



Chapter no. 3: Banks and banking system

Something concerning the course organization

- The first test will be written **on October 27, either at 8.30 am, or at 10.30.**
- The second test will be written **on December 16 at 8.30 am**
- It is still possible to apply for presentations and essays
- There are four final exam dates:
 - December 19, at 8.30 am
 - January 3, at 8.45 am
 - January 13, at 1.00 pm
 - January 27, at 12.00 am
- The sample test is already accessible
- Please, check the „notebook“ in the Information System regularly

Content

- Basic terms
- Banking system, functions of banks
- Types of banks
- Monetary policy
- Types of interest rates
- **Examples**
- Questions (revision)
- Conclusion, comments, discussion

Basic terms

- Loan
 - the act of giving money, property or other material goods to another party in exchange for future repayment of the principal amount along with interest or other finance charges
- Deposit
 - A transaction involving a transfer of funds to another party for safekeeping
- Mortgage
 - a debt instrument, secured by the collateral of specified real estate property, that the borrower is obliged to pay back with a predetermined set of payments
- Principal
 - The original amount of money (borrowed or provided); without any interest payments
- Collateral
 - a property or other asset that a borrower offers as a way for a lender to secure the loan

Banking system

- A **banking system** is a group or network of institutions that provide financial services for us. These institutions are responsible for operating a payment system
- Functions of banks:
 - Loans provision
 - Deposits accepting
 - Help and assistance with investments
 - (Information provision)
- Bank = a financial institution licensed to receive deposits and make loans

Types of banks

- Central and national banks
 - Control monetary policy
 - Regulation and supervision over commercial banks
- Commercial banks
 - (community banks)
 - Accept deposits and provide loans
 - Provide current and savings accounts
 - Other offered products: insurance, investments and retirement services
- Dual banking system

How central bank might influence the monetary policy?

- Central banks use a number of tools to shape monetary policy
- Particular tools and their impact:
 - Open market operation
 - Reserve requirements
 - Discount (bank) rate

Interest rate

- Nominal interest rate
 - Interest rate paid/asked by a bank
- Real interest rate
 - Interest rate after deduction of the inflation (expresses the real value of debt/income)

Real interest rate = nominal interest rate - inflation

Interest rate II – different types of rates

- **p.a.** (*per annum*)
- **p.q.** (*per quartale*)
- **p.m.** (*per mensem*)
- **p.d.** (*per diem*)

- The frequency might be even more frequent, for example, in question of hours, minutes or even seconds

Interest rate III – simple and compound interest

- Simple interest
 - Computes interest only from the original principal, not from added interest payment(s)
 - **= $P \times I \times n$**
- Compound interest
 - Computes interest from principal, as well as from the added interest payment(s)
 - **= $P(1+i)^n - P$**

Used abbreviations:

P = principal

I = interest rate

N = number of periods

Example I: Which of the following savings accounts is more profitable if an investor intends to deposit 20,000 CZK per one year?

- Savings account A: interest rate: 1.5% p.a.; simple interest, interest is added at the end of every year
- Savings account B: compound interest, interest rate: 1.4% p.a., interest is added at the end of every year
- Savings account C: compound interest, interest rate: 1.0% p.m., interest is added at the end of every month

Example II: Which of the savings accounts is more favourable if you intend to invest 10,000 CZK per one year?

- Savings account I: 1.2% p.a., with regular annual fee 100 CZK, interest is added at the end of every year
- Savings account II: 0.5% p.m., with one fee (paid in the beginning) in the amount of 3% of invested sum(principal), interest is added at the end of every month
 - ***Which of them provides an investor with higher return on investment?***

Revision

- What is the difference between „current account“ and „savings account“?
- What is the main role of commercial banks?
- What types of interest rates do you know?
- How can different types of interests influence the future income of such investment/loan?
- What are the possibilities of a central bank to influence the price of loans?
- What is monetary policy?



**Thank you for being able to keep up
with me till the end!**

Questions and comments?

References

- MISHKIN, Frederic S. *The economics of money, banking and financial markets*. 7th ed. Boston: Addison-Wesley, 2004. ISBN 0-321-12235-6.
- Simple Interest Definition | Investopedia. *Investopedia* [online]. [cit. 2016-09-06]. Dostupné z: http://www.investopedia.com/terms/s/simple_interest.asp
- Banking System: Definition & Types - Video & Lesson Transcript | Study.com. *Study.com | Take Online Courses. Earn College Credit. Research Schools, Degrees & Careers* [online]. [cit. 2016-09-09]. Dostupné z: <http://study.com/academy/lesson/banking-system-definition-types.html>