

FUNDAMENTALS OF BANK FINANCIAL STATEMENT ANALYSIS

giuseppe.montesi@unisi.it

Language

Italian

Content

The course is intended to give students the skills necessary to understand, analyze and interpret a bank financial statement, and to utilize accounting and other data from financial statement information to analyze risk, evaluate capital adequacy and calculate the main bank performance and evaluation measures. The course will explore several of the most critical elements linked to accounting systems through a comparison of different accounting standards, in particular IAS/IFRS vs. US GAAP. In addition, a review of some analysis models from a forecast perspective is provided, with the aim of providing the rationale on the basis of which to model the risk, income, equity and value dynamics of a bank.

Textbooks

- Teaching materials by the teacher: "Part I - Fundamentals of Bank Financial Statement Analysis".
- Teaching materials by the teacher: "Part II - Fundamentals of Bank Financial Statement Analysis".
- Rutigliano M. (a cura di), "Il Bilancio della Banca e degli Altri Intermediari Finanziari", Egea, Milano, 2020. [Ch.: 1, 2, 3, 4, 5, 6, 7 (pp. 225-299), 9 (349-440), 10, 11.
- Montesi G., Papiro G., Ugolini L. and Ammendola G., "Credit Risk Forecasting Modelling and Projections Under IFRS 9", Journal of Risk Management in Financial Institutions Vol. 12, 2019.
- Dicanio A. and Montesi G., "Banks in Time of Covid-19: Loss Absorption Capacity, Lending and Market Valuation", Bancaria, 2, 2021.
- Kieran D., Westwood B and Segoviano B. M., "Stress Testing of Banks: An Introduction" Bank of England Quarterly Bulletin 2016 Q3.

Readings and tools

- Massari M., Gianfrate G. and Zanetti L. "The Valuation of Financial Companies: Tools and Techniques to Measure the Value of Banks, Insurance Companies and Other Financial Institutions" Wiley, 2014. [Ch. 4]
- Schmieder C., Pühr C. And Hasan M., "Next- Generation Applied. Solvency Stress Testing" in "A Guide to IMF Stress Testing: Methods and Models" IMF 2014.
- Haldane A. G. and Madouros V., "The Dog and the Frisbee." Speech at a Symposium of the Federal Reserve Bank of Kansas City, August 2012 , Wyoming.
- BIS Glossary.

Objectives

1. To acquire specialized knowledge necessary for the interpretation and analysis of bank financial statements.
2. To understand bank risks in financial information.
3. To gain a prospective, integrated view of bank risks.
4. Bank capital planning.
5. Bank valuation and analysis of performance from a historical and prospective point of view.
6. To analyze bank financial statements through the data provider Bloomberg.

Prerequisites

Good understanding of basic bank operations and regulation. Knowledge of financial mathematics and fundamentals of finance theory.

Teaching method

Lectures.

Other information

Attendance at lectures is strongly advised.

Assessment methods

Oral final examination.

Full Course Program

PART I: FINANCIAL STATEMENT

1. Typical evaluation and reporting bank financial statement profiles
2. Financial instruments
 - 2.1. Classification and valuation criteria (ACIT, FVTPL, FVTOCI)
 - 2.2. Fair value policy (mark to market, mark to model)
 - 2.3. Fair value hierarchy (L1, L2, L3)
 - 2.4. Issues linked to the application of fair value accounting
3. IFRS 9: the new accounting standard
 - 3.1. IFRS 9 classification and measurement
 - 3.2. New financial reporting scheme (Bankit Circular 262 – 5th update 22/12/2017)
 - 3.3. Fair value and own risk
 - 3.4. New rules: IFRS vs. US GAAP
4. Credits
 - 4.1. Impairment and valuation models: Incurred Loss vs. Expected Loss
 - 4.2. Analytical and collective valuation
 - 4.3. IFRS 9: the new impairment model
 - 4.4. Impairment of financial instruments: FASB vs. IFRS 9
 - 4.5. Adjustments due to IFRS 9 transitional arrangements
 - 4.6. Credit risk modeling

5. Leasing
 - 5.1. Finance leases vs. operating leases
 - 5.2. Accounting and reporting
 - 5.3. Reform projects and new accounting rules (IFRS vs. US-GAAP)
6. Non performing exposures
 - 6.1. Classification and analysis
 - 6.2. Credit quality transition matrix
 - 6.3. Credit quality (Cost of risk, NPL's Cover ratio, Texas ratio, ...)
7. De-recognition & securitization processes
 - 7.1. Operations linked to derecognition (ABS, CDO, Repos...)
 - 7.2. Derecognition: accounting logic (full derecognition <--> no derecognition)
 - 7.3. NPL Securitization: analysis and valuation models
8. Derivative instruments
 - 8.1. Risks associated with derivatives
 - 8.1.1.1. Derivative position: gross market value vs. gross credit Exposure
 - 8.1.1.2. Counterparty risk vs. lending risk
 - 8.1.1.3. Bilateral clearing vs. central clearing
 - 8.1.1.4. Externalities in financial network
 - 8.2. Criteria for valuation and financial statement representation
 - 8.2.1.1. Trading derivatives, incorporated derivatives, Hedging accounting (Fair Value Hedge, Cash Flow Hedge...)
 - 8.2.1.2. xVA terms: Credit Valuation Adjustment (CVA), Debt Valuation Adjustment (DVA),... FVA, MVA, KVA
 - 8.2.1.3. Derivatives netting (IFRS vs. US GAAP)
9. Investments
 - 9.1. Concept of control and methods of consolidation
 - 9.2. Investments: definitions classification and valuation criteria
10. Intangible assets and goodwill
 - 10.1. Criteria for identifying and valuing intangible assets
 - 10.2. Impairment test on goodwill
11. Pension & Other Postretirement Benefit
 - 11.1. Defined-contribution pension plans
 - 11.2. Defined-benefit pension plans
 - 11.3. Financial statement reporting of pension & post-employment benefits
 - 11.4. The risks of accounting adjustments related to pension valuation
12. Stock-based Compensation expense
 - 12.1. Employee stock options
 - 12.2. Accounting rules: IAS/IFRS vs. US-GAAP
 - 12.3. Management options and value
13. Deferred tax
 - 13.1. Origin of deferred tax
 - 13.2. Accounting criteria
14. Information in footnote disclosures and Pillar 3 disclosure
15. Federal Reserve – Reporting Form FR Y-9

PART II: PROFITABILITY, RISK AND VALUE IN BANK ANALYSIS

1. Equity book value vs. regulated capital
2. The determinants of bank capital structure
3. Profitability threshold, risk threshold and conditions of capital adequacy
4. Capital planning process
 - 4.1. Forward-looking view
 - 4.2. Enterprise-wide scenario analysis

4.3. Multi-period forecasting models

4.3.1.1. Logics of accounting-regulatory-based models

4.3.1.2. Modeling of main risk factors (credit risk, liquidity risk...)

4.4. Banks & ESG (Environmental, Social & Governance) Risk Factors

4.5. Business Model Analysis

4.6. Bank stress-testing

5. Bank valuation

5.1. Cash flow analysis for bank

5.2. Cash flow to equity model

5.3. Excess return valuation

5.4. Multiples valuation

5.5. Own funds requirements and shareholder value

5.6. Bank valuation in M&A