Harvard University
Department of Economics

Entrepreneurship and Venture Capital

Economics 970
Spring 2006
Quantitative level: 2

Eliot House, E-14
Tuesday, Thursday
2:30-4pm

Instructor: Wan Wong
Email: wan@hbs.edu
Office: Morgan Hall 362-C, HBS
Telephone: (617) 496-1934

I. COURSE DESCRIPTION

Entrepreneurship is a powerful economic force. In the US alone, more than half a million new businesses are started each year. Many fail, but a few achieve spectacular success and become household names such as Microsoft, HP, Dell, and Google. The rapid development of the US economy over the past decades has been accompanied by large doses of creativity, risk taking, innovation and passion. Indeed, new dynamic theories of the economy suggest that entrepreneurial activities provide a constant flow of new ideas and experimentation vital to the health of the economy as a whole.

But transforming creative ideas into commercially viable businesses is a major challenge for entrepreneurs and investors alike. Financial intermediaries such as venture capitalists facilitate this process. Emerging in its modern form in the US around the late 1960s, venture capital has grown into a sizeable industry whose importance is reflected in the fact that one third of all initial public offerings today are backed by venture capital.

This tutorial will explore these fascinating areas of economic activity. What is entrepreneurship? What makes a good entrepreneur? Does success require special traits and skills or just luck? What roles do venture capital and other forms of private equity play? Can large companies follow the examples of successful individual entrepreneurs in pursuing innovation? We will apply modern theories of business and economics to shed some light on these questions and others.

II. COURSE OBJECTIVES

- To build on the foundations laid in earlier courses by applying frameworks of economic analysis to specific subject areas
- To help students develop an effective style for writing analytical economics papers
- To practice the art of analysis, communication, argument, and listening
- To practice applying statistical methods to the analysis of data

III. COURSE REQUIREMENTS

Class participation (25%)

Attendance is mandatory. Class discussions are an essential component of the sophomore tutorial. Your preparation time should be allocated both to reading and understanding the assigned materials, and to reflecting upon and challenging their assumptions, results, and relevance. You will be evaluated on punctuality, the quality of your participation as well as your ability to discuss and challenge the ideas of your classmates.
Response papers (15%)

Students will prepare 10 (out of a possible 19) commentaries on class sessions (classes 2 to 21 inclusive, but excluding class 13). These short commentaries (up to one page in length, single spaced) are due by 9am on the day of the relevant class, and are intended to evoke some thoughtful consideration of the material read, for example, exploring an issue or concept in greater depth, raising some theoretical or empirical questions, comparing and contrasting approaches or findings across the readings, etc. These are not meant to be a big burden on students’ time, and bullet point formats are not only acceptable, but encouraged. Note that these are meant to be reaction pieces and not summaries (i.e. write about what you liked and disliked, what else the readings made you think of, whether you thought the authors’ arguments were persuasive, etc.).

Short essays (15%)

Two short essays totaling approximately 4-6 pages of writing will be assigned. In these essays, your ability to support assertions with evidence and economic logic will be evaluated.

Empirical paper (15%)

We will design a study to conduct an empirical investigation. You will be required to construct an econometric model, analyze the results, and report your findings and conclusions (2-3 pages).

Term paper (including prospectus) (30%)

You will be required to submit a term paper of 10-12 pages related to one of the topics addressed in the course. In preparation for the term paper, you will need to submit a prospectus in which you propose a thesis or question, and outline how you will address the issue and your proposed approach. The prospectus will be due on April 20, 2006, and the final term paper itself will be due by noon on Friday May 12, 2006.

Assignment schedule

<table>
<thead>
<tr>
<th>Assignment</th>
<th>Due date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Response papers</td>
<td>By 9am on relevant day</td>
</tr>
<tr>
<td>Short essay #1</td>
<td>February 28, 2006</td>
</tr>
<tr>
<td>Short essay #2</td>
<td>March 21, 2006</td>
</tr>
<tr>
<td>Empirical paper</td>
<td>April 11, 2006</td>
</tr>
<tr>
<td>Prospectus for term paper</td>
<td>April 20, 2006</td>
</tr>
<tr>
<td>Term paper</td>
<td>By noon on May 12, 2006</td>
</tr>
</tbody>
</table>

Grading summary

Final grades will be determined as follows:
- Class participation 25%
- Response papers 15%
- Short essays 20%
- Empirical paper 10%
- Term paper (including prospectus) 30%

IV.  COURSE POLICIES

Attendance

Attendance is mandatory at all regular class meetings. Exceptions will be granted only on a case-by-case basis. If you do not have enough time to sufficiently prepare for a class, you should still attend, but you must let me know before the start of class that you are not as prepared as you would like to be. We all have other things going on in our lives and will occasionally face severe time constraints. This is not a problem as long as it does not happen often and we set the right expectations upfront.

Deadlines

No assignment will be accepted beyond the announced deadline. As with attendance, exceptions will only be considered on a case-by-case basis.
**Submission of assignments**
All assignments should be submitted by email before expiry of the deadline.

**Office hours**
There will be no “official” regular office hours, but I am available to meet with students at mutually convenient times. Please email me to schedule meetings. My office is in Morgan Hall on the Allston side of the Harvard campus.

**V. READINGS**
The readings for this class are listed in the accompanying list (pages 4 to 6). Not all of them will be required to be read in their entirety. I will specify beforehand which sections of the readings to focus upon.

Most of the required readings are available on e-journals at Harvard’s libraries. I will distribute electronic copies whenever possible. There will also be a small number of HBS cases that students will need to purchase.

**VI. WRITING**
Writing is a form of communication. Developing good writing skills will serve you well in your future careers. You should approach your writing for this class as you would approach any effort to effectively communicate your ideas. In particular, effective communication should:

- have a clear thesis – what is your point?
- include support for your thesis – what are you basing your views on?
- be interesting to read and write – do not excessively focus upon the formal structure of your writing. It is important to structure your writing such that a reader can follow your line of thought. Do not be messy in terms of style. Pick a style (e.g. for citing references) and stick to it. But most importantly, don’t let anything get in the way of making your communication interesting. Maintaining the interest of your audience is one of the most important and often most forgotten aspects of communication!
- be stylistically and grammatically correct, and free of spelling errors – in this age of the word processor and built-in spell-checkers, typographical errors reveal negligence on the part of the writer.
- not be one-sided – you are not writing as a lawyer, you are writing as a scientist. You should therefore acknowledge the limits of your analysis and be willing to consider alternative theories.

Students are encouraged to take advantage of the services of the Harvard Writing Center, on the Garden Level of the Barker Center, at 12 Quincy Street (www.fas.harvard.edu/~wricentr).

**VII. ACADEMIC HONESTY**
You are welcome to bring ideas from any source into this course. However, you must always clearly state where your ideas came from, give proper credit where credit is due, and provide adequate references so that an interested reader can easily go back to the source. You should familiarize yourself with the university’s policies on plagiarism and read *Writing with Sources: A Guide for Harvard Students* (available online at http://www.fas.harvard.edu/~expos/sources/).
Entrepreneurship

Class 1: Entrepreneurs in Economic Theory

Thursday, February 09, 2006


Class 2: Entrepreneurship and Geography

Tuesday, February 14, 2006


Class 3: The S-Curve and Disruptive Technologies

Thursday, February 16, 2006


Class 4: Sources of entrepreneurs

Tuesday, February 21, 2006


Class 5: Universities and Start-Ups

Thursday, February 23, 2006


Evolution of Venture Capital and Private Equity

Class 6: The New Kings of Capitalism

Tuesday, February 28, 2006

Short Essay #1 due.


Class 7: Economics of the Private Equity Market

Thursday, March 02, 2006

Class 8: Venture Capital


Class 9: Valuation

Student case presentation #1.

Class 10: How do LBO specialists make money?

Student case presentation #2.
Ahmad, Faisal, 2005. Leveraged Buyout Specialists: Sources of Value.

Class 11: Hedge Funds and Private Equity

The Differences Between Mutual Funds and Hedge Funds, Investment Company Institute.

Class 12: Private Equity Investors

Short Essay #2 due.
“Why endowments do it better.” Private Equity Online article, November 2004.
"Making private equity work.” Private Equity International article, November 2004.

Class 13: Event Studies - lecture and demo

Slides on event studies

From Innovation to Growth: IPO exits

Class 14: The dot-com Crash of 2000

Class 15: Initial Public Offerings


Class 16: Venture Capital and IPOs (1)

Empirical paper due.


Class 17: Venture Capital and IPOs (2)


Wong, Wan, 2005. Good VCs, Bad VCs, working paper, Harvard University.

Beyond IPOs

Class 18: Life cycle of firms


Class 19: The Impact of Venture Capital

Prospectus for term paper due.


Class 20: Globalization


Creating a Technology Hotbed In China: Lessons Learned from Silicon Valley and Israel. Ernst & Young Report, September 2005.


Class 21: Frontiers of private equity


Class 22: Student presentations (1)

Class 23: Student presentations (2)

Final papers are due by noon on Friday, May 12, 2006.