New York University Leonard N. Stern School of Business Prof. Robert Semmens Summer 2008 (May 19, 2008)

B40.3165 Private Equity Finance

Thursdays 6:00 to 9:00 pm

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Introduction

This course examines the private equity marketplace. Private equity is a major source of capital for both new ventures and established firms. Private equity is the investment of capital in the equity of private companies to fund growth or in public companies to take them private. Private equity is segregated into several sub-markets of which the principal focus of this class is on the venture capital and leveraged buyout markets. Since its origins after World War II, the size of the private equity market has grown substantially and has become institutionalized. For example, annual capital commitments to private equity funds have grown from \$8 billion in 1991 to a peak of about \$175 billion in 2000 before declining in 2001 and 2002. Since 2002 commitments have increased substantially. In fact, market sources estimate that more than \$500 billion was raised in 2007. It is widely expected that the private equity market will grow in the coming years.

The objective of this course is to provide an overview of the private equity market from the differing perspectives of private equity investors (limited partners), private equity fund sponsors (general partners) and the managers of portfolio companies by focusing on the nature of the market and the strategies employed.

The "private equity cycle" will be explored and developed in the course. The private equity cycle includes: 1. Private equity fundraising and structure; 2. Investment origination, valuation, the investment decision, strategies for value creation and investment management; and 3. Exit strategies. Topics expected to be covered include:

- 1. Fundraising and Structure
 - i. Private equity risk and return
 - ii. Private equity manager selection
 - iii. Asset allocation

- iv. Structure of private equity funds
- v. Analyzing a fund investment opportunity
- vi. Raising a fund of fund
- vii. Raising a first time fund

2. Investment Origination, Valuation, Value Creation and Management

- i. Structure of private equity investments
- ii. Private equity valuation methodologies
- iii. Venture capital investments
- iv. Buyout investments
- v. Value creation strategies
- vi. Investment management
- 3. Investment Exit
 - i. Initial public offerings
 - ii. Sale of portfolio companies
 - iii. Distributions of portfolio investments
- 4. Other topics (as time permits)
 - i. Discerning and Developing Opportunities
 - ii. Portfolio Management
 - iii. Corporate venture capital
 - iv. Private Equity in Emerging Markets
 - v. Secondary trading of fund investments
 - vi. Monetization of general partnership interests

The teaching method will employ extensive reading, some lecture, and case studies. Since this is a mini-course, we will cover topics quickly, touching on the highlights rather than studying issues in depth. We will not discuss every topic or case in class but reading will be assigned on every topic. Students will be expected to actively participate in classroom discussion.

Class Prerequisites

B01.2311. Working knowledge of finance, including investments and investment banking, and management policy. Students who have taken similar courses such as Entrepreneurial Finance, Venture Capital Financing and Financing New Ventures should only take this class with the Instructor's permission.

Schedule

Class will be held every Thursday from May 22nd until and including June 26^{th.} A written assignment will be distributed on Thursday June 5th and will be due the following Thursday at the beginning of class. The written analysis of a case, distributed on the last

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day of class, will be due no later than 9 pm on Thursday July 3rd. For every class, including the first class and except for the class where the first major assignment is due, students will prepare and hand in a short written analysis of a question the instructor distributes the previous week tied to the current reading assignment. Students are expected to work individually on all the weekly assignments and on the two major written papers.

Primary Materials

Harvard Business School cases and notes will constitute the primary course materials.

Course Outline

| <u>Class One:</u> | Topics1. Introduction to Private Equity2. Fundraisingi.Private equity risk and returnii.Private equity investment strategiesiii.Private equity manager selectioniv.Asset allocation |
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| | Required Reading Case Study: Joshua Lerner, "The Yale University Investments Office: August 2006" |
| | Lerner, G. Felda Hardymon & Ann Leamon, "Acme Investment Trust, January 2001" |
| <u>Class Two:</u> | Topics2. Fundraising (continued)v.v.Analyzing a fund investmentvi.Raising a fund of fundsvii.Raising a first time fund |
| Street Adviso | <u>Required Reading</u> Case Studies: Hardymon, Lerner, Leamon & Frank Angella, "Grove rs" |
| | Hardymon & Bill Wasik, "Columbia Capital Corporation: Summer 1998" |
| | Lerner & David Gallo, "Francisco Partners" |

Notes: Hardymon & Lerner, "A Note of Private Equity Partnership Agreements" Lerner, "A Note on the Private Equity Fundraising Process" Class Three: Topics 3. Investment Origination, Value Creation and Management Venture Capital i. ii. Valuation iii. Structure of Securities **Required Reading** Case Studies: Lerner, Hardymon & Leamon, "AIT Group, PLC" Hardymon & Wasik, "Metapath Software: September 1997" Lerner, Hardymon & Leamon, "Endeca Technologies (A & B)" Notes: Michael J. Roberts & Lauren Barley, "How Venture Capitalists Evaluate Potential Venture Opportunities" Linda Cyr, "A Note on Pre-money and Post-money Valuations (A & B)" Lerner & John Willinge, "A Note on Valuation in Private Equity Settings" Hardymon & Lerner, "A Note on Private Equity Securities" Class Four: Topics 3. Investment Origination, Value Creation and Management (cont.) iii. Leveraged Investments iv. Value Creation, Management and Restructuring Required Reading Case Studies: Malcolm Baker, James Quinn "Berkshire Partners: Bidding for Carter's"

Malcolm S. Salter, "Regal Cinemas (A) and (B)"

Notes:

Carliss Baldwin, "A Technical Note on LBO Valuation (A) and (B)"

| <u>Class Five:</u> | Topicsiv. Value Creation, Management and Restructuring (Cont.)4. Investment Exiti.ii.iii.Sales of Portfolio Companiesiii.Distributions of public stocks |
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| | <u>Required Reading</u> <i>Case Studies:</i> Lerner, Hardymon & Leamon "Apax Partners and Xerium S.A." |
| | Lerner, Dino Cattaneo & Giampiero Mazza, "Investitori Associati: Exiting the Savio LBO (A & B)" |
| | <i>Notes:</i> Lerner, Hardymon & Leamon, "Between a Rock and a Hard Place: Valuation and Distribution in Private Equity" Lerner, " A Note on the Initial Public Offering Process" |
| <u>Class Six:</u> | Topics5. Other Issues (as time allows)i.Discerning and Developing Opportunitiesii.Portfolio Managementiii.Private Equity in Emerging Marketsiv.Corporate venture capitalv.Secondary trading of fund investmentsvi.Monetization of general partnership interestsRequired ReadingCase Studies:Hardymon, Lerner, "Martin Smith: May 2000"Hardymon, Lerner, "Martin Smith: May 2002"Hardymon, "Venture Capital Case Vignettes" |

Lerner, "Vignettes: The Rebar Dilemma" John W. Mullins, "Good Money after Bad?" Hardymon, Leamon, "The Perfect CEO" *Notes:* Lerner, "A Note on Corporate Venture Capital" Leamon, Lerner, "A Note on Private Equity in Developing

Leamon, Lerner, "A Note on Private Equity in Developing Countries"

Unlike many finance courses this course is not an overly quantitative course. While the section discussing valuation contains quantitative work, the main focus will be on analytics, especially qualitative factors. This course places a strong emphasis on presentation and discussion skills. Students will need to explain their thinking about an issue to the class and the Instructor. Participation will be an important element of the final grade as described below. Participation will be judged primarily on the quality of the insight provided in the classroom comments rather than on the quantity of the participate by the Instructor. Relatively frequent contributions to the discussion that demonstrate logical and complete analysis will be required to excel in the participation portion of the grade. Name cards are highly recommended. If feasible, the Instructor may utilize assigned seating. The Instructor cannot properly evaluate your classroom participation if the Instructor does not know who you are.

Assessment

The instructor will follow the suggested grade distribution standards of the Stern Department of Finance for upper division graduate courses. These guidelines suggest the following grade distribution: "A" 10%, "A-" 10-15%, "B+" 10%, "B" 50-60% and "C" 10%. Grades will be based 35% on the first written major assignment, 45% on the second written major assignment (case analysis), 10% on the five weekly assignments and 10% on class participation.

Instructor

Robert Semmens was a Co-Founder and General Partner of the Beacon Group, a Private Equity and M&A Advisory firm formed in 1993. At Beacon, he raised and managed the \$650 million Beacon Group Energy Investment Fund, L.P and the \$950 million Beacon Group Energy Investment Fund II, L.P. The Beacon Group Energy Investment Funds were private equity funds focused on making investments in the global energy business. In addition, he also managed a hedge fund of fund invested in a variety of market neutral

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strategies. JP Morgan Chase acquired the Beacon Group in the summer of 2000 and until 2001 he was a consultant to JP Morgan Chase. Prior to co-founding Beacon, he was a Vice-President at Goldman, Sachs & Co. in the Investment Banking Division where he concentrated on corporate financings, mergers & acquisitions and private investments, all in the energy area. He also worked at J. Aron, the commodity and currency trading division of Goldman Sachs, in oil and gas derivatives. He has a BA from the University of Arizona (Economics), a Masters of Business Administration (Finance) from the J.L. Kellogg Graduate School of Management at Northwestern University and a Juris Doctor from the Northwestern University School of Law. He is currently a private investor in early stage companies and LBOs, serves on the Board of four companies and is a member of NY Angels, an early stage-investing group.

Course Packet and Useful References

The course packet consists of the notes and the cases that will be discussed during the course. **The course packet is the only required text.** However, students may find the following books to be useful references at various times during the course.

General references:

Brealey, Richard A. and Stewart C. Myers, *Principles of Corporate Finance (6th ed.)*, (New York: McGraw-Hill, 2000).

Private equity references:

Fenn, Liang, and Prowse, "The Economics of the Private Equity Market", *Board of Governors of the Federal Reserve System*, Release 168, December 1995. Available for download at:

http://www.federalreserve.gov/pubs/staffstudies/1990-99/default.htm

Bartlett, Joseph W., *Equity Finance: Venture Capital, Buyouts, Restructurings, and Reorganizations (2nd ed.)*, (Frederick, MD: Panel division of Aspen Law & Business, 1995).

Lake, Rick and Ronald A. Lake, *Private Equity and Venture Capital: A Practical Guide for Investors and Practitioners*, (London: Euromoney Books, 2000)

Levin, Jack S., *Structuring Venture Capital, Private Equity, and Entrepreneurial Transactions*, (Frederick, MD: Panel division of Aspen Law & Business, 2000).

Schell, James M., *Private Equity Funds: Business Structure and Operations*, (New York: Law Journal Press, 1999)

Valuation references:

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Copeland, Tom, Tim Koller, and Jack Murrin, *Valuation: Measuring and Managing the Value of Companies (2nd ed.)*, (New York: John Wiley & Sons, 1994).

Damodaran, Aswath, Damodaran on Valuation, (New York: John Wiley & Sons, 1994).

Pratt, Shannon P., Robert F. Reilly, and Robert P. Schweihs, *Valuing a Business: The Analysis and Appraisal of Closely Held Companies (4th ed.)*, (Burr Ridge, IL: Richard D. Irwin, 2000).

Other Comments

If you miss a class, you are responsible for any material that you miss, including any weekly assignments and administrative announcements.

To be fair to other students, there will be no extra-credit assignments.

Your final grade will be determined solely by the system described above.

The written assignments and the written cases will be available from the instructor.

The Stern Default Policies shall be followed except as otherwise indicated.

Students shall adhere to the MBA Honor Code. Every student is obligated to report to the Instructor any suspected violation of the code that he or she has observed.

Upon request, the Instructor will re-grade the student's work but only at the end of the term and only by reviewing each and every assignment of the term. The Instructor will not re-grade single assignments. The student will then receive the grade arising from the re-grade even if it is lower than the original grade.

Instructions for Preparing Written Case Analyses

1. Read the case carefully. Identify the significant points and relationships. Use the exhibits to help you understand and/or interpret the text.

2. Analyze the data presented in the case and evaluate it in light of the situation. Try to understand not only the present situation, but also its historical origin and how it developed.

3. Decide what the major problems are and, if appropriate, prioritize them.

4. With the problems in mind, identify the feasible alternative courses of action. Determine what additional information is necessary to evaluate the alternative courses of action. Obtain that additional information if possible. If the information is not possible to obtain, note the information you would like to obtain. 5. Decide what your specific recommendation is to be. In doing so, use your understanding of the alternatives to frame a solution to the problem(s), and predict and evaluate the probable consequences of your solution.

6. Decide how you will organize the presentation of your solution to the case.

Document Organization

1. **Problem Statement:** Identify the problem(s) concisely, using whatever case facts are necessary to show significance and/or priority.

2. **Analysis:** Avoid generalities. Be as specific as possible. Express your ideas clearly, supporting them adequately with evidence, explanation, and references to appropriate exhibits. The strengths and weaknesses of alternative courses of action should be developed. The analysis should build to support your recommendation. Reasons for accepting or rejecting alternatives should be stated and, if necessary, defended.

3. **Recommendation:** State your recommendation clearly and in detail sufficient to guide implementation. Discuss both the positive and negative results of following your recommendation and why you think that it is the appropriate course of action. Make sure that the recommendation follows logically from your analysis.

Document Format

The written analyses will be written as reports to senior management. The first page should provide a short executive summary that is no more than one paragraph long. The detailed analysis should be presented on the following pages. The written text should not exceed 5 pages. All pages should be numbered and the document typed with one-inch margins and double spacing. Use a 12 point font or larger. Tables, charts, spreadsheets, or any other supporting materials may be attached as exhibits. Each exhibit must be referred to in the text and clearly labeled. The weekly assignments can be written in whatever format the student finds most useful but cannot exceed one written page (although analytics may comprise additional pages.) The Instructor recommends an outline format for the weekly assignments.

CASE PACKET

- 1. Yale University Investments Office: August 2006, HBS # 9-807-073
- 2. Acme Investment Trust, January 2001, HBS # 9-202-055
- 3. Grove Street Advisors, HBS #9-804-050
- 4. Columbia Capital Corporation: Summer 1998, HBS # 9-899-255
- 5. Francisco Partners, HBS # 9-200-063
- 6. A Note on Private Equity Partnership Agreements, HBS # 9-294-084
- 7. A Note on the Private Equity Fundraising Process, HBS # 9-201-042
- 8. AIT Group, PLC, HBS #9-803-104
- 9. Metapath Software, HBS #9-899-160
- 10. Endeca Technologies (A), (B) HBS # 9-802-141 & #9-802-142
- 11. How Venture Capitalists Evaluate Potential Opportunities, HBS 9-085-019
- 12. A Note on Pre-money and Post-money Valuation (A & B), HBS # 9-801-446
- 13. A Note on Valuation in a Private Equity Setting, HBS # 9-297-050
- 14. A Note on Private Equity Securities, HBS # 9-200-027
- 15. Berkshire Partners: Bidding for Carter's, HBS # 9-205-058
- 16. Regal Cinemas (A) and (B), HBS # 9-902-019 & HBS # 9-902-020
- 17. A Technical Note on LBO Valuations (A) & (B), HBS # 9-902-004 & HBS # 9-902-005
- 18. Apax Partners and Xerium S.A., HBS # 9-804-084
- 19. Investitori Associati: Exiting the Savio LBO (A) and (B), HBS # 9-299-048 & HBS # 9-299-106
- Between a Rock and a Hard Place: Valuation and Distribution in Private Equity, HBS # 9-803-161
- 21. A Note on the Initial Public Offering Process, HBS # 9-200-018
- 22. Martin Smith, May 2000, HBS # 9-200-046
- 23. Martin Smith: May 2002, HBS # 9-802-160
- 24. Venture Capital Case Vignettes, HBS # 9-801-408
- 25. Actis and CDC: A New Partnership, HBS#9-805-122
- 26. Vignette: The Rebar Dilemma, HBS #9-803-091
- 27. Good Money after Bad? HBR Reprint # R0703A
- 28. The Perfect CEO, HBS #9-805-156
- 29. A Note on Corporate Venture Capital, HBS # 9-201-036
- 30. A Note on Private Equity in Developing Countries, HBS #9-208-307