



UNIVERSITÀ
DEGLI STUDI DI MILANO-BICOCCA

SYLLABUS DEL CORSO

Bank Management

2627-2-F1602M020

Learning objectives

At the end of the course, students will be able to:

1. Understand the evolution of prudential regulation (Basel II–III–“IV”) and assess its implications for banks’ business models and capital management.
2. Understand the main types of banking risk, with particular reference to credit risk, operational risk, liquidity risk, and interest rate risk, together with the related measurement and management models.
3. Apply basic measurement models for the main risks analyzed (credit risk, operational risk, interest rate risk in the banking book, liquidity risk, and market risk).
4. Analyze and apply the main Asset & Liability Management (ALM) tools and the logic underlying regulatory capital optimization.
5. Understand the framework of internal processes for risk, capital, and liquidity management (in particular ICAAP, ILAAP, RAF, and Recovery Plan) and their interaction with business strategies, the supervisory priorities of the European Central Bank, and the SREP process.
6. Link risk measures with accounting measures.
7. Assess asset quality and strategies for the management of non-performing loans (NPLs), also from a regulatory and strategic perspective.
8. Understand how to integrate sustainability (ESG) factors into risk management and assess their impact on the main banking risks.
9. Understand the implications of digital transformation in the banking sector, with particular focus on innovative payment services, digital money, and crypto-assets.

Students participating in the project work will also develop:

10. Research, analytical, and data processing skills, based on public data and information collected also through field interviews, with specific reference to banks’ strategies, risk exposures, and capital adequacy profiles.
11. The ability to work in teams and to organize and manage a project.
12. The ability to communicate results achieved, challenges encountered, and lessons learned, based also on independent judgment.
13. The ability to communicate and present the results of group projects, including through the use of multimedia

support tools.

Contents

The Bank Management course provides an integrated view of bank management, with a particular focus on risk management, within a context characterized by increasing regulatory complexity, digital transformation, and growing attention to sustainability.

After examining the Basel regulatory framework and its implications for banks' capital management and business strategy, the course explores the main types of banking risk (credit risk, market risk, interest rate risk, liquidity risk, and operational risk) together with the related measurement models.

Significant attention is devoted to internal processes for risk, capital, and liquidity management (ICAAP, ILAAP, RAF, and Recovery Plan), the supervisory priorities of the European Central Bank and the SREP process, as well as asset quality assessment and NPL management.

The course also addresses regulatory optimization tools, the integration of ESG factors into bank management, and the impact of digitalization on payment services, digital money, and crypto-assets.

Detailed program

1. The specific features of banks, Risk Governance, and the role of the Chief Risk Officer (CRO) and risk culture within the internal control system and business activities.
2. The regulatory framework after the 2008 financial crisis: the concept of capital adequacy from Basel I to Basel "IV".
3. Definition and components of regulatory capital.
4. Credit risk: definition and components (EL, UL, PD, LGD, EAD).
5. The Standardized Approach and IRB Approaches.
6. Credit Risk Mitigation (CRM) techniques.
7. Internal rating systems: rating assignment.
8. Internal rating systems: rating quantification.
9. Internal rating systems: rating validation.
10. Internal rating systems: LGD estimation.
11. Funds Transfer Pricing (FTP) and risk-based loan pricing.
12. NPL management.
13. Operational risk.
14. Asset & Liability Management (ALM) and Interest Rate Risk in the Banking Book (IRRBB).
15. Liquidity risk management.
16. ICAAP, ILAAP, RAF, and Recovery Plan processes, and their links with business strategies and the SREP process.
17. Supervisory expectations regarding sustainability and the impact of climate risk on banking risks.
18. The digital transformation of the banking system and its impact on risks.
19. The evolution of payment services: from innovative payments to new digital money.
20. Crypto-assets and their impact on financial services.

Prerequisites

None

Teaching methods

The course is delivered in person, with some sessions complemented by distance learning. Teaching methods include lectures, exercises focused on the application of individual risk measures and related management models, as well as guest lectures delivered by industry experts. Students will also discuss in class one or more business cases related to fraud risk and recovery processes.

Students will be offered the opportunity to participate in a project work (field project). This activity is concentrated in the second part of the course and involves the analysis and evaluation, in small groups, of the risk management systems and capital adequacy of a sample of Italian and international banks. The presentation of the project work results will take place in class through the screening of short 15-minute videos produced collaboratively by the students themselves.

Students who do not participate in the project work will be required to prepare a short individual final report focused on the analysis of risk management models and the evaluation of the capital adequacy of a bank of their choice.

Assessment methods

Assessment is carried out through different procedures for students who participate in the project work and for those who do not.

For students participating in the project work, the professor assigns a grade to the outcome of the group project (video presented in class) on the basis of an evaluation of students' learning ability, capacity to apply knowledge, ability to exercise independent judgment, and ability to communicate using appropriate technical language. This grade accounts for 40% of the final course grade and is assigned to the group in order to encourage teamwork.

In the evaluation process, the Professor also takes into account the results of a peer evaluation, based on a model designed to capture the level of satisfaction expressed by the class attending the video presentation, according to the following criteria (scale 1–4): mastery of the topic, clarity of presentation, ability to generate interest, use of language, consistency of individual contributions, and overall appreciation. The peer evaluation result (overall average score) accounts for 50% of the project work grade. Project work grades, peer evaluation results, and test grades will be communicated through the course website.

The remaining 60% of the final grade is assigned on the basis of an oral examination. In this context, knowledge, understanding, and learning ability are assessed through two questions concerning some of the main risk measurement models examined during the course. The answers account for 50% of the oral examination grade. The ability to apply knowledge is assessed through one or more exercises or through the request to comment on specific cases or problems. Performance in the exercises or the quality of comments provided on cases/problems accounts for the remaining 50% of the oral examination grade. The final course grade is therefore calculated as the weighted average of the project work grade (40%) and the oral examination grade (60%).

Students will also have the possibility to take the examination in written form, through two midterm tests. Both written tests, each lasting 1.5 hours, replace the oral examination either entirely or partially, in the event that one of the two tests is not taken or not successfully passed. The use of PCs, tablets, smartphones, or smartwatches during the examination is not permitted. Each written test is structured as follows:

- a) 8 multiple-choice or true/false questions designed to assess knowledge of basic concepts (2 points each);
- b) 1 open-ended question concerning risk measures and risk management models (7 points);
- c) 1 exercise concerning the application of individual risk measures and related management models (7 points).

Students may review their completed written examinations during the Professor's office hours.

For students who do not participate in the project work, assessment of knowledge acquisition and the ability to apply knowledge will be based on the evaluation (accounting for 20% of the final grade) of a final report prepared on a bank assigned by the professor, together with an oral examination conducted according to procedures similar to those described above. The report must be submitted in Word format (approximately 10–12 pages) and must contain a critical analysis of the following aspects: the bank and its business model; profitability; risk management

models; and capital ratios. The report must conclude with the student's own evaluation of the bank's capital adequacy in relation to the risks undertaken. Students may use documents and materials available on the bank's website (financial statements, Pillar III disclosures, etc.). Students are required to submit the report by email to the professor a few days before the examination, during which the report will be discussed.

Honors (cum laude) are awarded when all components of the examination demonstrate excellence in terms of completeness, clarity, quality of analysis, and ability to develop cross-topic connections.

Textbooks and Reading Materials

1. A. Sironi, The evolution of banking regulation since the financial crisis: a critical assessment, Working Paper, November 2018, available on the course website.
2. Slides, readings, and videos available on the course website. Students are required to check the course website regularly for teaching materials and for any additional instructions or communications provided by the professor.

Optional additional reading:

A. Resti, A. Sironi, Risk Management and Shareholders' Value in Banking, John Wiley & Sons Finance, 2007 (individual chapters can be purchased online at <https://onlinelibrary.wiley.com/doi/book/10.1002/9781118371886>)

Semester

First semester

Teaching language

English

Sustainable Development Goals

QUALITY EDUCATION
