

# Bank Corporate Lending and Financing

Банковское кредитное финансирование  
Module 4 (March 10 – May 3 2020)

**Evgeny Pogrebnyak**  
e.pogrebnyak+nes@gmail.com

## Course description

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This course focuses on bank business processes that support loan origination, approval, monitoring, risk oversight and bad loan resolution. The students are expected to adapt knowledge and skills gained in corporate finance and related courses as well as to prepare cases for more in-depth credit risk analysis.

In the course we focus on developing the following core skills:

1. assess role of bank loans in firm financing and savings transformation
2. understand corporate lending business process (inputs, sequence of events and controls)
3. perform firm financial analysis related to debt service capacity
4. understand and apply credit risk management and bank regulatory concepts (expected loss estimation, capital adequacy, portfolio diversification)
5. evaluate bank performance (balance sheet, P&L) in corporate lending business segment

Additional knowledge area will cover bank products, common departmental structure and functional roles within bank corporate business.

Upon completion of the course the students will be able to navigate from bank sector statistics, individual bank reports and other data sources related to corporate lending.

## Course requirements, grading, and attendance policies

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**Prerequisites.** Familiarity with corporate finance concepts (debt vs equity, financial ratios), financial products (loan vs bond) and bank accounting (eg. provisions for non-performing loans) and operations is desired. Knowledge of credit risk concepts will be a good supplement to the course.

**Grading.** Grading will be based on attendance and class participation (25%), homework assignments and their presentation (50%) and final essay (25%).

## Course contents

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### 1. Corporate lending process - analysis framework

Stages in bank lending process. Review of available public and private data. Study paths, possible learning difficulties and how to resolve them.

*Data analysis (in class): "Survey of lending conditions."*

### 2. Economy-wide view of financial intermediation using flow of funds data (FoF)

*Data analysis assignment: "Corporate lending facts from flow of funds data."*

### 3. Firm-level analysis

Why do firms borrow? Causes and consequences of defaults. Definitions of default (missed payment vs negative net worth). Firm panel example (Altman Z-Score). Cash flow (CF) analysis. Cash flow modelling, debt service coverage ratio (DSCR).

*Data analysis assignment: "What can we learn from Russian corporate reports dataset?"*

### 4. Corporate loans on bank balance sheet and P&L

Refresher on bank accounting (funding costs, profitability, accounting for a standard loan). Bad debt: non-performing loans (NPL), reserves and provisions, capital adequacy ratios (CAR). Bank products (capital vs fee-based) and types of corporate exposure.

*Data analysis assignment (EBA Transparency Exercise dataset and/or forms 101/102 data).*

### 5. Credit risk assessment and controls

- expected loss (PD, LGD, EAD)
- point-in-time (PIT) vs through-the-cycle (TTC) estimates
- credit ratings and scoring
- stress-testing exercises
- individual loan vs portfolio analysis
- loan approval vs existing loans
- actions to mitigate credit risk

*Case studies:*

- *risk management report of a major lender (eg Deutsche Bank)*
- *financial stability / stress testing exercises (eg EBA)*
- *loan portfolio simulation assignment*

### 6. Theory of bank intermediation and related topics

- bank loans vs bonds, delegated monitoring concept
- credit cycles
- monetary policy transmission

### 7. Special topics, to be covered based on student interest and learning progress on other topics:

- specific loan types (small and medium enterprises, project finance, syndicated loans, green/sustainable finance)
- data management in corporate lending
- IT systems and automation
- bad debt restructuring and bank failures
- lessons from retail banking
- innovation in corporate lending
- policy lending and development banks
- ESG issues, Equator principles
- national regulations (CBR)
- project management, specific to bank-financed projects

### **Description of course methodology**

We intend to supplement key topics with an in class data exercise or homework assignment, followed by student presentation in class. The data exercises are exploratory in nature, and the

class presentations should help share the ideas that students are expected to formulate and summarize in a final essay.

Part of the class time can be devoted to invited presentations and panel discussions with corporate banking practitioners.

### **Course materials**

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The suggested reading list and data sources will be provided by topic. We aim to keep technical detail low in order to make material more accessible (example - [capital adequacy reading](#)).

Overall review of principal topics can be found in European Banking Authority (EBA) 2019 consultation paper [Draft Guidelines on loan origination and monitoring](#). Earlier, but very readable and more detailed source is OeNB/FMA (Austria) [Credit Approval Process and Credit Risk Management guidelines](#)], published in 2004.

Preparation of several exercises will include Python scripts for data downloading and filtering. Students can use software of their choice for analyzing the provided datasets (Excel, Python, R or other).

### **Academic integrity policy**

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