Materials:

Required

Reading materials (including cases) will be sold in the NYU book store. Additional readings and handouts will be made available in class and, if we have copyright permission to do so, electronically.

In most weeks, I list both **essential** and **additional** readings. Note that you are expected to read all of the material assigned for the course, but readings marked "additional" are probably best tackled after the class to which they refer.

Recommended (but not required)

In addition to the required readings, you may find the following book of interest. It is NOT compulsory nor will it feature in the exam.

A nice collection of practitioner insights is Gupta, U. (2000), <u>Done deals</u>, Boston, MA: Harvard Business School Press.

Target audience

The course should be useful to those seeking to start a business or those seeking careers in venture capital, private equity investing, investment management or in senior management positions of entrepreneurial corporations. Note, however, that VCs currently rarely hire students straight out of an MBA program, preferring instead start-up experience or an operating background.

As mentioned above, this course is <u>not</u> suitable for first-year MBA students, due to its integrative nature. You are strongly advised to wait till your second year before taking this course.

Students with disabilities

If you have a qualified disability and will require academic accommodation during this course, please contact the Moses Center for Students with Disabilities (CSD, 998-4980) and provide me with a letter from them verifying your registration and outlining the accommodations they recommend. If you will need to take an exam at the CSD, you must submit a completed Exam Accommodations Form to them at least one week prior to the scheduled exam time to be guaranteed accommodation.

Auditing

Sorry - owing to space constraints, I cannot allow auditing.

Missed a class?

Classes will be recorded using "class capture". You can watch a streaming video of any class. Links will be posted on NYU Classes.