

# Principles of banking and finance

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## **Course Description:**

The course is divided in three parts.

In Part I, we investigate the structure and functions of financial systems. We focus on each of the three main entities that compose a financial system: financial intermediaries, securities and financial markets. We then investigate the difference in the relative importance of financial intermediaries and financial markets around the world, and thus propose a historical and economic investigation of the reasons behind the emergence of bank-based systems and market-based systems in different countries.

In Part II, we examine the issues that come under the broad heading of principles of banking. Here we examine the key economic reasons used to justify the existence of financial intermediaries (and specifically banks). We then investigate the special nature of banking regulation. Finally we outline the key risks in banking and the main methods used for risk management. Thus the areas covered include the role of financial intermediation, banking regulation and banking risk management.

In Part III, we move to the issues known as principles of finance. Here we will examine the techniques used by firms to value real investment projects, and the models used by investors to value bonds and stocks. We then investigate the issues related to the formation of an optimal portfolio by investors, and we derive the main equilibrium asset pricing models. Finally, we investigate the efficiency of the market in pricing securities, and thus we propose a theoretical and empirical validation of the efficient market hypothesis. The areas covered in this section therefore include capital budgeting, securities valuation, mean-standard deviation portfolio theory, asset pricing models and informational market efficiency.

A thorough understanding of today's structure and functions of financial system requires interdisciplinary reflection. To address this, Part I and Part II of the course will make extensive use of interdisciplinary approaches, which entail the use and integration of methods and analytical frameworks from more than one academic discipline to examine the issue. The integration of notions and guiding principles from subjects like political science and sociology will help us to form a more complete, and hopefully coherent, framework of analysis that offers a richer understanding of the issues under examination.

Part III of the course will equip students with solid knowledge of mathematical and statistical apparatus of Financial Economics. Students are expected to be able to interpret financial data including that arising in the context of the firm or household from accounting statements and data generated in financial markets. The interpretation will include analysis using statistical and financial functions and procedures such as are routinely available in spreadsheets (e.g. Microsoft Excel) and statistical packages. Students are expected to obtain the skills necessary to manipulate financial data and carry out statistical and econometric tests (e.g. basic estimation and interpretation of asset pricing models; financial modelling and projections; elements of time series analysis, such as serial correlation and mean reversion).

**Essential Reading:**

The following text has been chosen as the core text, due to its extensive treatment of many (but not all) of the issues covered in the course and its up-to-date discussions:

Mishkin, F. and S. Eakins Financial Markets and Institutions. (Boston, London: Addison Wesley, 2009) sixth edition [ISBN 978032155112].

However, this core text does not cover the material for the entire subject guide.

To analyse comparative financial systems, the essential reading also includes:

Allen, F. and D. Gale Comparing Financial Systems. (Cambridge, Mass.: MIT Press, 2001) [ISBN 9780262511254].

To investigate issues of principles of finance (capital budgeting and valuation of financial assets, risk and return of financial assets and portfolios), the following text is also essential reading:

Brealey, R.A, S.C. Myers and F. Allen Principles of corporate finance. (Boston, London: McGraw-Hill/Irwin, 2010) tenth (global) edition [ISBN 9780071314176] Chapters 2, 3, 4, 5, 7, 8, 13 and 14.

**Course Outline:**

Lecture 1: Introduction to the subject

Part I: Financial systems

- Introduction to financial systems
- Comparative financial systems

Part II: Principles of banking

- Role of financial intermediation
- Regulation of banks
- Risk management in banking

Part III: Principles of finance

- Financial securities
- Capital budgeting
- Financial markets