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## Accounting and management in insurance

PROF. ANTONIA DI BELLA; PROF. ALBERTO FLOREANI

MODULE I (Prof. Antonia Di Bella)

### Course aims and intended learning outcomes

The course introduces to accounting management and financial reporting, solo and consolidated, of insurance companies under Local GAAP and IAS IFRS framework.

### Course content

#### *Accounting for insurance business*

1. Introduction to accounting system: the double entry method.
2. Definition of Asset, Liabilities, Cost, Revenue.
3. Balance sheet and Profit&Loss Statements.
4. The accounting and extra-accounting system of insurance and financial transactions for the purpose of preparing the financial statements.
5. Accounting model for Life insurance contracts: Unit Linked, Participating contracts and Segregated funds
6. Accounting model for Non Life contracts under Local GAAP.

#### *International Financial Reporting Standards and International Accounting Standards relevant for Insurance Companies*

1. IAS 39: Financial Instruments: Recognition and Measurement.
  - a. Classification.
  - b. Measurement.
  - c. Valuation.
2. IFRS 13: Fair Value Measurement.
  - a. Definition.
  - b. Measurement.
  - c. Disclosure.
3. IFRS 9: Financial Instruments: impact of this standard for insurance business.
  - a. Classification and measurement.
4. IFRS 4: Insurance contracts (phase1).
  - a. Definition of insurance contracts.
  - b. Measurement.
  - c. Disclosure.

### Reading list

A. DI BELLA, Lecturer notes, 2019-20, Available on BlackBoard.

Additional reading list will be given during lessons.

### Teaching method



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Lectures.

### Assessment method and criteria

Written examination (Theoretical questions). Facultative oral examination.

### Notes and prerequisites

Place and time of consultation hours: from October to December, at the end of lesson time; in the other months consultation will be required by email to be fixed from time to time.

MODULE II (Prof. Alberto Floreani)

### Course aims and intended learning outcomes

The course introduces to capital management and risk management of insurance companies in the Solvency II framework. Specific focuses will be on the measurement of technical provisions under IFRS 17 compared to Solvency II and the measurement and management of market risks.

At the end of the course the student will be able to:

- Know the Solvency II legal framework;
- Understand the theoretical rationale behind the basic principles of the Solvency II framework (e.g. fair value measurement, risk measurement using a value at risk approach, risk aggregation formula);
- Know the structure and the content of the first pillar of Solvency II (e.g. balance sheet, technical provisions, own funds, SCR and MCR);
- Know the risks of an insurance company and understand how these risks are measured in the standard formula;
- Know the IFRS 17 on insurance contracts and understand the similarities and the differences between IFRS 17 and the Solvency II measurement of technical provisions;
- Apply the knowledge acquired to compute technical provisions under IFRS 17 and Solvency II;
- Apply the knowledge acquired to compute SCR using the standard formula;
- Apply the knowledge acquired to solve some Asset-Liability Management (ALM) problems.

### Course content

1. *Solvency II Introduction.*
2. *Financial instruments and insurance contracts valuation principles (fair value measurement).*
3. *Solvency II Economic Balance Sheet and the measurement of assets and liabilities apart from technical provisions.*
4. *Measurement of technical provisions.*
5. *Technical provisions: comparison between Solvency II and IFRS 17 approach*
6. *Own funds.*
7. *Risk measures, Value at risk, SCR and MCR.*
  - a. *Risk measures and Value at Risk.*
  - b. *Solvency Capital Requirement and Minimum Capital Requirement.*



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- c. *The standard formula and the diversification effects.*
  - d. *Life underwriting risks in the standard formula.*
  - e. *Non-life underwriting risk in the standard formula.*
  - f. *Markets risk and counterparty default risk in the standard formula.*
- 8. *Interest rate risk.*
  - a. *Interest rate risk and asset-liability management.*
  - b. *Interest rate risk measurement in the standard formula.*
  - c. *Accounting mismatch, IFRS 9, IFRS 17 and interest rate risk.*
- 9. *The second pillar of Solvency II.*

## Reading list

A. FLOREANI, Lecturer notes, 2019-20, Available on course BlackBoard.

Additional reading list will be given during lessons.

## Teaching method

Lectures and numerical exercises. A Kahoot will be played in the lecture following the end of each topic.

## Assessment method and criteria

Written examination (50% - 2 or 3 numerical problems) to assess the ability of the student in the resolution of some specific problems (e.g. technical provisions computation, Value at risk computation) and a oral examination (50% - 4 or 5 questions) to assess the knowledge and understanding of the topics. The Kahoot results contribute to the final grade (additional points).

## Notes and prerequisites

It is required a basic knowledge of the characteristics of insurance products (non-life, life, IBIPs) and the financial statement of an insurance company.

Place and time of consultation hours: Monday, starting at 11.30 am (via Necchi, 5, "ex conventino", room C1).