B8358 – Banking Fundamentals: Value and Risk

Fall Term 2013

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REQUIRED COURSE MATERIAL
Casebook readings (see below)

REQUIRED PREREQUISITES AND CONNECTION TO THE CORE
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>
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<tbody>
<tr>
<td>Corporate Finance</td>
<td>Risk and risk management</td>
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<td></td>
<td>Discounted cash flow analysis</td>
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<tr>
<td>Global Economic Environment</td>
<td>Role of central and private banks in money creation</td>
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<td></td>
<td>Financial markets and exchange rate movements</td>
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<td></td>
<td>Causes of financial crises and the role of regulation</td>
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<tr>
<td>Managerial Statistics</td>
<td>Random variables and distributions</td>
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<td></td>
<td>Decision making under uncertainty</td>
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<tr>
<td>Strategy Formulation</td>
<td>Sources of economic value</td>
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<td></td>
<td>Creation of value through strategy</td>
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<tr>
<td>Decision Models</td>
<td>Decision making under uncertainty</td>
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<td></td>
<td>Value at risk</td>
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Students will be expected to have mastered these concepts and be able to apply them in the course.
COURSE DESCRIPTION

This course is about the business of large banks in developed countries. It begins with the question of why banks exist and explores the two leading theories: information asymmetries and liquidity provision. We focus on what makes bank analysis different from standard corporate finance. Most companies have inherent operating risks and select an optimal mix of debt and equity financing given those risks. Banks select their risks and acquire them when expected returns are sufficient. But do banks manage risk intelligently?

For many years, banks and their regulators believed that they had learned to manage risk very well, but this has turned out to be an illusion. Indeed, some of the tools that were understood as safety devices (e.g. CDOs and CDS) were at the center of the financial crisis of 2007-2009. We will study the tools of risk management with a view to understanding both their utility and their limitations. We will revisit the crisis and ask what went wrong, what could be done better in the future.

Underlying all modern bank strategy is the question, how does a bank make money in a relatively efficient financial market? A critical reference point is the “market bank”, which does nothing but buy market assets and sell market liabilities. By understanding the characteristics of this model, the actual sources of value in real banks are more clearly seen. The course emphasizes VaR analysis, RAROC, and the international rules for bank capital, as well as the markets for loan trading, credit derivatives and securitization. It ends with a review of recent banking reforms.

COURSE OBJECTIVES

The goal is to provide students with tools with which to analyze and understand banks in the industrialized world, and to provide insights into the reasons for bank fragility and the nature of financial crises.

ASSIGNMENTS

The main deliverable is a research paper, which is written in teams of up to maximum four students. This is a Type A assignment with full collaboration and a single grade for all team members. The research paper focuses on the three largest private banks of some country, examining their strategy, their risks and their returns. It is written in two parts, with revision of the first part after its return.

In addition there are three individual Type B assignments which students are to prepare by themselves. One involves trying to figure out the strategy and sources of value of a real bank (Commerce Bank); another involves analyzing a proposal to take on some foreign exchange risk; and the third is a problem set about the Basel capital rules.

All assignments are submitted online.

METHOD OF EVALUATION

<table>
<thead>
<tr>
<th>Assignment</th>
<th>Percentage</th>
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<tbody>
<tr>
<td>Class Participation</td>
<td>20%</td>
</tr>
<tr>
<td>Assignments</td>
<td>30%</td>
</tr>
<tr>
<td>Research Project</td>
<td>50%</td>
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</table>
CLASSEMM ROOM NORMS AND EXPECTATIONS

Class attendance and participation is important in this course – 20% of the grade, assessed both qualitatively and quantitatively. Each class includes a polling question, frequently at the start of the class, which serves to record attendance. Each student is expected to have a functioning clicker to respond to these questions. Everyone is expected to speak up and join the classroom discussions.

Students are expected to arrive in the classroom before the class begins. Late arrival will usually be recorded as absence.

CASEBOOK READINGS


Class #3: Andrew G. Haldane, “Banking on the State” (September, 2009)


Class #5: DOB, “The Market Bank” (October, 2006)

Class #6: DOB, “Introduction to Bank Analysis” (June, 2013)

Class #10: DOB, “VaR: The RiskMetrics Implementation” (October, 2000)

Class #15: Willem Buiter, “Is Sovereign Default Unnecessary, Undesirable and Unlikely for all Advanced Economies?” (September, 2010)

Class #16: DOB, “Europe and the Financial Crisis” (March, 2009); and DOB, “Can the Euro Be Saved?” (October, 2011)

Class #17: DOB, “Landsbanki Íslands” (June, 2012)


Class #23: Marianne Ojo, “Basel III: Responding to the Recent Financial Crisis” (June, 2011)

Morgan Stanley, “Risks of Deleveraging” (November 2011)

Class #24: The Economist, “Retail Renaissance” (May, 2012)
DAILY CALENDAR

The nature of banking

9/4  1. Introduction to the course. What are banks and why do they exist? Financial intermediation in various forms. The information theory of banking and its implications.


Bank analysis


Market risk and VaR


10/2  9. Importance of risk measures. A unified way of thinking about risk. How various risks can be compared. Institutionalizing risk management in banks. The Value at Risk (VaR) as a proxy for capital required. Risk-adjusted Return on Capital (RAROC) and its impact on banking. Problem Set 1 assigned.


Capital and credit risk


10/30  15. The marginal-VaR regulatory model that underlies Basel II. The problem of sovereign risk; history and patterns of sovereign default. (Reading: Is Sovereign Default Unnecessary, Undesirable and Unlikely for all Advanced Economies?). Problem Set 2 due.

11/6  16. The crisis of banks and sovereign debt in Europe. (Readings: Europe and the Financial Crisis, Can the Euro Be Saved?).


Interest rate risk


Risk management


12/2  22. The three major British banks: Class discussion of the British environment and how these banks have differed in strategy, risk and value through the financial crisis. Research papers due.


12/9  24. The future of banking. Review of the course. (Reading: Retail Renaissance).