Value Investing
EMBA Block Week – Spring 2015
March 2\textsuperscript{nd} – 6\textsuperscript{th}, 2015

TANO SANTOS

Classroom: Uris 301
Professor Office Location: Tano Santos – Uris 815
Office Phone: 212-854-0489
Fax: 212-851-9509 (Heilbrunn Center)
E-mail: js1786@columbia.edu (Tano Santos)

You should contact James with any questions throughout the course. All email communications with James and I should have “EMBA-Value Investing” in the subject line.

Office Hours and communication with me: I will stay after class on Monday and Wednesday. On Tuesday and Thursday I will arrive early in case anyone wants to talk with me then.

You can also submit questions about class material to me every day until 8:00 p.m. I will answer either by email or next day in class. Questions about any of the assignments should be submitted to Michael. As before all emails should read “EMBA-Value Investing” in the subject line.

RECOMMENDED COURSE MATERIAL

Textbooks

There are two main textbooks:

- \textit{The Intelligent Investor: The Definitive Book on Value Investing. A Book of Practical Counsel} (Revised Edition) [with comments by Jason Zweig and introduction by Warren Buffett].
There is of course excellent literature on the subject of value investing and related topics. Some interesting books that immediately come to mind are:


There are two books in the intersection of accounting and valuation that are useful supporting material


All the materials related to the cases discussed in class will be posted on Canvas. This includes 10Ks, and supporting materials; I will have presentations about the cases after the class discussion but I will not distribute them. The lectures notes have two versions: A student one that will be distributed in class and a professor one with additional material and that will be the one projected in class. There are also presentations associated with the cases but this material will not be posted.

**REQUIRED PREREQUISITES AND CONNECTION TO THE CORE**

Co-requisite: Capital Markets

The learning in this course will utilize, build on and extend concepts covered in the following core courses:

<table>
<thead>
<tr>
<th>Core Course</th>
<th>Connection with Core</th>
</tr>
</thead>
<tbody>
<tr>
<td>Corporate Finance</td>
<td>1. Cost of Capital</td>
</tr>
<tr>
<td></td>
<td>2. Valuation</td>
</tr>
<tr>
<td></td>
<td>3. Financing Options</td>
</tr>
<tr>
<td></td>
<td>4. Time value of money</td>
</tr>
<tr>
<td></td>
<td>5. Opportunity cost (of capital)</td>
</tr>
<tr>
<td></td>
<td>6. The Capital Asset Pricing Model (CAPM)</td>
</tr>
<tr>
<td></td>
<td>7. Firm Valuation Model</td>
</tr>
<tr>
<td>Financial Accounting</td>
<td>1. The “accounting equation”</td>
</tr>
<tr>
<td></td>
<td>2. Revenue and expense recognition</td>
</tr>
<tr>
<td></td>
<td>3. Resources and obligations – measurement and disclosure</td>
</tr>
<tr>
<td>Global Economic</td>
<td>1. Risk Management</td>
</tr>
<tr>
<td>Environment</td>
<td>2. What is Gross Domestic Product and how is it measured?</td>
</tr>
</tbody>
</table>
### Managerial Economics

| 1. | Barriers to entry |
| 2. | Moats |
| 3. | Maximization and thinking on the margin |
| 4. | Analyzing complex decision-making under uncertainty |
| 5. | Decision-based cost analysis |
| 6. | Pricing with market power |
| 7. | Market segmentation and other advanced pricing strategies |
| 8. | Understanding market competition and equilibrium thinking (in the short-run) |
| 9. | Market equilibrium thinking (in the long-run) and barriers to entry |
| 10. | Strategic interaction among firms and Nash equilibrium |

### Strategy Formulation

| 1. | Trade-offs, value-added, efficiencies |
| 2. | Creation of value vs. value capture |
| 3. | Competing firms |
| 4. | Co-optition and Complementors |
| 5. | Strategic interaction analysis |
| 6. | Diversification and scope |
| 7. | Ethics & IBS |
| 8. | Behavioral and evidence-based strategy |
| 9. | Management |

### COURSE DESCRIPTION & OBJECTIVES

This course aims to familiarize the student with the principles and techniques of value investing, the investment philosophy pioneered by Graham & Dodd during their years at Columbia Business School. This will be done through a combination of formal lectures, in class valuation discussions (see below) and presentations by leading investors.

The areas covered will include:

1. The fundamental assumptions and approaches to value investing
2. Designing strategies for searching efficiently for value investing opportunities
3. Techniques for assessing fundamental value in a robust way
4. Risk management for the value investor
CONTENTS

Part I: Foundations of Value Investing

1. Introduction
   • Value Investing: A definition
   • Comparison with other approaches
   • Why value investing is so rarely practiced and so widely praised?

2. The value premium and the value premium puzzle
   • Portfolio sorts
   • The Book-to-Market sort and the value premium
   • Is it risk? The value premium puzzle
   • Behavioral evidence regarding the value premium
   • Other sorts: Momentum, long term reversals
   • Quantitative value strategies

3. Behavioral Finance: Why is Mr. Market the way it is?
   • Behavioral finance: individual biases and their consequences
     o Loss aversion and reference points
     o Preference for skewness
     o The representative heuristic: Extrapolation
     o Overconfidence
   • Institutional biases
     o Window dressing
     o Herding
   • Limits of arbitrage: The separation of capital and knowledge
   • The empirical evidence

Part II: The Value Investing Process

4. Introduction: An overview of the value investing process
   • The components of the value investing process
   • Differences with other approaches
   • Adverse selection: The fundamental problem of exchange

5. Search: Where do ideas come from?
   • Specialization: Searching in the circle of competence
   • The value of sorts: BE/ME, E/P,...
     o Do accounting sorts work?
     o Double sorts
     o An example: Greenblatt’s Magic Formula
   • Special situations
   • 13Fs: Imitating what smart investors do
   • News, periodicals and other sources

6. Valuation – I: Asset and earning powers values
• The main idea
• The approach
  o Asset Values
    1. Liquidation and net-nets
    2. Reproduction values
  o Earnings Power values
    1. Sustainable earnings
    2. Adjustments
  o Comparing asset and earnings power values
• An example

7. Valuation – II: Growth and profitability
• Evidence on profitability
• Growth accounting
• Capex and growth
• How to calculate the return on additional invested capital?
• Can firms capitalize on market growth?

8. An example in depth

Part III: Value Investing and the Economics of Strategic Behavior

9. The economics of Strategic Behavior: A crash course
• The logic of free entry
• The limits of product differentiation
• The limits of first mover advantages
• Barriers to entry
  o Demand advantage
  o Supply advantage
  o Other sources of advantages
• Industry maps: Performing strategic analysis

10. Assessing management
• Capital allocation
  o Incentives for empire building: Acquisitions
  o The empirical evidence
• Incentives inside the organization

Part IV: Macroeconomic Risks and Value Investing: Risk Management

11. Macroeconomics risks and value investing
• The Great Recession and the state of the US economy
• The Eurozone Crisis
• Case: Ferrovial
• The next crisis
12. Risk management and review
   • Risk Management
     o The margin of safety
     o The continuous review process
     o Portfolio formation
       1. Checklists
       2. The role of cash
     o Exit strategies
     o Hedging
     o The role of leverage
     o Shorting
   • Review
     o Analyzing success: Was it luck or was it skill?
     o Analyzing failure:
       1. What did you miss?
       2. Repeating mistakes

NOTE

Because of the peculiar pedagogical needs of the EMBA block week the material has been suitably re-arranged: Valuation essentials are introduced early in the course so that cases can be tackled from the first day. The previous index shows the “textbook” sequence of the material. Please see the EMBA grid to.

METHOD OF EVALUATION

The grade will be based on:

1. Class participation: Students will be asked questions throughout the semester. This is intended simply to elicit participation and attention.
2. Speaker assignment (due on Tuesday 3rd at 9:00 am).
3. There will be two cases. One due on Tuesday 3rd and the second one on Thursday 5th. These cases can be done in groups of four.
4. A valuation exercise project to be chosen among a list of names given in class and to be developed by a group of no more than four students. This case is due on Monday, March 23rd at noon. Please submit the copy of your work via email to Michael’s account. The write up must include the basis of the case, recommendation, and analysis and should be no more than three pages. The appendix can include an unlimited number of charts and supporting material. Brevity and clarity, not just the quality of the idea and valuation approach, will also be graded.

The bulk of the grading will be based on the last three items (about 80% of the grade).

CLASSROOM NORMS AND EXPECTATIONS

Class Participation: Preparation, Discussion, Organization, Engagement