Finance (Basics)

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Structure of lectures

- 1.Introduction to finance - ok
- 2.Financial markets - ok
- 3.Banks and banking systems - ok
- 4.Other financial institutions – now
- 5.Current value of money;
- 6.Private finance;
- 7.Investments;
- 8.Corporate finance;
- 9.International finance;
- 10.International financial system;
- 11.Macroekonomic and financial indicators and informations;
- 12.History of financial science;
- 13.Latest trends on financial markets.

Banks (and other financial institutions)

- Banks are financial institutions that accept deposits and make loans.
  - Included under the term banks are companies such as commercial banks, savings and loan associations, mutual savings banks and credit unions.
- Banks are the financial intermediaries that the average person average with most frequently.
  - A person who needs a loan to buy a house or a car usually obtains it from a local bank.

Banks

- Banks are the largest financial intermediaries in our economy, they deserve the most careful study.
  - However, banks are not the only important financial institutions.
  - In recent years other financial institutions such as insurance companies, finance companies, pension funds, mutual funds, and investment banks have been growing at the expense of banks, and so we need to study them as well.

The types of the financial institutions

- Commercial banks (clearing)
- Merchant banks
- Building societies (US: Thrifts)
- Pension funds
- Insurance companies
- Credit Unions

- Commercial banks accept deposits, make loans and provide services both to the members of the public and to the corporate clients while
- Merchant banks only cater for the corporate clients with the same services
- Building societies take mortgage loans and deposits by offering current accounts to members

- Pension funds earn interests and dividends from the accumulated funds and sometimes part of banks or

- Insurance companies…loan out funds and invest in government securities or shares

- Credit unions…co-operately owned by members who are given loans, chequebooks, life assurance etc.

Bulding societies (building savings bank)

- Definition
  - Building society is a financial institution, owned by its members, that offers banking and other financial services, especially mortgage lending.

  - The term building society first arose in the 19th century, in the United Kingdom, from co-operative savings groups. In the UK today building societies actively compete with banks for most personal banking services, especially mortgage lending and deposit accounts.

Building societies – building savings bank

PROCESS OF SAVING

- Building savings has **two phases**:
  - **Saving Phase**
    - *The person saving usually regularly puts money into their building savings account and the state can give them support.* Savings and support from the state on the building savings account gain interest, and this interest is free from income taxes.
  - **Loan Phase**
    - Following the saving phase there is the *loan phase* which *consists of the provision of an advantageous loan from the building savings bank for housing needs*. In this way building savings provides an advantageous way to save money and then the possibility of acquiring a favorable loan for housing needs.

Building societies – building savings bank in the Czech Republic

STATE FUNDING

- **Gaining access to state support**
- Contracts closed by 31 .12. 2003: Users of building savings have access to state support if they are individuals with permanent residence in the Czech Republic and they have a family number assigned by the Czech Republic. People who have more than one contract will only get state support on one of the agreements.
- Contracts closed after 1.1.2004 can get state support if:
  - They are a citizen of the Czech Republic
  - They are a citizen of the European Union who have permission to live in the Czech Republic and have a family number assigned by the Czech Republic
  - An individual with permanent residence in the Czech Republic and a family number assigned by the Czech Republic
  - If somebody fulfills all of the above requirements and has more than one contract signed in one year, state support is only given on the agreement where there person signed asking for it. If there are multiple requests for funding, state support is usually provided on the contract that is signed first, but in the case of multiple contracts, state funding can not exceed a total amount of 3000 CZK on all contracts.

Building societies – building savings

<u>Requirements for state funding</u>

- **Contracts signed by 31.12.2003:** State funding is provided to the client if for five years they haven‘t withdrawn any money from their account.
- **Contracts signed after 1.1.2004:** State funding is provided to the client if <u>for six years they haven‘t withdrawn any money</u> from their account.

<u>Amounts of state support</u>

- On contracts signed by 31.12.2003 that requested state funding by 31.12.2004 (the original version of the regulation): State funding accounts for 25% of the yearly saved amount for a maximum total of 18,000 CZK.
- On contracts signed before 31.12.2003 where state funding was requested after 1.1.2005 (according to the new regulation): State funding can account for 15% of the saved amount in the respective calendar year for a maximum of 20,000 CZK.
- For contracts signed after 1.1.2004 (according to the new regulation) <u>state funding can account for 15% of the total amount saved in a calendar year up to a total amount of 20,000 CZK</u>.

Building savings bank

THE CREATION OF THE BUILDING SAVINGS FUND

- Building savings is based on the principle of clients creating combined resources which they can 1. use for obtaining a favorable interest loan for a home, its reconstruction or 2. for the specific housing needs of the client.
- Each client saves for a period of time (at least 24 months by law) and, after fulfilling set conditions, can be granted a buildings savings loan.
- If the savings bank has enough resources, the client get something called a bridging loan, which allows the people to finance their housing needs sooner than they could get the full loan from the building savings bank.
- This type of financing is becoming more and more used amongst clients. The utilization of the so called bridging loan allows for more flexibility within building savings.

Building societies – building savings bank

- **THE ROLE OF SAVING CLIENTS**
  - An important and necessary role in the building savings system are the <u>clients who don‘t need money</u> for their housing needs, but use this product as an advantageous way to keep their savings.
  - <u>The state support provided to all clients of building savings is given for two reasons</u>.
    - Clients who use building savings to <u>solve their housing needs</u> get more money for specific needs.
    - The major reason for state support of the building savings system is the <u>creation of motivation to save</u>.

- **THE SAFETY OF BUILDING SAVINGS**
  - One of the most important attributes of buildings savings is the <u>high degree of its security</u>. Only specialized banks are allowed to provide buildings savings on the basis of a special license. The law limits any high-risk commercial activities of buildings savings banks;
  - Buildings savings thus can be considered one of the safest financial investments available.

Building societies – building savings bank

- **DIRECT AND INDIRECT EFFECTS OF BUILDING SAVINGS**
  - Buildings savings enables citizens to meet their individual housing needs, and increases interest in housing modernization.
- Part of the funds invested in buildings savings are thus returned to the state in the form of a higher volume of income taxes paid by construction companies and enterprises operating in related areas, such as the production of construction materials and components, the production of sanitation technology, etc.

- At the same time, the growth of production and sales influence employment and levels of income. Higher income results in higher consumption, and consequently in higher state budgetary resources.

- The direct effects of buildings savings in the area of meeting housing needs, as well as the wider indirect effects, clearly confirm the legitimate existence of buildings savings on the banking market and the legitimacy of state assistance to this product.

Building savings – CR - what is it?

- **Building savings is an effective way to save where the person saving long-term can save at a specialized bank. During the time that the person is saving, support can also be given by the government, and at the end of the savings period, the person can have the right to a loan from the building savings bank if they meet certain criteria.**
  - Building savings combines both savings and a loan in a compact package. The loan is characterized by low and stable interest rates during the entire period of payment.
  - In its own way, building savings is a closed system, not influenced by the negative factors of the capital market.

- **Participants in building savings can be:**
  - a person
  - a legal entity
- This difference is important primarily in the case of getting state support. At the moment, a legal entity is unable to gain state support, whereas a person is able to.

- **State support can be given to:**
  - citizens of the Czech Republic
  - European Union citizens who have given permission to live in the Czech Republic and have been given a Czech family number (after the accession of the Czech Republic into the European Union, as of 1.5.2004)
  - a person with permanent residence in the Czech Republic and is given a Czech family number

Building savings

- <u>Building savings began as a way to allow a wide array of people to solve their housing needs in the form of a advantageous savings and loan program</u>.
- **<u>This product is advantageous anybody who is interested in a way to develop their financial resources or whoever wants to help with funding housing related projects for themselves or somebody close to them</u>.** In terms of building savings, somebody close is considered to be a direct relative such as a sister, brother or wife or husband.
- One of the advantages of building savings is its variability. Building savings banks are able to create basically any kind of regime that responds to the needs of the client and allows them to solve their housing needs and the reliance on their financial resources. Building savings is also beneficial to those with lower incomes as well.

Nonbank finance

- Banking is not the only type of financial intermediation you are likely to experience.
  - You might decide to purchase insurance, take out installment loan from a finance company, or buy a share of stock.
- Insurance companies
- Pension funds
- Mutual funds

Insurance

- Everyday we face the possibility of the occurrence of certain catastrophic events that could lead to large financial losses.
  - A spouse's earnings might disappear due to death or illness; a car accident might result in costly repair bills or payments to an injured party.

- Life insurance
  - The first life insurance company in the United States was established in 1759 and is still in existence.

Insurance

- Term insurance is matched every year to the amount needed to insure against death (life insurance) during the period of the term (such as one year or five years).
- <u>Insurance is in the financial intermediation business of transforming one type of asset into another for the public.</u>
- Insurance providers use the premiums paid on policies to invest in assets (bonds, stocks, mortgages, loans); the earnings from these assets are then used to pay out claims on the policies
- Insurance providers, which are regulated by the countries, acquire funds <u>by selling policies that pay out benefits if catastrophic events occur</u>. Property and casualty insurance companies hold more liquid assets than life insurance companies because of greater uncertainty regarding the benefits they will have to pay out.

Insurance

- Insurance market and its concentration (www.cap.cz)

Insurance - Fundamental of insurance (all insurance is subject to several basic principles):

1. There must be a relationship between the insured (the party covered by insurance) and the beneficiary (the party who receives the payment should a loss occur). Beneficiary must be someone who may suffer potential harm. The reason for this rule is that insurance companies do not want people to buy policies as a way of gambling.
2. The insured must provide full and accurate information to the insurance company.
3. The insured is not to profit as a result of insurance coverage.
4. If a third party compensates the insured for the loss, the insurance company‘s obligation is reduced by the amount of the compensation.
5. The insurance company must have a large number of insured so that the risk can be spread out among many different policies.
6. The loss must be quantifiable.
7. The insurance company must be able to compute the probability of the loss occuring.

Pension funds

- In performing the financial intermediation function of asset transformation, pension funds provide the public with another kind of protection: <u>income payments on retirement.</u>
- Although the purpose of all pension plans is the same, they can differ in a number of attributes.
  - First is the method by which payments are made: <u>if the benefits are determined by the contributions into the plan and their earnings</u>, the pension is a <u>defined-contribution plan</u>; if future income payments (benefits) are set in advance, the pension is a defined-benefit plan.

Pension funds

- Pension plans provide income payments to people when they retire after contributing to the plans for many years.

- Many pension plans are underfunded, which means that in future years they will have to pay out higher benefits than the value of their contributions and earnings.

The Association of Pension Funds of the Czech Republic

Pension Fund	**Market share (%)**
PF České pojišťovny, a.s.	23,49
AXA penzijní fond, a.s.	17,41
PF České spořitelny, a.s.	16,23
PF Komerční banky, a.s.	13,58
ING Penzijní fond, a.s.	11,22
ČSOB PF Stabilita, a. s.	8,61
ČSOB PF Progres, a. s.	4,08
Allianz penzijní fond, a.s.	3,74
Generali penzijní fond a.s.	0,99
AEGON Penzijní fond, a.s.	0,65

Pension insurance - age spread of participants in %

	18 - 29 years	30 – 39 years	40 – 49 years	50 – 59 years	60 and over
on 31.12.2009	12,61	21,11	19,10	22,94	24,23
on 31.12.2008	12,70	20,60	19,20	24,20	23,40
on 31.12.2007	12,63	19,98	19,74	25,31	22,32
on 31.12.2006	12,60	19,09	20,46	26,91	21,38
on 31.12.2006	11,63	18,35	21,50	28,38	20,14

Pension funds - advantage

Your monthly contribution (CZK)	State support in the Czech Republic
100 - 199	50 CZK – 89 CZK
200 – 299	90 CZK – 119 CZK
300 - 399	120 CZK – 139 CZK
400 – 499	140 CZK – 149 CZK
Over 500	150 CZK

Pension funds – selected economic indicator

- The assets of pension funds (as at 31 December 2009) were CZK 215.9 billion, which is CZK 24.2 billion more than at the end of the previous year (CZK 191.7 billion).

- The average assets per participant in 2009 exceeded CZK 48,000, as against almost CZK 45,000 in 2008, approximately CZK 44,000 in 2007, and around CZK 40,000 in 2006.

- The profits of pension funds as at 31 December 2009 stood at almost CZK 2.6 billion. This is CZK 1.9 billion (3.7x) more than the year before.

Pension Funds etc.

  - Private Pension Plans
  - Public Pension Plans

- Mutual Funds
- Money Market Mutual Funds
- Hedge Funds

Pension funds etc.

- <u>Finance companies</u> raise funds by issuing commercial paper and stocks and bonds and use the proceeds to make loans that are particularly suited to consumer and business needs.
- <u>Mutual funds</u> sell shares and use the proceeds to buy securities.
  - <u>Open end funds</u> issue shares that can be redeemed at any time at a price tied to the asset value of the company.
  - <u>Closed end funds</u> issue nonredeemable shares, which are traded like common stock.

Mutual funds

- A **mutual fund** is a professionally managed type of collective investment scheme that pools money from many investors and invests typically in investment securities (stocks, bonds, short-term money market instruments, other mutual funds, other securities, and/or commodities such as precious metals).

- The mutual fund will have a fund manager that trades (buys and sells) the fund's investments in accordance with the fund's investment objective.

- Mutual funds may invest in many kinds of securities (subject to its investment objective as set forth in the fund's prospectus, which is the legal document which offers the funds for sale and contains a wealth of information about the fund).

- The most common securities purchased are "cash" or money market instruments, stocks, bonds, other mutual fund shares and more „exotic“ instruments such as derivatives like forwards, futures, options and swaps.

Types of mutual funds

- **Open-end fund, forms of organization, other funds**
  - The term *mutual fund* is the common name for what is classified as an open-end investment company. Being open-ended that, at the end of every day, the fund continually issues new shares to investors buying into the fund and must stand ready to buy back shares from investors redeeming their shares at the then current net asset value per share.
  - Mutual funds must be structured as corporations or trusts, such as business trusts, and any corporation or trust will be classified as an investment company if it issues securities and primarily invests in non-government securities.
- An investment company will be classified as an open-end investment company if they do not issue undivided interests in specified securities and if they issue redeemable securities.
- Closed-end funds are like open end except they are more like a company which sells its shares a single time to the public under an initial public offering or "IPO".

Types of mutual funds

Exchange-traded funds

- A relatively recent innovation, the exchange-traded fund or ETF, is often structured as an open-end investment company.
  - ETFs combine characteristics of both mutual funds and closed-end funds.
  - ETFs are traded throughout the day on a stock exchange, just like closed-end funds, but at prices generally approximating the ETF's net asset value. Most ETFs are index funds and track stock market indexes.

- Exchange-traded funds are also valuable for foreign investors who are often able to buy and sell securities traded on a stock market, but who, for regulatory reasons, are limited in their ability to participate in traditional U.S. mutual funds.

Equity funds

- Equity funds, which consist mainly of stock investments, are the most common type of mutual fund. Equity funds hold 50 percent of all amounts invested in mutual funds in the United States. Often equity funds focus investments on particular strategies and certain types of issuers.

Types of mutual funds II.

Bond funds

- Bond funds account for 18% of mutual fund assets. Types of bond funds include term funds, which have a fixed set of time (short-, medium-, or long-term) before they mature.

Money market funds

- Money market funds hold 26% of mutual fund assets in the United States. Money market funds generally entail the least risk, as well as lower rates of return.

Mutual funds – types III.

Funds of funds

- Funds of funds are mutual funds which invest in other mutual funds (i.e., they are funds composed of other funds).
  - A fund of funds will typically charge a much lower management fee than that of a fund investing in direct securities because it is considered a fee charged for asset allocation services which is presumably less demanding than active direct securities research and management.

- Most FoFs invest in affiliated funds (i.e., mutual funds managed by the same advisor), although some invest in unaffilated funds (those managed by other advisors) or both.

- The design of FoFs is structured in such a way as to provide a ready mix of mutual funds for investors who are unable to or unwilling to determine their own asset allocation model.

Hedge funds

- Hedge funds in the United States are pooled investment funds with loose regulation, unlike mutual funds.

Credit Unions

- Financial institution that focuses on servicing the banking and lending needs of its members.
  - These institutions are also designed to service the needs of consumers, not businesses, and are distinguished by their ownership structure and their „common bond“ membership requirement.

- Most credit unions are relatively small.
  - Credit Unions were established to serve the public‘s demand for consumer-type loans. They are unique because members must satisfy a common bond requirement to join.

Finance (Basics)

- Next lecture – 1st test
  - Multiple choice and open questions
  - 25 points (together 30 points/50 points)

- Thank you for your attention