

Banking

Module 3, 2018-2019

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Course description

This class covers some key themes in the commercial banking industry, including the impact of central banks and regulation. We will focus on value-creation, pricing and risk-management issues. The goal is to provide a framework for students to understand the sources of the revenue and fragilities of commercial banks as a basis for decisions and future work in economic and financial turbulence.

Course requirements, grading, and attendance policies

You will have two written assignments and banking simulation game analysis. The course grade will be based on 2 homework assignments (15 percent each), banking simulation game analysis (20 percent), and an exam (50 percent). You may discuss the assignments with other students, but you should write up each individually. Attendance and participation is strongly recommended. Students are required to adhere to the standards of academic ethics at NES.

Course contents

Day 1. Introduction to Banking

- Origins and history of first banks
- The role of banks and regulation, expansion of credit
- Balance sheet
- Income statement
- Financial indicators
- Risk management framework
- The banking simulation game is presented (H/W2 will be based on the simulation and will be given by parts after each class)

Day 2. Liquidity management

- Banking system: participants and liquidity
- Liquidity Measures
- Basel requirements in liquidity risk
- Management in on-going and crisis scenarios
- History of bank runs

Capital management

- The goal of the Capital requirements
- Measures (CAR, RWA, RoRWA)
- Basel requirements
- Capital management
- Examples (why CBR have closed 25% of banks?)

H/W 1: Case analysis: Shin, "Reflections on Modern Bank Runs: A Case Study of Northern Rock"

Day 3. Interest rate and FX risks management

- Sources of IR&FX risks
- Measures (regulatory and economic measures, gaps, behavioral adjustments, stress-tests)
- Goals and strategies
- Management (limits, hedging, balance and market instruments)
- Examples: FX explosion in Russia 1998 and 2014

Day 4. Pricing models and some principles of estimation banking products efficiency

- Funds transfer pricing: internal transfer rates and internal bank concept
- Basic principles of product pricing: funding and risk components, capital charges
- Basic principles of estimation banking products efficiency: scenario analysis, balance sheet dynamic modeling, cannibalization effect
- Example: loan pricing

H/W 2: Calculate liquidity, capital, IR, FX risk metrics and P&L of the bank described in business simulation

Day 5. Data Science in Banking

- Overview of DS application in Banking processes
- Process mining
- **Capital markets**
- The role of capital markets in bank's funding
- Instruments of banks at capital markets (bonds, Eurobonds, trade finance, syndicated loans)
- Regulation

Day 6. Retail banking

- Basic tendencies and major retail players in Russian market
- Competition from retailers, POS banking
- Client segmentation
- Product development

Simulation game "Balance Sheet Management" in groups (20% of grade)

Day 7. Banking trends and ecosystem

- Overview of banking industry trends
- Recent examples and cases in Russian banking sectors
- The concept of ecosystem
- Innovation management

Course materials

Recommended textbooks and materials

1. Economics of Money, Banking, and Financial Markets by Frederic S. Mishkin
2. Bank Asset and Liability Management by Moorad Choudry
3. Basel Committee on Banking Supervision Publications
4. "Strategic Risk Management in an Interconnected World" by Kroszner
5. The Economist, "Beyond Basel: America raises capital requirements for banks, widening the gulf with Europe"

6. The Economist, "Volcker Plus"
7. Ali et al. "The economics of digital currencies."
8. Andreessen, "Why Bitcoin Matters"
9. Ahamed, "Introduction" to Lords of Finance
10. Brett King Bank 3.0. Why Banking is No Longer Somewhere You Go, But Somewhere You Do

Academic integrity policy

Cheating, plagiarism, and any other violations of academic ethics at NES are not tolerated.