Principles of Banking and Finance

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Course description

The course Principles of Banking and Finance is an introductory course on banking and financial markets for students. The course is taught in English, students need to pass an exam in external program of the LSE.

The course applies analytical approach, aimed at developing the economic way of thinking, makes the careful step-by-step introduction of different analytical models, uses a number of applications and examples from different banking systems. Prerequisites for the course are micro- and macroeconomics.

Teaching objectives

The objective of the course is to acquaint students with the principles of the financial theory, traditional and modern financial assets, types of financial intermediaries and the ways of their functioning in the modern financial markets.

The study of banking and financial markets has become one of the most interesting topics in economics. Financial markets are changing rapidly, and new financial instruments appear almost daily. The once staid financial industry has become highly dynamic. These developments in financial markets have created an integrated world economy in which events in one country's financial markets have a major impact on financial markets in other countries. The development of the economic systems are determined by the international capital flows, channeled by banks and other financial intermediaries.

The boundaries between commercial and investment banks are disappearing while competition in financial sector is becoming global. Lots of factors, e.g. innovations, technologies, taxes and regulation, help to decrease barriers for capital flows. In 2008 these trends culminated in the world financial crisis which illuminated the most weak points in regulation, accounting, risks analysis, and other aspects off banking.

The course's analytical framework uses a few basic economic principles to organize students' thinking about bank management and the structure of financial markets. The basic principles are a transactions cost and asymmetric information approach to financial structure, profit maximization, basic supply and demand analysis to explain behavior in financial markets, and aggregate supply and demand analysis.

We aim to prepare students to study more complicated courses of the financial management and BORA, as well as investment portfolio management. As a result, they must be given the principles of the investor's behavior, of the banking regulation; taught the types of financial risks and the basic methods of their assessment and management. The seminars re based both on the detailed analysis of the banking practice and the analysis of the case studies.

Assessment

- Home assignments (14 sets)
- Intrasemester control tasks and exams
- Mock exams (150 and 180 min.)
- Winter exam (180 min.)
- External (UoL) exam

Grade determination

Students should pass the 2 intermediate Mock written exam in the end of each semester. The final exam will be held by the LSE. Each exam includes the list of 8 questions, from which the students will be asked to answer 4. Some questions may contain both numerical and essay-based parts. Each intermediate exam accounts for 20% of the final grade. Homework grades and graded received at classes account for 10% of the final grade. The rest of the final grade will be determined by the results of the final exam.

Fall semester is graded on the basis of home-assignments (15%), mock exam (25%) winter exam (50%) and class-work (10%).

Internet resources and databases

- 1. www.imf.org
- 2. www.worldbank.org
- econ.lse.ac.uk
- 4. www.bis.org
- 5. www.nber.org
- 6. www.thebanker.com

Course outline

Principles of Finance

1. Consumption and investment with and without capital markets

Consumption and investment without capital market (one person / one good economy). Production possibility frontier. The condition of the optimal allocation (utility maximization).

Consumption with capital markets. Interest rate as the price of deferred consumption or the rate of return on investment. Fisher separation theorem. The condition of the optimal allocation (utility maximization). Types of consumers.

Main reading:

- 1. Copeland, T.E., Weston, J.F. Financial Theory and Corporate Policy. Addison-Wesley Publishing Company, 1998, Гл. 1
- 2. Buckle, M., Thompson, J. The UK financial system: theory and practice. Manchester University Press, 1998, Гл. 1, 2.

2. Capital Budgeting and Valuation

Methods of project's valuation. Cash Flows. The concept of present value. Discount rate. NPV. IRR and required rate of return. Payback period. Main Reading

Main reading:

- 1. Brealey, R.A., Myers S.C. Principles of Corporate Finance. Mc-Graw Hill/Irwin, 2003, Гл. 3–5
- 2. Mishkin F., Eakins S. Financial Markets and Institutions. Addison-Wesley Publishing Company, 2003, Гл. 3, 10.

3. Risk and return

Mathematical characteristics of risk and return. Risk-adjusted return. Riskfree instruments. Utility maximization. Risk-return trade-off. Individual riskaversion. Risk-averse, risk-neutral and risk-seeking investors. Risk premium. The risk and return of the portfolio. Correlation of returns. Benefits of diversification. Systematic and non-systematic risks. Mean-variance portfolio theory.

Main reading:

- 1. Mishkin F., Eakins S. Financial Markets and Institutions. Addison-Wesley Publishing Company, 2003, Гл. 3, 4.
- 2. Фрэнк Дж. Фабоцци. Управление инвестициями. Инфра-М, Москва 2000, Гл. 4

3. Уильям Ф. Шарп, Гордон Дж. Александер, Джеффри В. Бэйли. Инвстиции. Инфра-М, Москва 2001, Гл. 8.

4. Asset pricing theories

Introduction of a risk-free asset: the capital market line. CAPM and securities market line. Assessment of beta. Single- and multi-factor models. Factorreplicating portfolios. Arbitrage. APT. Theoretical and empirical validation of APT.

Main reading:

- 1. Mishkin F., Eakins S. Financial Markets and Institutions. Addison-Wesley Publishing Company, 2003, Гл. 4.
- 2. Уильям Ф. Шарп, Гордон Дж. Александер, Джеффри В. Бэйли. Инвстиции. Инфра-М, Москва 2001, Гл. 9, 10, 12.

5. Financial Markets and Instruments

Classification of the financial markets. Money and capital markets. Primary and Secondary Markets. Debt and Equity Instruments. Common and Preferred Stocks. Coupon and Discount Bonds. Valuation of Financial Assets: Fair Price. DCF Models. Gordon Growth Model. Yield Curve. Derivatives: Forwards, Futures, Options, Swaps.

Main reading:

- 1. Mishkin F., Eakins S. Financial Markets and Institutions. Addison-Wesley Publishing Company, 2003, Гл. 10.
- 2. Фрэнк Дж. Фабоцци. Управление инвестициями. Инфра-М, Москва 2000, Гл. 13.
- 3. Buckle, M., Thompson, J. The UK financial system: theory and practice. Manchester University Press, 1998, Гл. 11.

6. Efficient markets

Operational and informational efficiency. Excess return. Weak, semi-strong, strong efficiency. Rational expectations. Random walk theory. Weak-form market efficiency. Technical analysis: filters, moving averages, relative strength, Semi-strong-form market efficiency. Small-firm effect, effect, low price-earnings ratio, calendar effects. Strong-form market efficiency. Insider trading. Speculative bubbles. Herd behavior.

Principles of Banking

7. Economic analysis of financial structure

Why do financial intermediaries exist? Transaction costs. Asymmetric information: adverse selection and moral hazard, principal-agent problem. Maturity, size and risk transformation. Economy of scale and economy of scope. The ways to minimize principal-agent costs: collateral, guarantees, capital requirements, self-regulation, credit bureaus.

Main reading:

 Mishkin F., Eakins S. Financial Markets and Institutions. Addison– Wesley Publishing Company, 2003, Гл. 14, 16.

8. Financial intermediation

Direct and indirect finance. Banks. S&L institutions. Co-operative banks. Mutual funds. Pension funds. Insurance companies. Term structure of liabilities. The problem of excess regulation. Disintermediation.

Main reading:

- Mishkin F., Eakins S. Financial Markets and Institutions. Addison-Wesley Publishing Company, 2003, Гл. 2, 9.
- 2. Фрэнк Дж. Фабоцци. Управление инвестициями. Инфра-М, Москва 2000, Гл. 8–11.
- 3. Buckle, M., Thompson, J. The UK financial system: theory and practice. Manchester University Press, 1998, Гл. 2.

9. Bank management: retail, wholesale, investment banks

Retail banking: current account and time deposits, micro-financing, consumer loans, mortgages, asset-backed securities, payment and credit cards.

Wholesale banking: large-scale loans, trade financing, loan commitments, commercial and standby letters of credit, asset management, syndicated loans, arrangement and underwriting of corporate bonds.

Investment banks: structure of transactions, risk sharing, syndicated loans, arrangement and underwriting of bonds.

Main reading:

 Buckle, M., Thompson, J. The UK financial system: theory and practice. Manchester University Press, 1998, Γπ. 3, 4, 11.

10. Risk management and internal control in banks

Asset-side and liability-side liquidity risks. Liquidity gaps. Liquidity management and the role of reserves. Asset-liability management. Purchase of funds. Treasury.

Interest rate margin. Interest rate risk. Fixed- and floating-rate assets and liabilities. Interest rate gaps.

Credit risk. Types of credit risk (industrial, regional and country risks). Diversication of loan portfolio.

Currency risk. Long and short open positions. Capital adequacy. Economic capital. Main reading:

- 1. Mishkin F., Eakins S. Financial Markets and Institutions. Addison-Wesley Publishing Company, 2003, Гл. 22.
- 2. Anthony Saunders. Financial institutions management. McGraw-Hill Higher Education, 2000, Γπ. 4–6.

11. Banking regulation

Banking supervision and inspection (on-sight and off-sight regulation). Capital adequacy ratio. The Basel accords on risk-based capital requirement (Basel I and Basel II). Liquidity ratios. Open currency positions. CAMEL. Disclosure requirements. Free banking. Government safety nets. Deposit insurance.

Banking crises.

Main reading:

- 1. Mishkin F., Eakins S. Financial Markets and Institutions. Addison-Wesley Publishing Company, 2003, Гл. 18.
- 2. Buckle, M., Thompson, J. The UK financial system: theory and practice. Manchester University Press, 1998, Гл. 17, 18.

12. Financial Systems Compared

Bank-based and market-based systems. Islamic banking. Emerging markets. Financial crises: banking, currency and debt crises. The peculiarities of the Russian banking systems.

Main reading:

- 1. Mishkin F., Eakins S. Financial Markets and Institutions. Addison-Wesley Publishing Company, 2003, Гл. 16.
- 2. Allen F., Gale D. Comparing financial systems. MIT Press, 2001, Гл. 1–3.

Distribution of hours

#	Topic	Total	Contact hours		Self
		hours	Lectures	Seminars	study
1.	Consumption and investment with and without capital mar- kets	18	4	4	10

#	Topic	Total	Contact hours		Self
		hours	Lectures	Seminars	study
2.	Capital Budgeting and Valua- tion	20	4	6	10
3.	Risk and return	24	6	6	12
4.	Asset pricing theories	24	6	6	12
5.	Financial markets and instru- ments	28	8	6	14
6.	Effective markets	22	6	6	10
7.	Economic analysis of financial structure	18	4	4	10
8.	Financial intermediation	24	6	6	12
9.	Bank management: retail, wholesale, investment banks	22	6	6	10
10.	Risk management and internal control in banks	24	6	6	12
11.	Banking regulation	24	6	6	12
12.	Financial Systems Compared	22	6	6	10
	Total:	270	68	68	134

PRINCIPLES OF BANKING AND FINANCE