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# Banking Theory and Applications

Professor: Victoria Vanasco

Office hours: by appointment

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## Course Description

This course explores different models of banking. Banks play a crucial role in all modern economies as they intermediate funds between savers and borrowers. In this course, we will discuss why banks exist and what their main role is. First, we will study banks' role in liquidity management through the transformation of illiquid loan assets into liquid deposit liabilities. Second, we will study informational frictions, such as adverse selection, and analyse different ways for banks to elicit borrowers' private information about their own inherent risk. Third, we will analyse moral hazard issues and how loan terms can be designed to reduce borrowers' risk-taking and ensure repayment. Finally, with the developed frameworks, we will think about competition and industrial organization in banking.

## Objectives

The objective of this course is to provide students with conceptual frameworks to think about banks. In particular, the goal is for students to understand the different theories of banking, and to be able to use these theories to think about the value and the potential risks associated with banking. The course studies banking from four different perspectives: (1) liquidity management, (2) adverse selection and screening, (3) moral hazard and monitoring, and (4) competition and industrial organization. In the end, students should apply and relate the concepts learned in this course with the other courses in banking offered in the program.

## Methodology

The course consists of four lectures of taught material, which will include class discussion and problem solving, and one final lecture of banking case studies.

## Evaluation criteria

Exam: 50%.

Case study: 30%.

Class Participation and Quizzes: 20%.

To pass the course, a minimum weighted average of 5/10 and a minimum grade of 4/10 in the final exam is needed. If a student does not reach the required grade, she/he will have to retake a final exam at a jointly established date, in which case the course grade will not exceed a 60/100.

Students are required to attend 80% of classes. Failing to do so without justified reason will imply a Zero grade in the participation/attendance evaluation item and may lead to suspension from the program. Students who fail the course during the regular evaluation are allowed ONE re-take of the evaluation, in the conditions specified above. If the course is again failed after the retake, the student will have to register again for the course the following year.

In case of a justified no-show to an exam, the student must inform the corresponding faculty member and the director(s) of the program so that they study the possibility of rescheduling the exam (one possibility being during the “Retake” period). In the meantime, the student will get an “incomplete”, which will be replaced by the actual grade after the final exam is taken. The “incomplete” will not be reflected on the student’s Academic Transcript.

Plagiarism is to use another’s work and to present it as one’s own without acknowledging the sources in the correct way. All essays, reports or projects handed in by a student must be original work completed by the student. By enrolling at any UPF BSM Master of Science and signing the “Honor Code,” students acknowledge that they understand the schools’ policy on plagiarism and certify that all course assignments will be their own work, except where indicated by correct referencing. Failing to do so may result in automatic expulsion from the program.

## Calendar and Contents

### Lecture 1 (3hs).

- Introduction and Overview of the Course - MB Chapter 1.
- Liquidity Management – MB Section 2.2

### Lecture 2 (3hs).

- Information Friction I: Adverse Selection – MB Section 2.3
- Banks & Screening

### Lecture 3 (3hs).

- Information Friction II: Moral Hazard – MB Sections 2.4 and 4.6
- Banks & Monitoring

### Lecture 4 (3hs).

- Competition - MB Chapter 3
- Industrial organization (IO) of banking

Lecture 5 (3hs).

- Case Study Presentations

**FINAL EXAM. Date and Room: TBD** - Includes all material covered in lectures. Bring a calculator (no phones or laptops allowed!).

### Reading Materials/ Bibliography/Resources

- Freixas, X., & Rochet, J. C. (2008). *Microeconomics of banking (MB)*. MIT press.
- Lecture slides and case studies, available on the course website.

### Bio of Professor

Victoria Vanasco is a Junior Researcher at the Centre de Recerca en Economia Internacional (CREI). She is also a Research Affiliate at CEPR, an Affiliated Professor at Universitat Pompeu Fabra and at the Barcelona School of Economics, an Associate Editor at Management Science and the Journal of Financial Intermediation, and a member of the Editorial Board at The Review of Economic Studies.

Before joining CREI in 2018, she was an Assistant Professor of Finance at the Stanford Graduate School of Business. She earned her PhD in Economics from UC Berkeley and holds a master's in finance and a B.A. in Economics from Universidad Torcuato Di Tella, in Argentina, where she is from. Before her PhD, she spent two years as a Junior Professional Associate at the World Bank.

Her research focuses on topics related to information asymmetries and their impact on financial markets and the real economy. She is interested in factors that lead to information and belief heterogeneity, in how these factors may impact incentives of market players to screen and monitor assets, and in the study of regulatory policies to increase liquidity and discipline in markets.