
Banking and Financial Intermediation

Professor: Victoria Vanasco and Sergio Vicente

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Office hours: By appointment

Term: Winter 2022

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, what their main role is, and the characteristics of loan contracts. In the first part, taught by Victoria Vanasco, we will first 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. In the second part, which will be taught by Sergio Vicente, we will first study several features of loan contracts in static settings. We shall analyze the role of loan guarantees, covenants, firm's equity, and collateral in overcoming the informational frictions encountered between lenders and borrowers. Second, we will study dynamic relationships between lenders and borrowers that interact repeatedly. Finally, we will look into the latest developments of the digital banking revolution, including shadow banking, credit scoring, and digital lending platforms.

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 first part of the course studies

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banking from four different perspectives: (1) liquidity management, (2) adverse selection and screening, (3) moral hazard and monitoring, and (4) competition and industrial organization. The second part of the course draws on the insights of the first part to study applications to (1) loan contracts in static settings, (2) loan contracts in dynamic settings, and (3) the digital banking transformation. 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 is divided in two parts. Each part 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%.

In order 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.

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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

Part I: Victoria Vanasco

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

Part II: Sergio Vicente

Lecture 1 (3hs).

- Loan guarantees

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- Asset substitution
- Firm's equity
- Secured and unsecured contracts
- Collateral
- Covenants
- Loan pricing
- Credit rationing

Lecture 2 (3hs).

- Long-term relationships
- Time inconsistency
- Loan restructuring
- Coordination problems in creditor coalitions
- Loan commitments

Lecture 3 (3hs).

- Sources of credit information
- Banks and financial markets
- Shadow banking

Lecture 4 (3hs).

- Credit scoring
- On-line platforms
- Direct lending

Lecture 5 (3hs).

- 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.

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Bio of Professors

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 GSE, an Associate Editor at Management Science, 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.

Sergio Vicente is an Assistant Professor and a Senior Research Scientist of Finance at the Université du Luxembourg. He earned his PhD in Economics from New York University. He has held full-time faculty positions at Queen Mary University of London and at Universidad Carlos III de Madrid.

His main research areas are banking, financial innovation, and the regulation of financial institutions, including topics such as the automatization of lending, the regulation of capital and liquidity, the architecture of banking unions, and the effect of monetary policy on lending.

He teaches finance, banking and economics courses at the University of Luxembourg, University College of London, Universidad Carlos III de Madrid, and Universitat Pompeu Fabra. He also teaches short courses at several MBA and MSc programs and is an occasional instructor at executive programs for bankers.

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