"Entrepreneurship" is a popular focus of discussion of business opportunity among businesspeople, financiers, economists, and policymakers. At a macro level, economists and policymakers have increased their attention to entrepreneurs because of the importance of innovation for economic growth, the significance of entrepreneurial businesses in job creation, and the role of business owners in aggregate saving and wealth accumulation. At a more micro level, interest in entrepreneurship reflects both the "demand" side and the "supply" side of entrepreneurial finance. On the demand side, many M.B.A. students want to start their own businesses or be part of emerging businesses, either at the beginning of their careers or within the first several years after graduation. On the supply side, many M.B.A. students are interested in participating in the growing industry of venture capital and private equity.

What, then, is "entrepreneurial finance"? The second term is somewhat easier to define (and, hopefully, quite familiar to you). "Finance" studies valuation and the allocation of resources, risk, liquidity, and information. Topics in finance related to valuing cash flows, assessing the cost of capital, choosing among suppliers of funds, and aligning incentives for value maximization are at least as important for entrepreneurial firms as for more established firms. In particular, new and growing firms likely face "financing constraints" on growth and difficult decisions about financial contracting.

Defining "entrepreneurship" is less straightforward. Consistent with many popular characterizations of entrepreneurs and daring risk-takers, the noted Harvard economist Joseph Schumpeter summarized an entrepreneur as follows:

“To act with confidence beyond the range of familiar beacons and to overcome that [social] resistance requires aptitudes that are present only in a small fraction of the population and that define the entrepreneurial type...”


Studying entrepreneurship would be a bit easier with a narrower focus. Economists have suggested two possibilities. Joseph Schumpeter emphasized that the role of the entrepreneur is to identify and pursue opportunity irrespective of direct control of resources.1 Most of us associate this identification of opportunity

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with entrepreneurship in startup of firms; it is also important in large firms and in the not-for-profit sector.

The second concept corresponds more closely to topics we discuss in this course as “entrepreneurial finance.” The great Chicago economist Frank Knight argued that entrepreneurs must address problems of raising capital and bearing risk in addition to identifying and pursuing opportunity. To study entrepreneurial finance, we will use a two-pronged approach. First, we will analyze principles of corporate finance, valuation, and coordination and control of firms, with an eye toward developing tools of entrepreneurial financial management. Second, we will use cases on firms at different stages of their life cycle to illustrate how tools may be applied in practice. In following these two approaches, we will study entrepreneurial decisions both from the point of view of the entrepreneur and of investors.

In principle, we can think of a “life cycle” of entrepreneurial financial decisions from identifying opportunity, marshaling resources, carrying our business decisions, and “harvesting” success. In practice, entrepreneurial finance is not a linear process though this life cycle. For example, Harvard Business School professor William Sahlman has described the need to think simultaneously about four “success factors”: people, opportunity, context, and the deal. Most of the cases we examine will necessarily address multiple stages of the life cycle.

In the first part of the course, we focus on identifying and valuing entrepreneurial business opportunities. That is, thinking of the “asset” side of the entrepreneur’s balance sheet, what are the key assets of the venture? Which financial tools should we use to value business opportunities?

The second part of the course emphasizes the “liabilities and net worth” side of the entrepreneurial balance sheet. How are investment in business assets and working capital valued? Which sources of funds offer the most attractive terms? How should financial contracts be structured to manage risk and align incentives?

The final two parts of the course address harvesting success and repeat entrepreneurs. What are entrepreneurs’ options for exit? How can an entrepreneur plan for future harvesting decisions? How can entrepreneurship be repeated? How can large companies be “entrepreneurial”?

While the teaching notes emphasize general principles and tools, class cases will cover firms in different industries. Cases also include applications outside the United States. The objective of using the cases goes beyond illustrating principles and tools; we will discuss similarities and differences in entrepreneurial finance across industries and across countries.

**COURSE REQUIREMENTS AND GRADING**

This course requires substantial preparation. For case discussion to be meaningful, you should be prepared both to “open” the case and to contribute to class discussion. Accordingly, class participation will count for

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one-third of your final grade. I will suggest study questions for each case. In response to these questions, you are responsible for submitting a two-page memorandum of analysis and recommendation addressed to the major decisionmaker at the beginning of five case-related discussions (of your choice). Group memoranda are acceptable (no more than five students per group). In addition, to the two-page memorandum, you may attach as many numerical calculations as you wish. Memoranda grades will count for one-third of your grade. The final examination, which will be an individual case analysis, will count for one-third of your grade; you may substitute a course paper (with an approved topic) for the final examination if you wish. The course paper may be a business plan for a venture in which you are involved or an analysis of an opportunity in another business plan or emerging venture (see, for example, the ventures staked by the Columbia Innovation Enterprise -- http://www.columbia.edu/cu/cie/enterprise.html). If you choose the final exam, it will be distributed on the last day of class (December 6) and must be submitted by 6:00 PM on December 11; course papers are due at the same time.

COURSE MATERIALS AND INFORMATION

Required readings, cases and case questions, and teaching notes will be made available to you in the casebook. The remainder of the course materials and information – announcements, case- and current event-specific Web links, additional handouts, and addenda to the teaching notes – can be found on the course Web page. Access to this page is restricted to registered students, and the correct user name and password, respectively, are "B8399" and "bigbucks" (I am an optimist!). The site address is http://www.gsb.columbia.edu/faculty/ghubbard/courses.htm. Please check the site regularly, as I will not generally make available hard copies of materials published on the Website. You may find optional readings by coming to see me or consulting resources in the library.

Finally, if you are interested in related courses offered in the Columbia Business School's Entrepreneurship, please consult the Program's Web page – http://www.gsb.columbia.edu/entprog.
## THE GAME PLAN

<table>
<thead>
<tr>
<th>Class No.</th>
<th>Date</th>
<th>Topic/Case</th>
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<td>1</td>
<td>September 6</td>
<td>Note: What Is “Entrepreneurial Finance”?; Information Sources About Private Equity</td>
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<td>2</td>
<td>September 11</td>
<td>Case: Technical Data Corporation Business Plan</td>
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<td>3</td>
<td>September 13</td>
<td>Case: Technical Data Corporation</td>
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<td>4</td>
<td>September 18</td>
<td>Case: Business Research Corporation (A)</td>
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<td>5</td>
<td>September 20</td>
<td>Discussion: Linking the &quot;Business Plan&quot; and &quot;Business Model&quot;</td>
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<td>Notes: Business Plans and Business Models; How Much Do You Need?; Financial Forecasting in New Ventures; Simulation and Business Strategy</td>
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<td>6</td>
<td>September 25</td>
<td>Case: Telewizja Wisla</td>
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<td>7</td>
<td>September 27 (AM)</td>
<td>Notes: Valuation from the Perspective of Outside Investors; Venture Capital Method; Valuation from the Entrepreneur’s Perspective</td>
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<tr>
<td>7A</td>
<td>September 27 (PM)</td>
<td>Optional Extra Session: A More Elaborate Model of Free Cash Flow; Da Numbers (valuation review)</td>
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<td>8</td>
<td>October 2</td>
<td>Discussion: Valuation (using Knight Publications case)</td>
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<td>Note: Is “New Economy” Valuation Really Different?</td>
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<td>9</td>
<td>October 4</td>
<td>Case: Quorum Health Group, Inc. (Guest: Russ Carson)</td>
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<td>October 9</td>
<td>Note: Real Options in Entrepreneurial Ventures; Strategy and Contract Design; Term Sheets</td>
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<td>11</td>
<td>October 11</td>
<td>Case: The Carlton Polish Company</td>
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<td>12</td>
<td>October 16</td>
<td>Case: Harris Seafoods</td>
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<td>13</td>
<td>October 25</td>
<td>Case: Pathfinder</td>
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<td>14</td>
<td>October 30</td>
<td>Notes: New Venture Financing (Background); Sources of Funds for New Ventures; Contracting and Control</td>
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<td>Case: Richina</td>
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<td>Background Notes: A Note on Private Equity Partnership Agreements; A Note on Private Equity in Developing Countries</td>
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15  November 1  Case:  Internet Securities, Inc.
16  November 6  Case:  Eureka Broadband (Guests: Matt McCooe and Bob Vanech)
17  November 8  Case:  Lotus Development Corporation
18  November 13  Case:  Parenting Magazine
19  November 15  Note:  Options for Exit  
                      (Guest: Paul Queally)
20  November 20  Case:  Star Cablevision (A)
21  November 27  Discussion:  Going Public and Due Diligence  
                      (Guest: Sabin Streeter)
22  November 29  Case:  ArthroCare
23  December 4 (AM)  Case:  ThermoLase  
                      Note:  Corporate Entrepreneurship and Carveouts
23A December 4 (PM)  Optional Review Session:  “One Minute” Entrepreneurial Finance
24  December 6  Notes:  Finance and Growth; Wrap Up and Public Policy Toward Entrepreneurship  
                      Final Exam distributed
THE END  December 11  Final Exam or Course Paper due (NO LATER THAN 6:00PM)
THE SYLLABUS

I. INTRODUCTION AND OVERVIEW (Class 1)

- Discussion and Teaching Note: What is “Entrepreneurial Finance”?

- Teaching Note: Information Sources About Private Equity

II. IDENTIFYING AND VALUING ENTREPRENEURIAL OPPORTUNITY (Class 2 – Class 13)

A. Identifying Opportunity (Class 2 – 6)

- Discussion and Teaching Notes: Business Plans and Business Models; How Much Do You Need?; Financial Forecasting in the New Venture; Simulation and Business Strategy; Background: Shapiro; Copeland, Koller, and Murrin, Chapters 5-7.

- Case: Technical Data Corporation Business Plan

- Case: Technical Data Corporation

- Case: Business Research Corporation (A)

- Case: Telewizja Wisla

B. Valuing Opportunity (Class 7 – 13)

- Discussion and Teaching Notes: Valuation from the Perspective of Outside Investors; Venture Capital Method; Valuation from the Entrepreneur’s Perspective; Background: Copeland, Koller, and Murrin, Chapters 8-9

- Optional Extra Session Notes: A More Elaborate Model of Free Cash Flow; Da Numbers

- Discussion Case: Valuation (using Knight Publications case) 
  Note: Is 'New Economy' Valuation Really Different?

- Case: Quorum Health Group, Inc.

- Discussion and Teaching Note: Real Options in Entrepreneurial Finance; Strategy and Contract Design; Background: Myers; and Gompers and Lerner, The Venture Capital Cycle, Chapter 7.
III. SOURCES OF FUNDS FOR ENTREPRENEURIAL VENTURES (Class 14 - Class 18)

- Case: The Carlton Polish Company
- Case: Harris Seafoods
- Case: Pathfinder

- Discussion and Teaching Note: New Venture Financing (Background); Sources of Funds for New Ventures; Contracting and Control -- Information Problems in Entrepreneurial Finance

  Background: Gompers and Lerner, The Venture Capital Cycle, Chapters 3, 4, 8, and 16.

- Case (Sources of Private Equity): Richina

  Background: A Note on Private Equity Partnership Agreements; A Note on Private Equity in Developing Countries

- Case (Financing Growth): Internet Securities, Inc.
- Case (Strategic Alliance and Financing Growth): Eureka Broadband
- Case (Venture Capital): Lotus Development Corporation
- Case (Strategic Alliance): Parenting Magazine

IV. HARVESTING SUCCESS (Class 19 - Class 22)

- Discussion: Discussion and Teaching Note: Options for Exit: Acquisitions and Initial Public Offerings; Background: Smith; Ibbotson, Ritter, and Sindelar

- Case: Star Cablevision (A)

- Going Public and Due Diligence

- Case: ArthroCare
V. CORPORATE ENTREPRENEURSHIP (Class 23)

• Case: ThermoLase

  Discussion and Teaching Note: Corporate Entrepreneurship and Carveouts
  Background: Allen

• Optional Review Session Note: “One Minute” Entrepreneurial Finance

VI. CONCLUSION (Class 24)

• Discussion and Teaching Note: Wrap Up and Public Policy and Entrepreneurship
REFERENCES FOR ADDITIONAL STUDY

I. INTRODUCTION AND OVERVIEW


II IDENTIFYING AND VALUING ENTREPRENEURIAL OPPORTUNITY

A. Identifying Opportunity


B. Valuing Opportunity


III. SOURCES OF FUNDS FOR ENTREPRENEURIAL VENTURES


IV. HARVESTING SUCCESS


V. CORPORATE ENTREPRENEURSHIP


GENERAL BACKGROUND READINGS

General Books


Periodicals

Black Enterprise (http://www.blackenterprise.com)
CFO (http://cfonet.com)
Entrepreneur (http://www.entrepreneurmag.com)
Entrepreneurial Woman
European Venture Capital Journal (http://nvst.com/evcj)
Inc. (http://www.inc.com)
Investment Dealer's Digest
Journal of Business Venturing
Journal of Small Business Finance
Red Herring (http://www.redherring.com)
Success (http://www.success.com)
Silicon Alley Reporter (http://www.siliconalleydaily.com)
Venture Capital Journal (http://www.nvst.com/vcj)
Wired (http://www.wired.com)
WEB LINKS

U.S. Government Information

Small Business Administration (http://www.sbaonline.sba.gov) Tips on financing and services from Small Business Administration


Fed World (http://www.fedworld.gov) Intelligent gateway that helps users gain better access to statistics and information compiled by the U.S. government

Edgar Online (http://www.edgar-online.com) Disclosure data; retrieve all government filings made by public companies and general SEC information at no cost


International Opportunities

International Business Forum (http://www.ibf.com)

New Economy Strategies

Information Rules (http://www.inforules.com)

General Information Search

Ask Jeeves (http://askjeeves.com)

NorthernLight (http://northernlight.com)

E-Library (http://wwws.elibrary.com)
Comparable Firms/Company Research

Edgar Online (http://www.edgar-online.com) SEC filings

Hoover’s (http://www.hoovers.com) Research the competition

Company Sleuth (http://www.companysleuth.com) Free information on public companies plus analysts' reports

Ibboston Associates – firms by industry (http://www.ibbotson.com) Go to the "Cost of Capital" section

Disclosure (http://www.primark.com) Financial disclosure data

Quote.com (http://www.quote.com) Stock quotes

Wall Street City (http://www.wallstreetcity.com)

SiliconInvestor (http://www.siliconinvestor.com)

The Motley Fool (http://www.fool.com)

Market Guide (http://www.marketguide.com)

MultexInvestor (http://www.multexinvestor.com)

Best Calls (http://www.bestcalls.com)

IPO Monitor (http://www.ipomonitor.com)

FinancialWeb (http://www.financialweb.com)

Doing Business Online

Web Commerce Today (http://www.webcommercetoday.com) Site offers reports and resources focused on e-commerce

InternetNews (http://www.internetnews.com) If it's about selling online, it shows up here)
Current Events in Entrepreneurial Finance

*Red Herring* (http://www.redherring.com)

*Entrepreneur* (http://www.entrepreneurmag.com)

WashTech (http://www.washtech.com)

*Business Week* (http://www.businessweek.com/homepage/homepage.htm)

StartUp.WSJ (http://startup.wsj.com)

*Interactive Wall Street Journal* (http://interactive.wsj.com) This is a pay site, but is worth the investment, as it contains several features not available in the print edition (plus, think about all the trees you’ll save). Pay special attention to the "Small Business Suite".

Valuation

*WorldlyInvestor* (http://www.worldlyinvestor.com)

*WebSideStory* (http://www.websidestory.com)

Options for Exit


*IPO Home* (http://www.ipohome.com)

*Nolo* (http://www.nolo.com) Estate planning

Venture Capital

*VentureOne* (http://www.ventureone.com/research/ventedata/stats/index.htm) Information on flows of funds and trends in venture financing

Information Technology University (http://www.itu.com) Peer-to-peer venture capital advice and investing

GE Capital’s VentureMine (http://www.geventuremine.com) Information to facilitate entrepreneurs and financiers
Other/General

Columbia Entrepreneurship Program (http://www.gsb.columbia.edu/entprog)

Harvard Business School Entrepreneurship Program (http://www.entrepreneurship.hbs.edu)

Ivo Welch (http://www.welch.som.yale.edu)

Entreworld (http://www.entreworld.org) A wealth of resources from the Kauffman Center

GotTheBug (http://www.gotthebug.com) "...[A]n online community devoted to helping executives at struggling startups deal with everything from finding an accountant to learning how to survive without a salary." (Business Week, 10/25/99)

Abuzz (http://www.abuzz.com) A New York Times Online-sponsored forum for members of the entrepreneurial community to post questions and receive answers. The value of the site depends entirely on the quality of contributed questions and answers. The thoughtful participation of MBA students is encouraged.