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Czech Mortgage Market and Its Development in the Previous Years

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Declaration

I hereby declare that I have worked on my Diploma Thesis titled "Czech Mortgage Market and Its Development in the Previous Years" solely and completely on my own and that I have marked all quotations in the text. The literature and other material I have used in this Thesis are mentioned in the References section.

Prague, 5th of April, 2009

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Signature

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Czech Mortgage Market and Its Development in the Previous Years

Český hypoteční trh a jeho vývoj v posledních letech

Souhrn

Tématem této diplomové práce je Český hypoteční trh a jeho vývoj v posledních letech. Práce je rozdělena do dvou základních celků – teoretické a praktické části.

Teoretická část nese název - Vymezení teoretické podstaty hypotečního trhu. Tato část práce se zabývá analýzou a vysvětlením důležitých pojmů souvisejících s hypotečním trhem. Vymezuje definici a účel hypotečního úvěru a jeho základní druhy. Teoretická část rovněž popisuje a vysvětluje důležité teoretické pojmy z oblasti hypotečního trhu, takové jako úroková sazba, fixační období, bonita, splátka, zástavní právo a jiné. Tato část práce zároveň analyzuje možné kombinace hypotečního úvěru s jinými finančními produkty. V závěru teoretické časti jsou vysvětlené důležité pojmy související s nákupem a pojištěním nemovitého majetku.

Praktická část nese název – Struktura hypotečního trhu a jeho současný vývoj. Teoretická část práce provádí analýzu Evropského a Českého hypotečního trhu. Tato část analyzuje a popisuje Evropský obytný sektor, Evropský hypoteční trh a jeho vývoj za posledních několik let. Dále obsahuje analýzu českého hypotečního trhu a trhu s nemovitostmi. Pojednává o historickém vývoji českého hypotečního trhu, popisuje jeho strukturu, současný stav a nové trendy. Poslední kapitola obsahuje vlastní řešení, které představuje návrh hypotečního úvěru pro konkrétní příklad rodiny.

Klíčová slova

Hypoteční trh, hypoteční úvěr, dlužník, půjčovatel, nemovitost, úrok, fixační období, splátka, banka, bonita, peněžní prostředky, zástava.

Summary

The subject of this Diploma Thesis is the Czech Mortgage Market and its Development in the Previous Years. The work is divided into two basic parts – the literature review and the practical part.

The title of the literature review is the Theoretical Base of the Mortgage Market. This part deals with important concepts connected with the mortgage market and mortgage loan. The definition and purpose of the mortgage loan and mortgage loan types are discussed. The theoretical part further analyses and interprets important notions in the area of mortgage market such as interest rate, fixation period, credit worthiness, payments, right of lien and others. This part of thesis also provides an analysis of the possible combination of the mortgage loan with other financial products. Finally, the chapter deals with real estate purchase and real estate insurance.

The title of the practical part is Structure of the Mortgage Market and its Actual Development. The practical part analyses the structure, development and current situation both the European mortgage market and Czech mortgage market. This part is concerned with the interpretation of the European residential sector, European mortgage market and its development in the previous years. The practical part also contains analysis of the Czech real estate and mortgage market. It includes historical facts from the development of the Czech mortgage market, current structure, situation and trends. Finally, the practical example with own research and proposals is included.

Keywords

Mortgage market, mortgage loan, borrower, lender, real estate, interest, fixation period, repayment, bank, credit worthiness, funds, right of lien.

Table of Contents:

1 Introduction

The subject of this Diploma Thesis is the Czech Mortgage Market and Its Development in the Previous Years.

The real estate activity is one of the important matters of modern society. Almost all human activities are performed inside the buildings or in the surroundings. Individual properties are not only a shelter provided by a dwelling, but it is also usually a part of human procuration, stability and wealth. However, in most cases, to have your own housing means to purchase, construct or reconstruct it, in other words to invest financial resources into a real property.

Real estate financing can be intended for residential or commercial purchasing of a real property. It can include purchasing of family houses, flats, cottages, offices, commercial buildings etc. In this thesis, only mortgage loans for private individuals are discussed. There are many different ways to provide real estate financing. The most traditional way of financing in today's economy is known as a mortgage or home loan. A mortgage is a long-term agreement under which the borrower pledges his property as collateral for payment. As for the purpose of a mortgage loan, it ensures financial resources for concrete real estate purchasing, construction or reconstruction.

The property sector has a significant influence on the activity of mortgage markets and financial institutions. Balance sheets of financial institutions are mostly made up of mortgage loans. Mortgage lending went through long-term development and experienced a huge growth all around the world in previous years, including "old" members of the European Union. The same development is also expected in the countries that have "recently" joined the EU.

Another important aspect is the year-to-year growth of globalization. A huge number of investors, developers and service companies extend their activities abroad and operate on international markets. This process is stimulated by a number of factors, from the need for geographical diversification, through the management of real estate investment risk, to cross-border experiences from different markets. The internationalization process has of course already existed in the Europe. There are many financial institutions and banks that operate in more than one country; and their offered services and financial products are becoming increasingly similar. Because of the idea of a united Europe, through the progressive integration, it is very important to have a vision of the European real estate and mortgage market as a whole and push this vision gradually into practice.

As for the mortgage market in the Czech Republic, the record growth in demand for mortgage financing has been recorded over the past years. However, compared to the situation in the more developed countries of the EU, the banking market in the Czech Republic is not so saturated. Czech banks face new challenges on the mortgage market. The acquisition of new clients becomes more and more difficult, but there are still few opportunities left for a major growth in terms of the number of clients and overall future development of the mortgage market.

This paper is divided into the two basic parts – the literature review and the practical part.

The title of the literature review is the Theoretical Base of the Mortgage Market. This part deals with important concepts connected with the mortgage market: the mortgage loan definition, mortgage loan types, interest rate, fixation period, credit worthiness and others. The chapter also provides a description of the combination of the mortgage loan with other products and deals with real estate purchasing and insurance.

The title of the practical part is Structure of the Mortgage Market and Its Actual Development. This part covers three main subjects: the analysis of the European residential sector, the mortgage market and its development; the analysis of the Czech real estate market, the history, development, structure and current situation of the Czech mortgage market and a practical example containing a concrete proposal of a mortgage loan to a concrete family.

There is a conclusion at the end of the thesis that summarizes and assesses the achieved findings.

2 Objectives of the Thesis and Methodology

The subject of this diploma thesis is the Czech Mortgage Market and its Development in the Previous Years.

The main aim of the literature review is to analyze and interpret basic theoretical notions connected with the mortgage market and mortgage loans. This part of the thesis provides a specification of important concepts such as mortgage loan types, interest rate, fixation period, payment, credit worthiness, right of lien etc. The purpose of this part is to discuss subjects that people should know before they plan to invest financial resources in a real estate in the near future. The literature review further deals with the description and explanation of a possible combination of the mortgage loan with other financial products. The important questions and notions in the area concerning real estate purchasing and insurance are also discussed.

The theoretical part of this diploma thesis was written on the basis of reading, interpretation and elaboration of special literature. Special books, technical journals and internet databases in the area concerning the mortgage market and mortgage loans were utilized. After reading through the special literature and documentation a detailed description and explanation of necessary concepts was made.

The objective of the practical part is to analyze and characterize European and Czech real estate sectors and the mortgage markets. This part addresses the European residential sector and mortgage market, its development and present situation. Another important aim of the practical part is to analyze and discuss the Czech real estate market and Czech mortgage market, historical facts, its present situation, structure and development in the previous ten years.

Another important part of this thesis is the practical example. The main aim of this part is to propose the best suitable mortgage loan for an actual family. The first step is to develop research in the area of today's mortgage market in the Czech Republic and to compare the offered financial products of selected mortgage loan providers. The second step is to evaluate, on the grounds of this research, the obtained results and to propose the best solution (the best suitable mortgage loan) for an actual family.

The practical part elaborated based on analyzing and interpreting of the documentation about the present structure and actual development of the mortgage markets in the EU and the Czech Republic and concentrates on its development within the last ten years. The methodology of the practical part is also based on the research of the mortgage market in the Czech Republic. The research is accomplished by collecting information about concrete financial products provided by selected mortgage loan banks situated in the Czech mortgage market and by comparing and evaluating this offered products. The analysis is executed based on data provided by the Simply Company. The financial products are compared on the basis of several predetermined mortgage loan parameters. The best suitable solution is proposed for an actual family situation.

3 The Theoretical Base of the Mortgage Market

3.1 Mortgage Loan and Its Types

Real estate financing can be intended for residential or commercial purchasing of a real property. It can include purchasing of family houses, flats, cottages, offices, commercial buildings, etc. There are many different ways to provide real estate financing. The most traditional way of financing real estate in today's economy is known as a mortgage or a home loan (1).

3.1.1 The Mortgage Loan Definition and its Purpose

A mortgage loan is a long-term loan used for financing the purchase of real estate. The exact wording of the mortgage loan is defined in the Fund law no. 190/2004 Coll., which came into effect after the EU enlargement in 2004. The law defines the exact terms for the mortgage bond, mortgage loan and its security. A mortgage loan has two members: the mortgagor (borrower) and the mortgagee (lender). The lender lends the money. The borrower gives the lender a lien on the property to secure the loan. That means that if the borrower doesn't carry out his duties, the lender can sell the property and get the borrowed money back.

The purpose of a mortgage loan is to ensure financial resources for concrete real estate purchasing. Real estate is also called real property. It can be classified as a land and all things that are fixed to that land, for example, buildings, fences, trees and other structures.

A mortgage loan can be used for different types of activities: purchasing, construction, reconstruction and modernization. It can be used for purchasing personal property (land, family house, flat), for purchasing structures for recreational purposes (cottages, summer houses) and also for purchasing a housing cooperative flat from the city or the municipal council. A mortgage loan also serves as a repayment of earlier loans used to invest in a real property and the refinancing of a previous investment into a real estate. It can be a combination of the activities mentioned above.

The mortgage market is composed of the primary mortgage market and the secondary mortgage market. Separate mortgage loans originate in the primary mortgage market and the resale of mortgages is provided by the secondary mortgage market. Primary origination is conducted by commercial banks, savings banks, savings and loan associations, mortgage bankers and insurance companies.

A mortgage loan is intended for Czech citizens, EU citizens with a permanent or temporary residence permit, for foreigners from other countries with permanent residency and for married couples in which at least one of the partners is a Czech citizen or has permanent residency (24).

A loan for real estate financing is specified by the two most important characteristics: payment period and interest rate. The payment period is a required number of years intended for paying off the loan. Most frequently, the payment period offered by a significant number of lenders fluctuates from five to thirty years. The longest payment period is the smallest amount of repayment paid by the borrower. "*The cost of borrowing money, that is, the interest rate, is one of the most important factors*" (2). The interest rate is fixed for specific period of time and is determined by different factors. Some factors can be affected by the borrower (length, fixation period, repayment etc.) some of them are influenced by state policy.

The lending industry is influenced by many types of factors. Risk and profit are the most important ones. "*Part of the lender's risk analysis is the property they are collateralizing with the loan. The lender has to keep in the back of its mind the worst-case scenario: a borrower's default and ensuing foreclosure. In other words, the lender asks itself - would I want to own this property?*" (2). The lender will set the higher cost to the borrower in case of higher risk. On the contrary, the lender will reduce the risk, if the borrower will take one more risk. The lender wants to pay for higher risk. Higher risk influences a higher amount of the borrower's cost (interest rate or fees). There are two types of risks. The first one is connected with the borrower's cash-flow. It might happen that a borrower with a high debt or poor cash will not repay the loan, and this means high risk for the lender. The second type of risk is influenced by the interest rate and the fixation period. If, for example, the borrower selects the five year fixation period and the interest rate increases during this period, the lender could potentially lose money.

The most important aim of the lender is to generate profit from the lending process. Profit mostly consists of interest and fees. The lender will try to sell the loan that is the most profitable for him. That means that it is good for the lender, but not for the borrower. The borrower should try to understand the basics of mortgage lending, to avoid this situation and get a mortgage loan that will be the most suitable for him (1).

The success of the borrower’s application depends on the so-called underwriting. “*When you apply for a mortgage loan, the success of your application depends on underwriting. Underwriting is the process used to decide whether to accept or reject a loan application*” (23). When the underwriter is satisfied, the borrower will receive an approval for the mortgage loan. There are three major factors that play a significant role in the underwriting process: credit history, income to debt ratio and property valuation. Credit history of the borrower consists of his previous credits. The lender evaluates how the borrower has managed his credit, how the payments were financed and whether or not the payments were made on time. A bad credit history decreases the possibility to get a mortgage loan. For some lenders, it can be even the most important factor in accessing a mortgage loan. The second factor of this process is income to debt ratio. The lender checks how much money the borrower earns and how much money the borrower owes. The bank wants to be sure that the borrower can afford to pay the loan back. The total debt shouldn’t exceed a certain percentage of income. It usually varies from 36 to 42%. Income to debt ratio affects the decision about what type of loan the client can choose. One of the major procedures before accepting the mortgage loan is an estimation of property value (the so called loan to value ratio). This process will be done by a licensed appraisal, which determines the price of the property based on defined criteria (12, 23).

3.1.2 Mortgage Loan Types

There are a lot of different types of mortgage loan programs that exist on the mortgage market. Two basic types that occur ordinarily can be defined as a loan for a specified purpose and a loan for a non-specified purpose (so-called American mortgage loan). Both types of mortgages have to be secured by a lien on the real property. The borrower should expect a lower interest rate and a higher amount of borrowed money in case of the specified mortgage loan. On the other hand, the non-specified mortgage loan brings a higher interest rate and a lower amount of loan.

The specified loan is intended for exactly specified purposes, defined by the bank. In the majority of cases the mortgage loan has to be used for financing of the real estate (its purchase, construction, reconstruction or modernization). The specified mortgage loan is further divided based on the amount of funds which the bank is willing to loan. These types of mortgage loan basically differ in the level of the loan, interest rate, client's ability to repay the loan and length of payment period.

<u>Standard Mortgage Loan</u>

This is a long-term loan for a special purchase used by individuals. The principle of this type of mortgage loan is that bank doesn't borrow the whole value of real property acquired. The standard mortgage loan can be used for purchase, construction or reconstruction of a flat, family house or another real property. The loan may cover 70%, 75% or maximum 85% of the property value. This mortgage loan is always secured by a lien on the real property located in the Czech Republic. The payment period may be between 5 to 40 years. In most cases the minimum mortgage loan is CZK 200,000. The upper limit of the mortgage is determined by the value of the pledged assets and the ability of the client to repay the loan.

100% Mortgage Loan

The bank loans a fund up to 100% of the value of the property, and the client does not have to have any savings. The basic parameters of this type of loan are similar to the Standard mortgage loan. The loan can be used for buying a family house or a flat, for construction, reconstruction and modernization of an immovable, settlement of credit provided at an earlier date and used for investment into the immovable. The payment period may be between 5 to 30 years. The minimum mortgage loan is CZK 200,000. The upper limit is not set. The interest rate for this type of mortgage loan is higher than in Standard mortgage loan.

American Mortgage Loan

The non-specified loan has no concrete purpose. The lender does not verify what the loan is used for. Money acquired from the bank can be used for anything (housing, automobile purchasing, investment into reconstruction, etc). This mortgage loan is always secured by a lien on the real property. The amount of loan can reach 70% of the security value of the real property. The bank doesn't check how the client uses the money. The client can also refund the money whenever he wants, without any sanction. This type of loan has quite a high interest rate; The payment period may be between 3 to 20 years. The minimum mortgage loan limit is CZK 200,000 and the maximum limit is CZK 5 million (24).

3.2 Interest Rate and Fixation Period

Nowadays, people rent everything from clothing to cars to apartments and they pay for it. This is called rent. The amount of rent depends on a time basis. The rent people pay for using the money is called interest. It is a rate which is charged by the lender to the borrower. Interest rate is expressed as an annual percentage of the total amount of money borrowed, in this case principal.

"*Interest rates are determined by some factors over which you have no control, as well as some that you can control*" (23). The borrower can set the amount and length of the mortgage loan, as well as the fixation period. These factors are under the borrower's control and can influence the interest rate. The interest rate is also influenced by inflation and the fact that it's determined by monetary policy of the Czech National Bank (23).

Among other very important factors of the mortgage loan belongs so-called fixation period. It's a special period of time during which the interest rate is fixed. The fixation period is always specified by the client and depends only on his choice. In the selected fixation period, the bank guarantees the fixed interest rate and unchangeable conditions of the mortgage. A shorter fixation period (for example for one or five years) has, as a rule, smaller interests. However, the disadvantage of a short fixation period is a possibility of a strong interest rate increasing after the time expires. Of course only with the proviso, that the Czech National Bank will raise the interest rate. A borrower with a longer fixation period, for instance from five to ten years, could expect a higher interest rate, but he can be more certain that the interest rate will be the same during the next "ten" years. But the present-day situation shows that banks have a tendency to consolidate interest rates, so that shorter fixation periods (2-10 years) have almost the same rate.

Interest rate can be fixed for the period of 1, 3, 5, 10 – 30 years. After this period expires, the client can agree on the new interest rate with the bank. At the end of each fixation period the borrower is also allowed to repay the whole or only a portion of the mortgage loan without paying any sanction or fees. For how long should you fix the interest rate? It's up to the borrower and his selection. Shorter fixation period is better for those borrowers who suppose to repay a part of the mortgage loan after shorter period of time. It is also preferable in case of interest rate decrease. While experts wait for declining interest rates, the borrower can change his or her interest at the end of the short fixation period. Longer fixation period is of course suitable in case that an interest rate increase is expected. The most popular period among today's clients is between one and five years. Even though banks offer the fixation period, which is fixed on the whole terms of the mortgage, borrowers use it very rarely.

It is also possible to arrange a mortgage loan without fixation of interest rates. This rate consists of a PRIBOR rate (a rate at which banks mutually provide loans to each other on the Czech inter-bank market), determined by the Czech National Bank, plus an interest premium added by the bank. The rate is adjusted by the bank every year according to the actual PRIBOR rate.

Everyone who finances the purchase of a real estate through the mortgage loan (eventually through building savings) can decrease the tax base from receipts of natural persons by certain amount of credit interest. State support lies in the taxation relief, which has to fulfill the conditions as provided by the law. At the end of the year the bank sends a letter to the client stating the amount of interest, which was paid in the previous year. This amount can be deducted from the tax base. The interest confirmation must be enclosed to the tax declaration (22, 24).

3.2.1 Current Situation on the Czech Market

A credit crunch caused a rapid slowdown of mortgage loans. Housing loan interest rates continue to grow. Even expansionary monetary policy of the Czech National Bank does not bring a recovery to the mortgage market. The average interest rate of a new loan given increased to 5.74%. The highest surge is in the rate of mortgage loans with 5 year fixation period, which got on 5.64%. The rate for mortgages with fixation period up to 1 year is 5.93%. Such a high level of interest rate in case of a one year fixation period is decreasing the interest of the borrower. The share of new loans with the fixation period up to one year have fallen from 40% in 2006 to only 20% in 2009. *Table 1* shows the development of interest rates from January 2003 up to now. The highest underflow of interest rate was in 2005, when the ratio decreased to 3.5%. This period was replaced by a long-term mild growth of interest rates. The last half of the year 2007 and the whole of 2008 mostly contributed to this trend.

However, the Czech National Bank (CNB) tries to activate a “dead” economy, trough its monetary policy (by decreasing the basic interest rates). Commercial banks do not follow this effort and respectively raise interest rates. In the previous years, progression of the interest rates on mortgage loans more or less copied the development of the CNB rates. This relation stopped in December 2008 and January 2009. The mortgage market shows enhanced uncertainty. Loan providers face higher risk in case that the borrower stops repaying the loan and tries to protect himself through increasing the mortgage loan price.

Table 2 shows changes of interest rate during the period from November 2008 to January 2009. The table compares the offer of standard mortgage loans, which cover 85% of the property value. The majority of banks didn’t change the interest rate during the mentioned period. Smaller changes (decreasing) occurred in LBBW Bank, UniCredit Bank and Raiffeisenbank. Komerční Banka reduced interests only in case of/for the 3 and 5 year fixation period. However, Volksbank implemented the biggest changes and raised the interest rate by 2% to 7.29% (3, 10, 18).

3.3 Credit Worthiness

Before the borrower starts looking at a home and a way of financing it, he should know how much money he can borrow. Credit worthiness means current and future ability of the debtor to meet debt obligations. It usually depends on the credit history, credit report, income-to-debt ratio and the amount of repayment. The bank gathers information about the borrower and evaluates the credit worthiness based on several aspects. The higher credit worthiness means of course the higher amount of money the borrower gets. A borrower with good credit history and stable credit worthiness represents lower risk for the bank. Consequently, the bank provides a mortgage loan with a lower interest rate to the borrower with higher credit worthiness.

Credit worthiness of the client is calculated as a difference between regular income and regular expenses. Monthly net income mainly consists of the income from employment, the income from business activities, and the income from lease and other income. Expenses mainly represent the expected amount of repayment. They can also include other loan repayment, real property insurance and other insurance and leasing. The rest of the money is compared with the subsistence level of the person (i.e. the amount of money needed to cover the basic personal necessities at a very modest level, such as food, clothes, education). The bank determines what types of indicators will be included in the credit worthiness evaluation. Credit worthiness of the client can be affected by other several factors – age (the most benefit groups of people are between 30 and 40 years old; it is expected that the borrower at this age will have a stable income and a family that he wants to secure), education (highest level of education brings more confidence to the borrower), current job position, family (family size, number of children), type of household (single, married couple, unmarried man/woman, registered partners, widower/widow, divorced), place of living etc.

How to account for the monthly net income? Individuals account for their income based on income confirmation from the employer, while entrepreneurs submit the declaration of taxes. The certificate of income must not be older than 30 days. The borrower must not be in trial or have a notice period. The certificate of income includes basic information about the employer (name, legal status, registered office, main business activities, number of employers etc.). The information about the employee (borrower) consists of his name, surname, date of birth, job position, place of employment, starting date of the contract etc. The bank asks for the average net monthly income, including the eventual sick leave benefits during the last three months. Some problems could occur if the employee is on the fixed-term contract for less than one year. In that case the bank cannot be sure that the borrower's income will be stable and the employer has to declare that there is no procedure of ending the contract and that the contract is not expected to finish in a fixed term (6, 24).

3.4 Mortgage Loan Costs

The process of borrowing money to buy a new real property does not consist only of interests and principal. "*The cost of a loan is as important as the interest rate. Lenders and mortgage brokers charge various fees for giving you a loan and you thought they just made money on the interest rates!*" (2). The borrower should also take into consideration that preparation and running of the mortgage loan cost an additional amount of money. The borrower also needs to allocate some amount of funds to the payment of fees connected with this process. Loan costs can vary significantly from one mortgage to another. Specific costs also differ from lender to lender. The mortgage loan provider charges an interest on the amount of borrowed money and also charges fees for some of the services provided with a home loan. The fees should be included in the loan contract. There are some basic groups of fees that the borrower can expect.

3.4.1 Fees for Loan Preparation

Loan preparation includes the appraisal fee. The borrower pays to an independent appraiser who provides a home valuation. This process means an estimation of the real estate price according to the bank's methodology. The cost of the real estate valuation depends on housing units. The standard appraisal price of a housing unit is about CZK 3,000. The appraisal of a family house or a building for individual recreation usually costs about CZK 5,000. This fee of course varies from one real estate to another. If the borrower finds a low interest rate and wants to lock it in while the lender is approving his application, the borrower can pay to the lender to hold that rate for a specified amount of time, usually for 30 days.

3.4.2 Processing of a Mortgage Loan

This fee is connected with mortgage loan processing. The loan processing fee is charged only if the loan is approved. In case of loan disapproval, the borrower doesn't pay the processing fee. It usually costs no more than 1% of the loan provided. The bank determines the upper and lower limit of the processing loan fee. This could be quite detrimental for those who borrow a relatively small amount of financial resources. The fee includes evaluation and assessment of the loan and also preparation of contractual documentation.

3.4.3 Administration of a Mortgage Loan

Besides the fee for processing of a mortgage loan, the borrower also pays for mortgage loan maintenance and administration. The fee for maintenance and administration varies from CZK 150 to 220 per month, from the date of the completion of the contract. The borrower can also draw a loan several times (for example in case of a family flat or house construction). The first three drawings are usually not paid for; the fee is charged for every following drawing. Fees are also charged for extra loan repayment, sending of the account statement, the amount of paid-up interest confirmation, confirmation for subsidies to payment of interest and report on the state of construction.

3.4.4 Changes in Contractual Conditions

A fee is charged for each change in the contract and is recorded in a supplement to the contract. The contract can be changed due to the extension of the loan maturity, postponement of repayment etc. Fees are charged for reservation of funds for the mortgage loan, incomplete drawing on the agreed amount of the mortgage loan, extra mortgage loan repayment during the fixation period, and shortening of the maturity of the loan. The borrower might also have to pay for re-evaluation of his financial situation in case that he changes a product or service, and for late payment of interest, fees, contractual penalties and repayment on the principal amount of the loan.

3.4.5 Other Costs

Besides the mortgage loan costs, there are other fees and charges connected with buying a real estate property. Loan and real estate insurance are generally required by all banks to get the borrowed money back in case of unexpected occasions. Life insurance can be combined with permanent disability insurance, insurance against inability to work and against loss of employment. Real estate and household insurance depends mainly on the property value. Some other fees and charges may also include the following: issue of confirmation of solvency, issue of bank information about the client, issue of information about personal data kept by the bank on a physical person, issue of a declaration about conditions for waiving a lien, etc (6, 22).

3.5 Payments and Drawdown of the Mortgage Loan

When applying for the mortgage loan, it is necessary to take into consideration the monthly payment amount and the way of drawing down the mortgage. The borrower may draw the mortgage according to his needs. The client determines the necessary amount to be drawn for the investment into a real estate, and also costs associated with the mortgage loan process (the real estate appraisal, fees, legal services etc.).

There are two possible ways of drawing down the mortgage loan. A one-off drawdown of the mortgage loan is commonly used in case of home purchase or lone refinancing. A flat or a family house construction or reconstruction requires a gradual drawdown of the mortgage. Both types of the drawdown have to be done within a strict time period, specified by the bank.

After the terms of the contract have been fulfilled, the bank transfers financial resources to the account of the seller (in case of a real property purchase), the supplier (in case of construction or reconstruction), the creditor (in case of repayment of an early granted loan) or the borrower (in case of a retroactive payment for an earlier real estate investment). Financial resources are strictly provided in the form of a bank transfer.

The conditions for the transfer of financial resources are the following: presenting a document about a mortgage loan purpose, signing the mortgage contract and registration of a lien right to the real estate (or a proposal for the registration confirmed by the land register) and presenting insurance required by the bank. During the mortgage drawdown period, the borrower only pays the interest from the drawdown loan amount. After a full drawdown the borrower starts to repay the principal by regular monthly repayments (14, 24).

How to repay the mortgage loan? The period of the mortgage maturity varies from five to forty years. The borrower may choose the type of monthly repayment. The most common way is regular monthly installments, the so called annuities. The monthly payment is made up of two components – principal and interest. The principal is the amount of money that the debtor borrowed from the bank at a given time period. The interest is the rent which is paid for the use of the borrowed money. The allocation of the monthly payment changes during the maturity. At the beginning of the repayment period, the highest portion of the repayment consists of the interest, while the rest is the principal. When the borrower reduces the principal amount, more of his payment will be going to the principal than to the interest. Almost the whole payment will go to the principal at the end of the repayment period.

There are two other types of repayment – they have a form of progressive or degressive instalments. Progressive repayment is small at the beginning and it rises within the repayment period. In subsequent periods the repayment is increased by a certain growth coefficient. It is more suitable for young people at the beginning of their professional career to reduce their debit, or for married couples, where one of the partners is temporarily unemployed; they expect that the situation is going to change and they will have higher income. Degressive repayment enables to repay a higher amount of the loan at the starting period and reduce repayments at the end of the lending relationship. In subsequent periods the repayment is decreased by a certain growth coefficient. This model is more suitable for older people, who expect an income decrease (due to retirement age, sickness, inability to work, etc.).

The borrower may repay the whole or a partial amount of the loan amount during the interest rate change date without any sanctions (22, 24).

3.6 Right of Lien

A mortgage loan is a long-term specified loan, which is always secured by a real property. "*A lien is the interest a creditor has in your property. It secures the debt and gives the creditor the legal right to take your property if you fail to meet the terms of your debt agreement*" (23).

In other words, the lien is an instrument used to secure the mortgage loan, interest and fees. The borrower gives the lender a lien on the property as a guarantee for the loan. It means that the borrower gives up his home in case of failing to make agreed monthly payments. The lender can sell pledged assets to get back the money that the borrower used for purchasing the real property. It is usually based on a Pledge contract made between the bank and the borrower by the registration in the Land Registry.

The mortgage loan is always secured by a lien on the real estate located in the Czech Republic. In some cases the bank allows to pledge several pieces of real estate. The borrower can pledge the property which is currently bought, or other real property, e.g. the real property that will be constructed in the near future.

The real estate must not be burdened by any lien of a third person and the transfer of the real property should not be limited with the exception of a lien that secures the loan provided by a construction savings bank.

The real estate must be insured before the mortgage loan is drawn down and the insurance benefit must be pledged in favor of the mortgage loan provider. The mortgagor's lien on the property expires when the mortgage is paid off in full (2, 5).

3.7 Property Appraisal

A real property valuation is always required by the mortgage loan provider. The valuation is done by the bank or by experts who co-operate with the bank. Each bank has a list of independent experts, a regional branch where the loan is prepared. The so called “usual price” of the real property is determined. A qualified appraiser uses a transparent valuation method and determines the usual price or market price at the valuation date.

There are a lot of important factors which influence a property valuation. During the valuation process, the valuer takes into consideration the following aspects: the property itself (building age, shell construction, living space area, flooring, garage, disposition of the housing unit), the location of the property, price map, demographic characteristic, purchase and sale of the similar property, the relevant market development in which the property is situated and historical and future development of the area.

Banks use an appraised value to determine the mortgage loan amount. It usually exceeds from 70% to 80% of the collateral value of the property and even 100% in some cases (4, 14).

3.8 Mortgage Loan Processing

The whole process is generally divided into three basic periods.

<u>Before Applying for a Mortgage Loan</u>

The first thing in the mortgage loan process is to choose the most suitable bank from a broad range of mortgage loan providers. The most important criteria are the interest rate and the terms of the mortgage loan. The bank will provide the borrower with all important information concerning the mortgage loan and prepare a mortgage loan offer according to the client’s requirements. The applicant gets a list of necessary documents. The bank evaluates the ability of the borrower to repay the requested mortgage loan.

After submitting all the required documents including the income confirmation, the borrower fills out the application for a mortgage loan and passes it to the bank.

After Applying for a Mortgage Loan

The bank verifies if the list of documents is complete and in good order. The real property appraisal is done by the specialist. In case the borrower is satisfied with the bank offer, the application for granting a mortgage loan is signed. The bank decides whether to approve the application or not. The borrower will be asked to sign the contractual documents in case of positive evaluation of the application. It is necessary to sign the following documents: a contract concerning the loan including the general loan conditions, a mortgage contract or other security documents, and a proposal for a lien right registration. The fee for the processing of the mortgage loan is paid after the day the contractual documents were signed. Certain terms of the contract must be fulfilled before the bank transfers the money to the relevant account. After the conditions are fulfilled and the application for drawing a loan is submitted, the bank provides financial resources to the account of the borrower (seller, supplier or creditor). The borrower can draw down the mortgage loan.

After the Mortgage Loan is Fully Draw Down

After the mortgage loan is fully drawn down, the borrower starts to pay regular monthly instalments (if the other methods of repayment are not used) and gets the regular monthly bank statement. The borrower may repay the whole or a part of the loan amount before the interest rate changes without any sanctions.

List of documents

The documents to propose the conclusion of a loan agreement with private individuals are the following:

1. Documents required for the real estate property securing the mortgage loan

a. An updated statement from the Land Register, a picture of cadastral map or a geometric drawing in case the construction hasn't been registered in the Land Register yet.

b. The original copy of appraisal of the real estate property
2. Documents confirming the customer's income
a. If the borrower has an income from employment he needs the original copy of the income confirmation from the employer. The confirmation must not be older than 60 days before the application is presented to the bank.
b. If the borrower has income from business activities he needs a business licence (trade licence, trade permit certificate), an income-tax return for the last two tax periods and a document on the tax payments or a confirmation of no indebtedness from the Financial Authority.
3. Documents confirming other income
a. An income from lease is presented by the relevant Lease Agreement or an Interim Lease Agreement
b. If the borrower has an income from property interest in a company economic result, he should present the Memorandum of Association, the document from Minutes of General Shareholders Meeting on profit distribution and a document that proves a transfer of profit after taxation to the customer.
c. If the income from the property interests of assets exceeds 50% of a company owned by the borrower from which the borrower's income exceeds 50% or more of his total income, he should present the company's income-tax returns for last two years, financial statements and company's liabilities.
4. Documents required in case of a real estate purchase
a. A preliminary purchase agreement, a draft purchase agreement or a purchase agreement
b. In case of a purchase of a building lot, it should be documented that the lot is designated for constructing in the zoning map or planning permission
c. In case of a purchase of a co-operative share a contract on assignment of members' rights and duties or a housing co-operative certificate of membership should be presented
5. Documents required in connection with the real estate construction or reconstruction
a. A building permit

b. A contract for work done or a preliminary contract for work done, or a construction agreement
c. A design document, a technical report, a position drawing, a ground plan, a construction schedule and a summary calculation of the budget costs of the construction
d. Documents confirming payments of the already completed construction work

6. Documents needed for the loan settlement

a. A loan agreement which has to be re-financed, including a statement of the account from which the loan is being repaid (6, 24).

3.9 Combination of the Mortgage Loan with Other Products

There are many different ways of providing real estate financing. The most traditional way of financing a real estate in today's economy is known as a mortgage or a home loan. Real estate financing can be done through the building saving loan. There is also a possibility to combine different types of financing. The most common solution is a combination of the mortgage loan with the building savings loan or a combination of the mortgage loan with life insurance.

3.9.1 Combination of the Mortgage Loan with the Building Savings Loan

One of the Czech housing finance policies is the so called building savings, provided by building savings banks. Building savings is a specific product used for money savings for the future real estate financing. It is an effective way of saving with subsequent possibility to use a building savings loan. The client deposits money for a minimum period of six years (the time period can of course be longer or shorter than six years in some cases). Regular monthly savings are not obligatory; the saver can chose any monthly payment based on his financial position. Yearly interests from savings are about 2% per annum. One of the advantages of the building savings is government support. Money which has been saved can be used for investment into a real estate.

The building savings loan in a combination with the mortgage loan is a useful source of purchasing real estate. If the client has made a building savings contract, he can use the saved money for financing a new home or flat. The advantage of this situation is that the mortgage loan provider admits these financial resources as own resources of the borrower and provides a mortgage loan with a lower interest rate. In case that the building savings contract is older than six years, the client can use the money for the purpose mentioned above.

Those who want to have more than the saved amount of money or those, whose contract lasts less than six years, can approve for a standard or a bride building savings loan. The client may use this loan to pay another loan related to the house financing.

One of the disadvantages of this combination is a heftiness of the whole process. The building savings loan is not simpler than the mortgage loan. It means that the applicant has to submit and complete all required documents twice. The other negative fact is that regular monthly repayments of a building savings loan can affect the credit worthiness of the borrower, which is very important during the application for a mortgage loan. On the other hand, the building society (the provider of a building savings loan) does not require securing the loan by a real property. The borrowed amount of money is usually secured by the pledger. A big advantage of the building savings is also a government guarantee including partial or entire possibility to repay the building savings loan at any time.

Another way of using the borrowed money from a building savings loan is an extraordinary repayment of the mortgage loan during the end of the fixation period (22, 24).

3.9.2 Combination of the Mortgage Loan with Life Insurance

Some banks offer a combination of the mortgage loan with investment or capital life insurance. This is not an obligatory loan and real estate insurance, which is required by the bank to get the borrowed money back in case of unexpected occasions. This loan is designed for financing a real estate, the repayment of which is secured by life insurance. The basic principle of this program is that for the duration of the mortgage loan the borrower only pays the interest (thus asserts the claim of a constantly high decrease of the tax base by paid interest). The principal is repaid gradually or in a lump-sum from accumulated money in the capital life insurance at the end of the loan maturity. This type of loan in a combination with capital life insurance always has to be secured by a real estate (as in case of the standard mortgage loan) located in the territory of the Czech Republic. The fixed interest rate is used during the validity of the interest conditions.

The benefits of this program are the possibility to combine capital life insurance sources with the mortgage loan and using the tax saving. The disadvantage is relatively high uncertainty. This program is very risky. The saved amount of money during the capital life insurance is not guaranteed by anyone. It depends on the financial market situation, which is unpredictable. There is a possibility that after twenty years of savings it won't be enough to repay the whole principal (24).

3.10 Real Estate Purchase

Almost everybody wants to live in their own house or flat. People also face various housing conversions for the whole life. To buy a new real estate is, in most cases, a very significant decision. That is why it is necessary to draw up the budget, i.e. how much you earn and how much you spend. Most people do not know their spending habits. The main purpose of drawing up a budget is to see what kind of home and how much of a mortgage loan you can really afford. Very often, however, we lack not only financial resources but also very important information, which is useful during the purchase of a house or a flat (23).

After we make the decision to buy a new home, another very important question arises. What type of real estate or property do we wish to acquire? It is very difficult to generalize what kind of home is the best. Everyone has a different life style, needs and visions concerning this question. It is also obvious that choosing a suitable home is a matter of great importance and has an influence on the conditions under which people live for a long period of time.

There are some basic questions that cannot be avoided. They seem to be simple and logical, but not everyone thinks about them during the purchase of a new home. People should be able to answer some of the questions themselves; as for some other questions, they should ask a potential real estate seller or a real estate broker.

The first big question is where to buy the home? The location of the property is one of the significant criterions. The decision where to live is mainly determined by the budget of the buyer. If he has the finance to buy a big modern flat, the capital or big industrial cities are the right choice. If he doesn't have an extravagant budget the most suitable solution might be to find a property located in a small town, 50 to 70 km away from a big city.

Families with children mostly prefer a home in a calm location near nature, on the fringe of a town or even in the countryside. But even there, families should find out information about the surrounding area, amenities, entertainment and cultural prospects, traffic accessibility, etc.

Young people or married couples without children long for a town centre or its surrounding area. They can find there a new job or business opportunities, entertainment, places for sport and relaxation.

It is very important to compare the real level of civic amenities of the chosen location with the information provided by a real estate agent or advertising brochures. At least one personal visit to the place where the new home is located helps to make the right decision.

The most considerable facts are also traffic accessibility, kindergarten or school availability, supermarket or hypermarket availability with a high range of services, places for entertainment, but also the future development of the surrounding area, its safety and many other factors.

Another very important factor is a household size. The size of a dwelling is defined by the number of rooms or the overall living space area expressed in square meters. It's necessary to answer the question how many rooms are really needed for everyday life. Then the buyer should compare his requirement and financial resources with the appropriate supply of a flat or a home of a given size in the chosen locality. However, a bigger size of a real estate means higher costs and the need for home maintenance. The size of the home also influences the share of common parts of the building. Bigger flat means higher contributions to the collective fund indented for house cleaning and maintenance.

In most cases, real estate agencies offer dwelling units with two types of flat disposition: open space or the so called “loft”, or a standard flat with separate rooms. Again the choice depends only on the purchaser and of course, in this case the choice is mostly influenced by whether it is a family with children or young people that are single.

And last but not least, the factor that influences the choice of a flat is the floor. The highest floor usually costs the most. If the flat has a balcony, terrace or a front garden it will also have an influence on the price (4, 13, 14).

3.11 Real Estate Insurance

Investment in your own home is not a low-budget matter. Sometimes it influences your financial situation for a long period of time. That's why the protection of a home is very important. Those who finance housing through the mortgage loan have an obligation to insure the real estate. The loan and real estate insurance is generally required by almost all the banks. Banks usually require insurance for the building structure (a family house or a flat building) from the borrower. The insured value should cover the value of a real estate. After a definite period of time it is necessary to revise the insured value, especially when the real estate value has been raised (due to repairs, replacements, reconstructions etc.). Insurance of the building structure, however, protects only the building, in other words the external walls, the panes (doors and windows), the roof and other structural elements or parts which are affiliated with the skin (the balcony, conductors etc.). It doesn’t protect the furniture and personal items inside the flat or house. Household insurance serves for those purposes. What can be insured? The objects that can be insured are: household furnishings, personal items, audio-visual equipment, electronics, jewellery, valuables, artwork, collections, sports equipment, the bathroom and kitchen equipment, windows etc. The client can insure his property against fire, explosion, plane crash, lightning strike, flooding, burglary or robbery, storm or hail, earthquake, vandalism etc. The property has to be insured to a corresponding value (11, 22).

3.12 Summary of the Literature Review

The literature review deals with important concepts connected with the mortgage market and mortgage loans. The definition and purpose of a mortgage loan and mortgage loan types are discussed. The chapter analyzes and interprets important notions such as interest rate, fixation period, credit worthiness, payments, right of lien and property appraisal. A classification of the different types of mortgage loans is provided. The literature review also includes an analysis of the whole mortgage loan process. Finally, this part of the thesis provides a description of the combination of the mortgage loan with the building savings loan or capital life insurance and deals with real estate purchasing and real estate insurance.

4 Structure of the Mortgage Market and Its Actual Development

4.1 The European Residential Sector

The residential sector plays one of the most significant roles in modern society. Almost all human activities are performed inside the buildings, no matter if it is private, social or common performance. Housing is a very important part of the general economy, which also influences other sectors. A huge amount of money is invested in dwellings. When people buy a house or flat, they invest a sizeable part of their financial resources, and when they rent a home, it represents a major part of family expenditures.

The residential sector has a great connection with other important sectors. Property building influences the construction industry and is of course a source of employment. A significant amount of business activities of financial institutions are connected with housing finance. Investment in residential property plays an important role in the investment portfolios of real estate companies.

In 2007, the housing markets were influenced by visible difficulties, which occurred in the mortgage markets in the USA. Not only European countries truckle to a decline of housing activities and house prices.

Demographic factors such as number of population, population density, number of households and others affect the housing demand inside a particular country. The European Union is the community of 27 countries which covers more than 490 million people with the total area of 4 million km^2. Germany, with 82.4 million inhabitants, is among the most populated countries, followed by France (62.9 million), the United Kingdom (60.3 million) and Italy (58.7 million). Malta, the Netherlands, Belgium and the United Kingdom, with more than 240 inhabitants per km^2, are the countries with the greatest population densities. Sweden and Finland are the countries with the lowest population density with less than 25 inhabitants per km^2. An interesting fact is that, according to projections of the United Nations for the year 2050, the world population will increase, while Europe will be the only continent where the population will decrease (by about 9.2%). Europe had negative balances of migration until the year 1970, but since then, the balance has been growing and became positive. Change in the population will be one of the significant factors in housing demand.

Another factor that determines the size of the housing demand is households (the size of a dwelling and the number of bedrooms). The number of people per household has decreased in most countries, mainly in Spain from 3.3 to 2.9 (which is the average number of people per household) and Portugal from 3.1 to 2.8. "*Sociological changes, such as the fall in the birth rate, longer life expectancy, an increase in single-person households, among other factors, will determine the features of future dwellings*" (21).

The quality of life is determined by the number of people living in a house and the size of the dwelling. It is of course based on the people's needs and their financial situation. The housing policy and the development of urban history also reflect the size of the dwelling. *Table 3* shows how the size of dwellings varies between countries. For example, the size of a dwelling under 50m^2 is very popular in Poland. Dwellings of between 50 and 74 m^2 are mainly found in Ireland, Germany and again Poland. Dwellings with the area between 75 and 99 m^2 are mainly used in Greece and France. Dwellings of the area between 100 and 149m^2 are most common in Denmark and Norway, and finally, dwellings with the area more than 150 m^2 are found again mainly in Norway, Denmark and Austria. The Czech Republic has the highest amount of dwellings in the category of 50 to 74 m^2.

The average family spending on housing in the EU-25 is about 22% of the total spending. Denmark, Sweden and Belgium spend the highest portion of the total spending on housing, i.e. about 29%. On the other hand, the spending on housing in the United Kingdom, Greece and Spain is only about 17% of the total spending. See *Graph 1*. The development of house prices is one of the most significant factors which influence the variation in household spending between the countries (21).

4.1.1 Housing Stock

There are 224.1 million of dwellings in the EU-27 (without Malta). The most populated countries, such as Germany, France, Italy and the United Kingdom, are also countries with the largest number of dwellings. See *Table 4*. These countries represent about 53.4% of all dwellings from the EU-27. The Czech Republic had 4.5 million of dwellings in 2006. Estonia, Slovenia and Luxembourg are the countries with the smallest amount of dwellings; they have less than a million houses each. Spain, Luxembourg, Poland and Portugal show the greatest growth in the number of dwellings between 1997 and 2006. The average number of dwellings in the EU-27 countries is 457.5 per 1,000 inhabitants. With 564 dwellings per 1,000 inhabitants, Spain is the country with the most dwellings per inhabitant. The Czech Republic has about 450 of dwellings per 1,000 inhabitants.

Graph 2 shows housing density of 17 selected European countries. The differences between the countries are significant. The highest housing density is in the Netherlands, Belgium, Germany and the UK. These countries have a density of 100 - 200 dwellings per km^2. The Republic of Ireland, Sweden and Finland are the countries with the lowest housing density with less than 30 dwellings per km^2. It follows that housing density arises from population density of each country. Countries with a high density of population have a higher housing density and respectively countries with a low population density have a lower housing density.

There are two forms of occupancy - ownership and rental. The average rate for the EU-27 countries is 67%. Romania, Lithuania, Bulgaria and Hungary belong to the countries where the highest proportions of owner-occupied houses are to be found (all with a proportion higher than 90%). The Czech Republic (47%) and Germany (43.2%) have the lowest proportions of owner-occupiers. See *Table 5* (21).

4.1.2 Housing Production

There are three variables by which the production of new houses can be measured – building permits, housing starts and housing completions. *Table 6* shows the number of building permits for housing units in EU countries in 1997 and 2006. This period is characterized by intensive housing construction in Europe. In 2006, the highest number of building permits were issued in Spain (865,561) followed by France (561,700) and Germany (247,541). The Czech Republic is placed in the middle of the list, with 49,777 building permits issued in 2006. Since the mid-1990s, housing development has been running wild. In Spain and France the number of building permits between 1997 and 2006 has grown by 156.3% and 87.6% respectively, while in Germany this number has fallen by 53.3% during the same period.

Spain is also a leading country in the construction of new housing, with 769,169 new dwellings completed in 2006. See *Graph 3*. There is a big difference between Spain and the two following countries, France (about 411,000 in 2006) and Italy (about 312,000 in 2006). As for the Czech Republic, the housing production was about 40,000 in 2000 and 50,000 in 2006. The largest increase during the period 2000-2006 was in Sweden (165.7%), Slovakia (108.3%) and Italy with the growth of output by 78.7% over this period.

In 2006, many European countries had a decrease in housing demand. In 2007, this trend was even more intense. "*Apart from the forecast of an economic downturn, the change was also determined by turbulence in the financial markets, triggered by an increase in the default rate of subprime mortgages (loans granted to people with substandard credit records) in the USA. The result was a financial squeeze that affected many areas, in particular the real estate markets*" (21). This caused a significant fall in housing supply. Huge decrease in housing starts was in Denmark, Spain, Sweden and Croatia. See *Table 7* (21).

4.1.3 House Transaction and Prices

The total number of transactions (house purchase or sales) was about 5.8 million in 2006 in 13 selected EU-27 countries. That is 11.4% more than in 2001. The United Kingdom was the country with the largest number of property transactions in 2006, with about 1,780,000 transactions. The United Kingdom was followed by Spain with about 955,000 transactions, France and Italy with about 800,000 transactions each. Other selected European countries each had less than 500,000 transactions. The Republic of Ireland recorded the highest increase in property transactions, from about 69,000 in 2001 to 114,000 in 2006. A house transaction increase was also observed in Estonia, Italy, the United Kingdom, Sweden and Spain. In the Netherlands, Germany, Finland and Hungary, however, the number of transaction decreased.

As for the price of houses in Europe in the period 1997-2006, the general trend was that the prices increased in 2006. Price decrease was observed only in Germany (– 0.9%). See *Table 8*. Between 1997 and 2006, there was a strong price growth in most European countries. Ireland (268.1% growth), the United Kingdom (184.5) and Spain (168.9) were the countries where prices rose the most. "*The price growth observed up to 2006 is one of the most spectacular in the history of housing prices for three reasons: its intensity (the rates of price growth); its duration (in some countries, the favourable cycle lasted up to ten years, as in the case of Spain); and the fact that prices have risen simultaneously in many countries*" (21). However, the rate of price growth fell in 2007 in all European countries; the greatest fall was in Latvia, Lithuania, Ireland and Denmark.

The highest transaction costs which may include sales and transfer taxes, registration costs, legal fees and agent fees, are in Belgium, with 17.8% of the total price of the sold property, Italy (17%) and France (16%). The largest portion of costs in Belgium and Italy is connected with sales and transfer taxes; in France it's agent fees. People in the Czech Republic spend about 8.5% on transaction costs. The highest portion of money goes on agent fees, followed by sales and transfer taxes and legal fees (8, 21).

4.1.4 Housing Policies in Europe

Housing policies didn't exist in Europe before 1945. After this year, specific policies began to emerge. It was connected with rebuilding of the towns and cities damaged during the Second World War. The main goal of housing policies is to help and facilitate citizens to live in a decent home. There are policies that are implemented directly by the government (social housing) and those that stimulate private activities (tax benefits, subsidies and improved transparency and information). Housing policies of course differ from country to country. To generalize some facts, the housing policies in Western Europe can be divided into three stages: the rebuilding process after 1945, supported by large subsidies and finance from the government (social housing), followed by quality improvement including private ownership until the 1970, and finally the housing processes became more market-driven after 1970. There has been a shift in policies, from object subsidies to housing allowances. The percentage of owner-occupied houses increased in the EU-15 from 57% in 1980 to 65% in 2004. The implementation of systematic policies after the Second World War, increase in owner-occupancy in most countries, help to the citizens instead of "bricks and mortar" and implementation of housing policies within the countries were the general trends in the European housing policies (8, 21).

4.2 The European Mortgage Market and Its Actual Development

However, one of the European Union goals is to integrate the common interests and create a single common market, it is a place where each national market works differently. It is also the case of European mortgage markets, where there is a wide diversity in regulations, product types and mortgage loan providers. And it is not simple to integrate them. The European mortgage market has gone through a significant period of development. Mortgage credit in the EU-27 increased from EUR 2.5 trillion in 1997 to EUR 5.7 trillions in 2006. The increase was mainly caused by a rise in house prices in all European countries (apart from Germany), but also by a large drop in interest rates to historically low levels before 2006, tax advantages and an increase in disposable income in some European countries. However, the growth of mortgage lending slowed down in 2007 and greatly decelerated in 2008. Also, the ratio of residential mortgages to total loans increased from 39% in 1995 to 70.8% in 2006. European credit institutions have come to the market with new innovative products, including self-certified products, interest-only mortgages, consumer loans, and loans linked to pension funds or flexible mortgages. The increase in number of mortgage loans also caused the rise in household indebtedness in Europe; between 2003 and 2006, household indebtedness rose by 25.8%. Despite this development, cross-border lending between European countries is still very slow. "*It is hoped that the benefits of increased integration in mortgage markets will result in greater choice and cheaper mortgages for borrowers, as well as lower funding and risk-management costs for lenders*"(21).

4.2.1 Description of the European Mortgage Markets

As mentioned above, mortgage market represents a significant share of the financial sector. The European mortgage market has a wide assortment of products, as well as operating institutions that provide different types of mortgage loans. Customers' preferences vary across the countries. It results from historical and demographical differences and also from political and regulatory frameworks. Types of loans differ as to the loan-to-value ratio, the duration of the loan and interest rates. Some institutions offer additional financial or non-financial services, such as insurance products etc. Mortgage market is mainly composed of universal banks and commercial banks, notably in Belgium, Greece, Finland and the Republic of Ireland. Savings banks play an important role in mortgage markets in Spain, Germany and Austria. Mortgage markets in Denmark and Sweden are characterized by mortgage credit institutions. Building societies are major players in the Republic of Ireland and the United Kingdom, and finally, insurance companies and pension funds are major institutions in the mortgage markets in Austria, the Netherlands, Germany and Finland.

A trend characterized by growing tendency of people buying their own homes has been in progress since the late 1990s in all European countries. There are several important factors, which encouraged this trend. The first one is connected with fiscal policies that advance home buying. The second factor, maybe one of the most responsible ones, is the reduction of interest rates. Interest rates reached low historical level for most European countries before December 2005. Other factors that encouraged this growth were the increase of the loan-to-value ration (the borrower can now get a 100% of the value of the property), an extension of time to repay the loan (up to 40 years) and new products, offering a tailor-made approach (for example "made-to-measure" mortgages, "payment holidays" etc.).

Table 9 shows residential mortgage balances outstanding in the EU-27. There is a huge difference between the mortgage markets in the EU-27, namely between the enormous markets of the United Kingdom and Germany and the tenuous markets of most of the new EU member states. The United Kingdom, Germany, France and Spain were the countries with the largest residential mortgage balance outstanding in 2006. The residential mortgage balance outstanding of the Czech Republic was EUR 8,055 million. During the period of 1997-2006, the volume of residential mortgage loans outstanding in Europe doubled and reached EUR 5.7 billion. A big growth in lending has been noted in many countries, mainly in the new member states of the EU-27, such as Latvia (9,650% growth), Bulgaria (3,958% growth) and Slovenia (3,661.5% growth). These new member states showed a big growth mainly during 2005-2006 (one of the significant reasons is the EU enlargement in 2004). Increasing bank competition led to credit cost reduction and a greater access to loans for many families. Countries with mature mortgage markets, such as Germany, the United Kingdom and the Netherlands have clearly experienced a slowdown.

Table 10 shows a number of gross residential mortgage loans in selected European countries. The gross new residential mortgage lending in 2006 amounted to EUR 1.2 billion for the countries with available data. The trend is similar to the increase in outstanding balances. The countries with a high growth rate of lending also have a high level of outstanding mortgage loans.

The year 2007 is characterized by financial disturbances that were triggered by the sub-prime sector of the US mortgage market. It affected lending activities and caused a lack of liquidity of the financial institutions. This fact influenced the activity in mortgage markets and also the reduction of mortgage lending supply and demand in 2007 in many countries. For example, the annual lending volume in the United Kingdom was 6.9% lower in 2007, than in 2006 (7, 21).

4.2.2 Mortgage Market and its Connection to the Economy

Residential mortgage loans outstanding in relation to GDP, the size of the residential mortgage loans to the total loans, and mortgage loans outstanding per capita are the main measures of the importance of the mortgage markets in the financial sector. The ratio of residential mortgage loans outstanding to GDP shows an important role mortgage markets play in each economy. This ratio has increased in all the EU-27 countries in the past few years. In 2006, the increase in mortgages outstanding (11.1%) was greater than the increase in GDP (3%). Denmark, the Netherlands and the United Kingdom are the leaders in this ratio. These countries have well-established mortgage markets with easy access to credits. Financial deregulation and emergence of new innovative products led the mortgage markets of Ireland, Portugal and Spain to a relatively high mortgage loan to GDP ratio. See *Graph 4*. Another indicator of the importance of mortgage markets is the size of mortgage products relative to the total loans. This ratio increased in almost all European countries (except for Germany and the United Kingdom where the ratio increased very slowly). See *Graph 5*. The last measure is the mortgage loans outstanding per capita. The EU-27 average is EUR 11,600 per capita. The countries above the EU-27 average are the United Kingdom, Germany, the Netherlands and Sweden (these are the countries with mature mortgage markets and a large number of transactions), followed by Luxembourg and Finland (smaller markets) and finally Denmark, Spain and the Republic of Ireland (countries whose mortgage markets have performed significant activity in recent years). All new EU member states are below the EU average. See *Graph 6* (8, 21).

4.2.3 Household Indebtedness

The growth of mortgage lending considerably influenced the increase in household indebtedness. During the period of 1997-2006, household indebtedness grew significantly and also borrowing for housing purposes increased. Borrowing money for house purchases is the highest item in the total loans. The Netherlands is on the first place in borrowing for house purchases with 88% from total loans, followed by Denmark (84.9), Estonia (82.4) and Portugal (79.7). Household indebtedness can also be measured by total outstanding residential loans to gross disposable income of households. In the Netherlands, Denmark, the Republic of Ireland, the United Kingdom and Sweden, borrowing for housing purposes is considerably higher than household gross disposable income, by more than 100% in each country. See *Table 11*. Poland (13.0%) and Czech Republic (14.7%) have respectively a much lower ratio (21).

4.2.4 Terms of Mortgages, Interest Rate, and Loan Costs

The terms of mortgage loans vary from country to country. Thirty years of repayment for a mortgage loan is normal in Sweden, the Netherlands, Portugal and Denmark. The average term in Italy is about ten years, in Spain it is a twenty year period. There are also differences in the interest rates. A general decrease of interest rates occurred in most countries before 2006 and caused an increase of mortgage lending. See real interbank interest rates in selected European countries in *Table 12*. The mortgage loan costs may include insurance, notary's services, registration fees, valuations, expert advice and expenses and fees charged by the lender. The costs are relatively high in Greece, Spain and the Netherlands, and very low in Denmark and Portugal. Wide competition and a highly-developed market are the reason of relatively low transaction costs in the United Kingdom (8).

4.2.5 European Integration of Mortgage Markets

The road towards integration of the mortgage market began in 2001. In that year the European Agreement on a Voluntary Code of Conduct for Precontractual Information on Home Loans was signed by the European Credit Sector Associations. The European Code of Conduct was under the aegis of the European Commission. The main goal of the Code is to standardize information for consumers, simplify comparison between different mortgage markets and help them choose the best suitable home loan. This aim also leads to the cross-border development of mortgage sectors and stimulates competition in the still-fragmented European mortgage markets. The application has been very successful. It was confirmed by the credit institutions that subscribed to the Code. At the end of 2007, it was over 3,800 of institutions. See *Table 13*. The table shows the number of credit institutions registered in selected European countries and the percentage they present of the total national mortgage market. With the exception of France and Norway, the rate of adoption reached 90% of the national total in selected European countries.

"*The way to the integration of mortgage markets has many routes, not all of them within the reach of the EU institutions. Many activities related to mortgage lending are regulated at national level as, for example, valuations, real estate agents, property rights, taxes and subsidies. In some cases the European Union influences mortgage lending indirectly through regulations on bank and consumer solvency*" (21).

The Green Paper on Mortgage Credit in the EU was published in July 2005 by the European Commission. The Green Paper examines the case for Commission action in the EU mortgage credit market. At the beginning of 2006, the Commission established its Mortgage Funding Expert Group and Mortgage Industry and Consumer Dialogue

Group. These two groups tried to investigate funding issues and issues connected with consumer protection. The European Parliament also drew up its own report, which was elaborated by the Committee on Economic and Monetary Affairs, the Committee on Internal Market and the Consumer Protection and Parliament's Legal Committee. The report focused mainly on economic issues and questions connected with consumer protection.

2007 was finally the year when the Commission published the White Paper on the Integration of EU Mortgage Credit Markets. The main objectives set in the White Paper are the facilitation of cross-border supply and funding of mortgage credit, the increase of product diversity and improvement of consumer confidence in the area of financial operations. The White Paper identified a number of measures which boost the competitiveness and efficiency of the EU mortgage markets. These measures support consumers (product diversity, easy information access), mortgage lenders (more efficient mortgage-lending process, cross-border activity) as well as investors (lower risk, higher certainty and broader range of investment opportunities) (21).

4.3 Real Estate Market in the Czech Republic

The Czech Republic has one of the best performing economies in Central and Eastern Europe, with a booming residential real estate market. In the last five years, since the entrance of Czech Republic into the European Union, the real estate market has been rapidly growing. This positive progression of the property market has been encouraged by a strong economy, relative political stability, increase of wages, huge level of new FDI (foreign direct investment) and a mature mortgage market with low interest rates. From the investor’s point of view, the Czech real estate market offers a low risk investment, with long-term capital growth. After the opening of the real estate market in 1989, the development standards have been nearing those of the other Western European countries. The gradually developing mortgage market has enabled Czech buyers to purchase a home, rather than just to rent it. The mortgage market development also caused improvement of building quality, price range of property and growing competition between Czech financial institutions offering home financing.

Wages, gross domestic products and foreign direct investments are the main forces that drive the Czech property market. The nominal average gross monthly wage was CZK 21,470 in the third quarter of 2007. The financial sector proves the highest monthly wages of almost CZK 40,000. On the contrary, the fishing industry, with almost CZK 15,000, has the lowest paid nominal wages. The rise of wages is strengthened by international companies that look for highly-qualified staff and can afford to pay more. The real GDP grew by 6% in the third quarter of 2007, which acknowledges economic growth of six or more percent over the last two years. The amount of foreign direct investment was EUR 5.95 billion in 2006. The United States, Japan and Germany are the countries with the highest flow of investment to the Czech Republic (16).

4.3.1 Historical Facts about the Czech Real Estate Market

The pre-Second World War period is characterized by relatively high quality of construction. Building quality was much better than in the post war era. After World War II, during the period from the 1950s to the 1990s, housing construction was controlled and financed by the State. Almost all the real estate belonged to the State. In 1959 the cooperative form of housing ownership was established by the State. About 50% of the present housing is known as panel apartment buildings were constructed in the period between 1950 and 1990. These buildings were assembled very quickly and they were supposed to last for years, but the reality is a little bit different. The flats or the so-called concrete units were very small and could not meet the needs of a big family with children. About 2,100,000 of these units were constructed during this period. Poor quality and lack of maintenance is the cause of the quick deterioration. Almost 43% of the population living in Prague occupies this type of housing.

Nowadays, foreign investors tend to buy the top floors of these apartments, reconstruct them into large lofts and either resell or rent them. Before 1989 a newly wed Czech couple may have had to wait for up to ten years for their own flat. The “Velvet Revolution” brought about huge changes to the Czech politics and economy, and also important changes to the housing sector. Major State-funded housing developments were phased out completely by 1992. Nowadays, there are about 350 state-owned flats available for every 1,000 inhabitants. The regulated rent of these flats is very low in comparison with the rent of privately owned flats. People try to hold a rent agreement for a long time, in some cases for their children in the near future or even rent it illegally at a higher price than that of the State (19).

4.3.2 Current Housing Stock

As was mentioned in the previous chapter, the Czech housing market is dominated by significant number of old “panelak” buildings, with a number of problems occurring nowadays (poor quality, bad layouts etc.). In comparison with other Central European countries (CEE), the Czech Republic has a quite low home ownership rate. There is a total housing stock of about 4,336,000 units, from which only about 47% is in home ownership. To compare the difference in this rate between the Czech Republic and other CEE, it is necessary to state that, for example, in Hungary the home ownership rate is 92%, in Poland 75% and in the Slovak Republic 79%. The main reason for such a low home ownership rate in the Czech Republic is a presence of regulated rents. For many years people used to pay peppercorn rents and had no incentive to buy or rent private-owned apartments. The current situation concerning regulated rents is changing. Regulated rents are starting to rise (a yearly growth of 14.2% is expected) and should be reversed completely in three years. It will cause a great boost in the property market, increase demand for new buildings and attract new investors. It is expected that the level of rents will increase because of rising competition on the market.

A major effect on the property market was also caused by the rise of VAT in 2008. At the beginning of this year a higher rate was introduced. The VAT on new buildings increased from 5 to 9% (for flats with the area up to 120 m^2 and for family houses with the area up to 350 m^2). For all other new properties, with the area more than 120/350 m^2, the basic rate of 19% obtains. The regulation about the rise of value added tax is a part of the EU legislation. A lower rate can be applied by the Czech Republic until December 31, 2010. The EU has to approve a further extension of the lower rate. If the EU does not extend this period, the Czech Republic has to increase the VAT rate to 19%. As a result, the price of property will increase by 4%. But it is necessary to state that the Czech market is relatively strong enough, with a strong economy, rising salaries and easy access to mortgage loans, and these changes do not disturb the positive development of the property market.

In the last five to ten years, property construction has been significantly growing. *Table 14* shows the number of completed homes in the Czech Republic between 1996 and 2006. It is obvious that this number has been growing since 1996. Construction of new buildings also increased during 2007 and this trend continues to progress in 2008. Based on the data given by the Czech Statistical Office, 41,649 homes were completed and 43,769 homes were started during 2007. During the first quarter of 2008, the number of dwellings started was 9,570 and the number of homes completed was 9,158. The highest number of apartments, constructed during 2007, was flats with two rooms (with a kitchen), with 36.6% of the total number of apartments, followed by apartments with three rooms (29.1%). See *Graph 7*. Prague together with the Středočeský and Jihomoravský regions are places where the most homes were built in 2007. 26,329 of the building permits were granted in the first quarter of 2008, from which 10,174 permits were issued for residential buildings.

About CZK 20 billion was invested by leading Czech developers in building new homes in 2008. New homes were constructed not only in Prague, but also in other regional capitals. There are new huge developers projects in Prague, from Karlin's River Garden Project, where 500 new homes will be built, to regeneration of the area in Prague 9 (The 150,000 m^2 site of ČKD, the former engineering plant in Vysočany, will have 2,200 new flats). (16, 19)

4.3.3 Sales Market

The worldwide economic crisis also strikes the Czech housing markets and the level of prices. Prices of real properties in the Czech Republic started to decrease in the third quarter of 2008, after the minimum price increased in the first two quarters of this year. The average price of flats decreased from CZK 2.26 million to CZK 2.1 million between September and December 2008. Developers started to offer discounts up to 30%, and they even offer projects with free items, such as free kitchen facilities or free parking space.

The prices of property have risen by 13.5% between 2000 and 2003 per annum. In 2004 the average price dropped by 5%, followed by a 2.1% fall in 2005 and a price rise of about 2% in 2006. In 2007, the number of house purchases increased, due to the VAT increase expectation at the beginning of 2008. Consequently, the price of flats has increased by 4.8%. The sales of real estate have decreased by 38% during 2008. The Czech property market is expected to subdue also in 2009 (4).

4.4 Structure of the Czech Mortgage Market, its History and Development

After World War I, the mortgage finance system in Czechoslovakia was an enhancement of what had already existed in the Austro-Hungarian Empire. Mortgage banking existed apart from commercial banking and was managed by state nonprofit mortgage banks (similar to Landesbanken in Germany). However, mortgage banks had no capital, and their obligations were guaranteed by the state. The largest mortgage bank at that time owned the traded obligations, which represented 10% of the budget of the government and more than 2% of all deposits. Savings cooperatives and credit unions also played an important role on the mortgage market.

A huge turning point, not only in the mortgage market, but also in a whole economy came after World War II. "*In October 1945 all banks in Czechoslovakia that were joint*

- stock companies were nationalized and their number was reduced to two after the Communists took over the government in 1948. The law 31/1950 combined the two banks with the central bank and with another institution into State Bank of Czechoslovakia, which thus became a monobank of commercial and central banking" (15). Savings cooperatives and credit unions were combined into State Savings Bank. The Investment Bank, which offered long-term credits, was created in 1948. But again their activities were taken over by the State Bank in 1958. The construction and financing of apartment houses were under state control. After 1958, high-rise buildings known as "panelak" were being constructed. However, housing-building cooperatives were providing twice as many finished apartment houses as the state did after 1970. According to the regulation 136/1985, the State Bank provided a 40 year term loan at 1 % interest for cooperative housing, and savings bank provided a 40 year term loan at 2.7 % interest for individual construction.

After the fall of communism in 1990, the State Bank was split into the Central Bank and the Commercial Bank. Long-term housing loans were transferred to the recovered Investment Bank. The first wave of privatization started in the spring of 1990. The State Savings Bank was renamed the Czech Savings Bank and was partly privatized in 1992, along with the Investment Bank. In 1994, the Investment Bank was owned by the Fund of National Property (34.4%), Investment Mutual Funds (53.5%), Restitution Investment Fund (6.7%) and individuals (5.4%). The Czech Savings Bank was owned by the Fund of National Property (45%), Investment mutual funds (37%), the Restitution Investment Fund (3%) and individuals (15%). Both institutions were still under great control of the State, which was given the power to impact all strategic decisions. The Investment and Postal Bank (previously the Investment Bank) and the Czech Savings Bank held their low-interest long-term loans. To help the banks, the government supplemented the interest payments on the loans. This raised the rates received by the banks to the discount rate, which reached 8.5% in November 1994. The inter-bank rate PRIBOR fluctuated around 11% in November and around 12% in December 1994 (15).

4.4.1 Creation of the Banking Law

Before the new amendments were adopted, the banking law 21/1992 mentioned mortgages (liens) only once. The law didn't mention mortgage loans. Banks could provide commercial loans with a lien on the property and many banks used this security. However, this type of loan is not a mortgage loan.

The development of the mortgage market was decelerated by a disagreement between the Czech government and the Central Bank. The main dispute was about mortgage banking. Universal banking has been adopted by the Czech Republic. "*Thus, the government believes that all banks should be allowed to extend mortgage credit. The Central Bank wanted to follow the German model, in part because the model resembles the mortgage system in pre-war Czechoslovakia. Instead of amending the banking law to allow for universal mortgage banking, as the government wished, the Central Bank intended to separate mortgage banking from commercial banking*" (15). The mortgage system of Germany relies on issues of mortgage-backed bonds (MBBs) for the supply of long-term funds. The Czech Central bank insisted that only mortgage banks were allowed to issue MBBs thereby to create a safe secondary mortgage market. The system is based on the issue of up to 10 year bonds, with the aim of obtaining financial resources for providing long-term mortgage loans.

In Germany the MBBs are bought by insurance companies and pension funds. In 1994 insurance companies and pension funds had already existed also in the Czech Republic, so the Czech Central Bank assumes that the same kind of secondary market will develop there. On November 28, 1994, amendments to five laws were introduced. These changes were supposed to create preconditions for mortgage banking. Parliament passed them on April 18, and they went into effect on July 1, 1995. The key amendment allows banks to emit MBBs and clarifies the exact rules for issuing them. Only those banks, that have a license for mortgage activity can make mortgage loans and issue MBBs. The amendment also defines a mortgage loan as a credit used to purchase or rebuild real estate in the Czech Republic, the repayment of which is backed by a lien on the property. The bill also proposed that a mortgage loan covers no more than 60%

of the value of the property, but after some consideration, this percentage was increased to 70%. The existing constructions as well as unfinished houses may serve as a security for the loan. Other amendments also describe the connections between the holder of the MBB and the mortgage borrower, and between the holder and the property. The holder, for example, has a claim only on the issuing bank, but not on the borrower or his property.

So the most important amendment concerning the banking law states that only banks that separate the mortgage activity from other activities will be allowed to issue MBBs and due to this separation they will create a “German-style” secondary mortgage market (15).

4.4.2 Bank and Credit Developments

There were 59 banks in the Czech Republic at the end of 1995, including building savings banks and branches of foreign banks. After the collapse of two relatively large banks (Banka Bohemia and AB Banka) and one smaller bank (Kreditní Průmyslová Banka) in 1994, the moratorium on new bank licenses has been decelerated. The Central Bank prefers equity participation by large banks in smaller banks, which would specialize in mortgage loans. Those banks that wanted to issue MBBs had to invest in an existing institution. The foreign banks had to apply for a permission of the Central Bank to do so.

The Investment and Postal Bank held a majority share in Regiobanka Hradec Králové that was renamed to Czechomoravian Mortgage Bank and became the first mortgage bank since 1948. This bank launched the re-emergence of the mortgage market in Czech Republic.

One of the most stable institutions existing from prior regime, the Czech Savings Bank, started to offer 20 year mortgage loans with a 9.75% interest rate. The Commercial

Bank and Czechomoravian Mortgage Bank offered up to 30 year loans at 10 and 11%. The Commercial Bank created the Mortgage Institute of the Commercial Bank and provided 20 year loans, charging 10.5%. The offer of residential and commercial mortgage loans was separated. Commercial mortgages were offered by the Commercial Bank. All banks that wanted to issue mortgage-backed bonds had to apply for a special license given by the Central Bank. The first license was given to Czechomoravian Mortgage Bank in September 1995. Another independent bank, Vereinsbank, specializing in mortgages, got the license in January 1996. In the same year the Czech Savings Bank and the Mortgage Institute of the Commercial Bank received their licenses, too. The Central Bank expected at least three other institutions to apply for this license during the next year.

The Czech Savings Bank (CSB) began to accept applications for existing houses, renovation and repayment of earlier loans secured by real estate. The maturity of loans for residential purposes was up to 20 years, and for non-residential construction only 10 years. Interest rates offered by CSB started at 10.5%. CSB also offered a special loan up to 90% of the property value at a 12.5% interest rate. By December 1995, CSB advanced 659 loans totalling CZK 422 million. During the same period Czechomoravian Mortgage Bank (CMMB) provided 160 loans for CZK 155 million in total. CMMB charged its loans at 11.3%, but planted to decrease interest rate to 10.4% to compete with CSB. Half of the applicants wanted mortgage loans for separate homes, the rest for apartments or business residences. Half of the applicants wanted to buy the property; the rest wanted to construct a new one or renovate. CMMB basically offered products similar to those of CSB. But only CMMB gave credits for new construction. The Mortgage Institute of the Commercial Bank was more conservative in approving mortgages, and by the end of September 1995 it had provided only 14 mortgage loans, totalling CZK 62 million.

The combination of the mortgage loan with building savings was accessible. Those borrowers who saved the necessary amount were eligible to use this money for mortgage down payment and combine building credit with a mortgage loan. CMMB offered this combination with the cooperation of Českomoravská Stavební Spořitelna (15).

4.4.3 Current Situation and Trends on the Czech Mortgage Market

The mortgage market in the Czech Republic is one of the biggest markets based on the gross amount of money lent in Central and Eastern Europe. The mortgage lending has been growing rapidly during the past few years. It is proved by the mortgage market value, which was CZK 589,408 million in 2007, while in 2006 this value amounted to CZK 431,512 million (37% less than in 2007). The development of mortgage lending is driven mainly by strong demand and high prices of property. People don't have their own resources to buy a property and use financial offers of loan providers.

However, the mortgage market in the Czech Republic continues to show a strong growth, the year 2008 wasn't so optimistic in terms of mortgage lending reinforcement. The two biggest Czech loan providers (Česká Spořitelna and Hypoteční Banka) showed a decrease in the number of new mortgage loans. The volume of Česká Spořitelna's new mortgage loans fell by dramatic 54%, Hypoteční Banka registered an 8% drawdown. The figures show that the mortgage market (based on the volume of provided mortgage loans) fell by 20% in 2008. In the same year, banks provided mortgage loans totalling CZK 114 milliard, while in the previous year it was CZK 142 milliard. See *Table 15*.

Nowadays, there are sixteen banks on the Czech mortgage market that provide mortgage loans (20). For the complete list of the Czech mortgage loan providers see *Table 16*. Hypoteční Banka (HB) was the biggest mortgage loan provider on the Czech mortgage market in 2008. This bank led both in total numbers of provided mortgage loans and in the volume of provided mortgage loans. HB removed Česká Spořitelna from the first place and shifted this institution on the second position in terms of the number of provided mortgage loans and even to the forth position in terms of total volume. GE Money Bank, Raiffeisenbank, Volksbank, Komerční Banka and Wüstenrot are also main players on the mortgage market. See *Graph 8* and *Graph 9*.

Table 17 and *Table 18* show the development of the mortgage market (based on the total number and volume of provided loans) in the period between 2000 and 2008. The preliminary figures from the local Ministry for Regional Development show that the mortgage market will also continue to fall this year. It is expected to decrease by 20%. But, let's get back to the year 2008. As already mentioned, the highest breakdown was registered in the case of Česká Spořitelna which provided 54% less of mortgages than in the previous year. The other big fall was also registered in GE Money Bank (a 24% decrease in the number and a 36% decrease in the volume of provided loans) and in Hypoteční Banka (a 10% decrease in the number and a 2% decrease in the volume of provided loans). Raiffeisenbank provided 12,010 of mortgage loans, which is 5.5% less in comparison with the previous year; although in terms of volume it stayed almost at the same level with only a small decrease of 0.14%.

As for the area, the highest decrease of mortgage lending during 2008 was observed in Prague with about a 27.3% fall. On the other hand, the smallest breakdown was registered in the Jihočeský (-5.4%) and the Liberecký region (-10.4%).

Table 19 and *Table 20* show the number and volume of loans provided to the population during the period 2002 – 2008. The greatest fall was recorded in case of the mortgage loans intended for house or flat construction, with a 33.64% fall in number and a 32.02% decrease in volume. Mortgages for property purchase registered a 32.34% decrease in number and a 28.83% decrease in volume. The decrease in volume is not as dramatic as it is in case of the number of mortgage loans. The year 2008 was even the second most successful period during the modern history of mortgage market in terms of total amount of mortgage loans provided by banks.

Despite of the fact that the mortgage market is decreasing, the average amount of mortgage loans is rising. In 2008 the average mortgage loan for construction reached

CZK 1,734,658 (a 2.44% increase) and the average amount of mortgages for property purchase was CZK 1,849,585 (a 5.17% increase). See *Table 21*.

The highest number of mortgage loans is provided in Prague, the Jihomoravský and the Moravskoslezský region. *Table 22* shows three indicators – the number of people per one mortgage loan, the amount of mortgage loans per one person, and the average amount of mortgage loans in different regions. The number of people per one mortgage loan represents how many citizens fall on one mortgage loan in a particular region. It means that, for example, in Prague every third family has a mortgage loan (on condition that every family has in average three persons). The mortgage loan amount per one person represents the average indebtedness in a concrete region. In case of the Czech Republic, this number is the highest in Prague (CZK 172,904) followed by the Ústecký region (CZK 72,086) and the Královéhradecký region (CZK 59,786). The last indicator registers the average amount of mortgage loans provided by banks in a particular region. The highest mortgages are provided in Prague, the Středočeský and the Jihočeský region (9, 17).

Based on the residential mortgage debt to GDP ratio, the number of people in the Czech Republic with mortgage loans is still small compared to the EU average. The residential mortgage debt to GDP ratio in the Czech Republic was at 9.1% in 2006 and 16.6% in 2007. This ratio is low compared to many other European countries and is considerably lower than the EU average with 50% debt to GDP ratio. That means that there is still a space for potential future growth.

The mortgage market offers a wide range of products, available to Czech citizens as well as to foreigners. EU citizens can obtain a mortgage loan without any problems. Applicants who are not Czech or EU citizens can purchase a property and get the mortgage loan through a Czech registered company. The most common loan to value ratio provided by banks is between 85-90%. A 100% mortgage loan appears more rarely. Interest-only and buy-to-let products are not yet available on the Czech mortgage market. The refinancing of a mortgage loan is possible. The Czech mortgage market became very attractive for foreign investors, because of relatively low interest rates, low buying costs, a wide range of financial products and easy application process. Despite the huge growth in mortgage lending in the last few years and subsequent decrease in 2008, the mortgage market has potential to expand in the future (16).

4.5 Practical example

This part represents a concrete example of a young family that decided to purchase a property in the near future. The example focuses on analysis and comparing of financial products (in this case mortgage loans), offered by selected mortgage loan providers available on the Czech mortgage market. The financial products are compared on the basis of several predetermined mortgage loan parameters. The analysis is executed based on data provided by the Simply Company. The main goal is to review the financial situation of the family, their needs and wishes and on the basis of these facts to propose the best suitable mortgage loan.

4.5.1 Characteristics of the Family and Financial Situation

Mr. Moravec is 30 years old. He graduated in informatics at University of Economics in Prague in 2004 and since his graduation he worked in various small private companies in the area of information technology. Since 2007, he has been an IT manager in a Prague-based company that specializes in the construction of large capacity steel storage tanks and steel structures. He is married with no children. His wife Mrs. Moravcová is 26 years old. She finished her studies at Commercial College in Prague in 2002 and she’s now working as an assistant in advertising and marketing department in an international auditing company.

The common monthly net income of the couple is CZK 47,000. Mr. Moravec has a total monthly net income of CZK 25,000 and Mrs. Moravcová earns CZK 23,000 a month.

Mr. Moravec has his own financial resources of CZK 375,000. This sum was obtained from the common part of a sold weekend house after one of their grandmother's death. The monthly expenses consist of everyday spending on food, drinks, free time, services (telephone, internet, television, fare etc.) and a monthly rent for a hired apartment. The family has no loan or leasing instalments and no other extra expenses.

4.5.2 Basic Mortgage Loan Parameters and Proposed Financial Products

A mortgage loan is intended for a flat purchase. The price of the flat that Mr. and Mrs. Moravec want to purchase is CZK 2,500,000. They want to apply for the mortgage loan together. They want to repay the mortgage loan for 20 or maximum 30 years. The fixation period of the interest rate is also under consideration – it should be three, five or ten years. Despite the fact that the family has their own financial resources at their disposal, they want to analyze two possible options. The first one will cover 80% and the second one the whole 100% of the collateral value of the real property. Mr. Moravec also heard about the possibility to combine a mortgage loan with capital life insurance. This combination will be also introduced as one of the possible solutions.

Based on the financial situation, the basic needs and options of this young family, the following combinations were proposed:

First option
Price of the flat CZK 2,500,000, monthly net income CZK 25,000 and 23,000, two applicants, loan maturity 30 years, <u>fixation period 3 years</u>, mortgage loan up to 80% of the real property value.

Second Option
Price of the flat CZK 2,500,000, monthly net income CZK 25,000 and 23,000, two applicants, loan maturity 30 years, <u>fixation period 5 years</u>, mortgage loan up to 80% of the real property value.

Third option

Price of the flat CZK 2,500,000, monthly net income CZK 25,000 a 23,000, two applicants, loan maturity 30 years, fixation period 10 years, mortgage loan up to 80% of the real property value.

Fourth option

Price of the flat CZK 2,500,000, monthly net income CZK 25,000 a 23,000, two applicants, loan maturity 20 years, fixation period 3 years, mortgage loan up to 80% of the real property value.

Fifth option

Price of the flat CZK 2,500,000, monthly net income CZK 25,000 a 23,000, two applicants, loan maturity 30 years, fixation period 3 years, mortgage loan up to 100% of the real property value.

Sixth option

Price of the flat CZK 2,500,000, monthly net income CZK 25,000 a 23,000, two applicants, loan maturity 30 years, fixation period 3 years, mortgage loan up to 80% of the real property value. Mortgage loan is combined with capital life insurance.

The first option offers the standard mortgage loan parameters. The mortgage loan covers 80% of the real estate price, which, in this case, is CZK 2 million. Loan maturity is set up for 30 years with a 3 year fixation period of the interest rate. The selected loan providers offer interest rates which fluctuate from 4.99 to 5.94% per annum. The lowest interest rate is provided by Komerční Banka, with 4.99% per annum and a monthly payment of CZK 10,724. The mortgage loan costs are also relatively low – the bank charges CZK 2,900 for the processing of the loan and CZK 150 every month for the loan administration. Other two lowest interest rates are offered by Česká Spořitelna and Hypoteční Banka. Česká Spořitelna provides a mortgage loan with a 5.19% interest rate and a monthly payment of CZK 11,059. This bank processes a mortgage loan without any payments, and charges CZK 200 for the loan administration. Hypoteční Banka has a 5.49% interest rate and a CZK 11,343 monthly payment. The cost for the processing of the mortgage loan is relatively high. The loan processing fee is calculated as 0.8% of the loan provided, which in this case is CZK 16,000. Hypoteční Banka charges CZK 150 for the loan administration.

Table 1

Option	**A**	**B**	**C**	**D**	**E**	**F**
Bank	Hypoteční Banka	Česká spořitelna	Wüstenrot	Komerční Banka	LBBW BANK	Raiffeisen bank
Real estate price (CZK)	2,500,000	2,500,000	2,500,000	2,500,000	2,500,000	2,500,000
Loan amount (CZK)	2,000,000	2,000,000	2,000,000	2,000,000	2,000,000	2,000,000
LTV (%)	80	80	80	80	80	80
Loan maturity (years)	30	30	30	30	30	30
Fixation period (years)	3	3	3	3	3	3
Interest rate p.a. (%)	5.49	5.19	5.84	4.99	5.85	5.94
Monthly payment (CZK)	11,343	11,059	11,786	10,724	11,907	11,914
Processing of a ML (CZK)	16,000	Free of charge	16,000	2,900	9,000	Free of charge
Monthly administration of ML (CZK)	150	200	150	150	150	150

Source: own processing based on data provided by Simply company

The second option differs from the first option only in the fixation period of the interest rate. The other parameters of the mortgage loan are the same. The current trend of the interest rate unification for shorter fixation periods (up to 10 years) is proved by the offers of Hypoteční Banka, Česká Spořitelna and Komerční Banka. These three banks provide mortgage loans for the same interest rate in case of the 3 year and also 5 year fixation period. Monthly payments and loan costs stay unchangeable. Wüstenrot and LBBW BANK offer a decreased interest rate for five year fixation period. Raiffeisenbank has the highest interest rate, which is 6.54% per annum. The most optimal conditions are again provided by Komerční Banka – a 4.99% interest rate and a monthly payment of CZK 10,724.

Table 2

Option	**A**	**B**	**C**	**D**	**E**	**F**
Bank	Hypoteční Banka	Česká spořitelna	Wüstenrot	Komerční Banka	LBBW BANK	Raiffeisen bank
Real estate price (CZK)	2,500,000	2,500,000	2,500,000	2,500,000	2,500,000	2,500,000
Loan amount (CZK)	2,000,000	2,000,000	2,000,000	2,000,000	2,000,000	2,000,000
LTV (%)	80	80	80	80	80	80
Loan maturity (years)	30	30	30	30	30	30
Fixation period (years)	5	5	5	5	5	5
Interest rate p.a. (%)	5.49	5.19	5.64	4.99	5.74	6.54
Monthly payment (CZK)	11,343	11,059	11,532	10,724	11,765	12,694
Processing of ML (CZK)	16,000	Free of charge	16,000	2,900	9,000	Free of charge
Monthly administration of ML (CZK)	150	200	150	150	150	150

Source: own processing based on data provided by Simply company

The third option has the same mortgage loan parameters as proposed in the first option. It differs again only in the fixation period, which is 10 years in this case. Česká Spořitelna and Komerční Banka offer the same interest rates in all three cases – a 3, 5 and 10 year fixation period. Raiffeisenbank has the same rate as for the 5 year fixation period, which is 6.54%. All three other banks increase their interest rate by minimum 0.20% compared to 5 year fixation period. Because Komerční Banka doesn't change its interest rate even for the 10 year fixation period, it again has the lowest interest rate (4.99%) from all selected banks.

Table 3

Option	**A**	**B**	**C**	**D**	**E**	**F**
Bank	Hypoteční Banka	Česká spořitelna	Wüstenrot	Komerční Banka	LBBW BANK	Raiffeisen bank
Real estate price (CZK)	2,500,000	2,500,000	2,500,000	2,500,000	2,500,000	2,500,000
Loan amount (CZK)	2,000,000	2,000,000	2,000,000	2,000,000	2,000,000	2,000,000
LTV (%)	80	80	80	80	80	80
Loan maturity (years)	30	30	30	30	30	30
Fixation period (years)	10	10	10	10	10	10
Interest rate p.a. (%)	5.69	5.19	6.25	4.99	5.95	6.54
Monthly payment (CZK)	11,595	11,059	12,314	10,724	12,038	12,694
Processing of ML (CZK)	16,000	Free of charge	16,000	2,900	9,000	Free of charge
Monthly administration of ML (CZK)	150	200	150	150	150	150

Source: own processing based on data provided by Simply company

The maturity of the loan can be also shorter than 30 years. The **fourth option** compares mortgage loans for the period of 20 years. Other parameters are the same as in the first option. The mortgage loan covers 80% of the real estate price; the fixation period is 3 years. It is obvious that in comparison with the first option, all selected banks do not change their interest rates. The largest changes occur in the monthly payment. In this option, the regular monthly instalments are about CZK 2,000 higher than in the first option, with a 30 year loan maturity.

Table 4

Option	**A**	**B**	**C**	**D**	**E**	**F**
Bank	Hypoteční Banka	Česká spořitelna	Wüstenrot	Komerční banka	LBBW BANK	Raiffeisen bank
Real estate price (CZK)	2,500,000	2,500,000	2,500,000	2,500,000	2,500,000	2,500,000
Loan amount (CZK)	2,000,000	2,000,000	2,000,000	2,000,000	2,000,000	2,000,000
LTV (%)	80	80	80	80	80	80
Loan maturity (years)	20	20	20	20	20	20
Fixation period (years)	3	3	3	3	3	3
Interest rate p.a. (%)	5.49	5.19	5.84	4.99	5.85	5.94
Monthly payment (CZK)	13,746	13,490	14,145	13,188	14,254	14,529
Processing of ML (CZK)	16,000	Free of charge	16,000	2,900	9,000	Free of charge
Monthly administration of ML (CZK)	150	200	150	150	150	150

Source: own processing based on data provided by Simply company

The fifth option differs from the previous ones in the loan to value ratio. The mortgage loan covers 100% of the property value. Wüstenrot and Raiffeisenbank don't provide this type of mortgage loan. The loan maturity is 30 years with a 3 years fixation period. The benefits of this type are that the client gets funds in the amount of 100% of the property value and does not have to have any savings. Because of increasing risk for loan providers, a 100% mortgage loan has higher interest rates that nowadays in most cases exceed 6% per annum. From all four banks that are on the list, Česká Spořitelna offers the lowest interest rate – 5.19% per annum. Česká spořitelna also charges no fee for processing of the mortgage loan. Komerční Banka guarantees the interest rate of 5.99% per annum and charges CZK 2,900 for the mortgage loan processing. The other two banks offer a 100% mortgage loan at an interest rate that exceeds 6% per annum.

Table 5

Option	A	B	C	D
Bank	Hypoteční Banka	Česká spořitelna	Komerční Banka	LBBW BANK
Real estate price (CZK)	2,500,000	2,500,000	2,500,000	2,500,000
Loan amount (CZK)	2,500,000	2,500,000	2,500,000	2,500,000
LTV (%)	100	100	100	100
Loan maturity (years)	30	30	30	30
Fixation period (years)	3	3	3	3
Interest rate p.a. (%)	6.49	5.19	5.99	6.3
Monthly payment (CZK)	15,785	13,824	14,973	15,624
Processing of ML (CZK)	20,000	Free of charge	2,900	10,000
Monthly administration of ML (CZK)	150	200	150	150

Source: own processing based on data provided by Simply company

The **sixth option** is a combination of the mortgage loan with capital life insurance. The current situation on the mortgage market is that only Hypoteční Banka offers this type of combination. Raiffeisenbank offered this type of combination but had to suspend this product because of current unstable financial situation on the market. The mortgage loan can cover up to 85 % of the collateral real property value. Hypoteční Banka cooperates with the ING and UNIQA insurance companies. The duration of the mortgage loan and insurance has to be the same, which is 30 years in this case. The monthly payment, which is CZK 14,630 consists of two parts – interest and insurance installments. As for this type of combination, the client only pays the interest for the duration of the mortgage loan. In this example the interest reaches CZK 9,400 at a 5.64% interest rate level and the rest CZK 5,230 is investment in life insurance. The principal is repaid in a lump-sump or gradually from the capital life insurance at the end of the loan maturity.

Sixth Option – Table 6

Option	**A**
Bank	Hypoteční Banka
Real estate price (CZK)	2,500,000
Loan amount (CZK)	2,000,000
LTV (%)	85
Loan maturity (years)	30
Fixation period (years)	3
Interest rate p.a. (%)	5.64
Monthly payment (CZK)	14,630
Processing of ML (CZK)	16,000
Monthly administration of ML (CZK)	150

Source: own processing based on data provided by Simply company

4.5.3 Data Analysis and Recommendations

It is necessary to note that the whole data (interest rates, monthly payments and mortgage costs) mentioned above are valid from March 1st, 2009 according to price lists and interest rate lists of selected loan providers. The mortgage loan providers were chosen on the basis of the lowest interest rates and mortgage costs available on the mortgage market on the 1st of March 2009. The market share and extension (according to the numbers and volume of mortgage loans provided by banks) of the mortgage loan providers were also taken into account. The analysis is executed based on the data provided by the Simply Company.

The first three options differ from each other only in the predetermined fixation period of the interest rate. The 3, 5 and 10 years fixation periods are compared. Interest rates fluctuate from 4.99 to 5.94% per annum in the first option (3 years fixation period). Komerční Banka provides a mortgage loan at the lowest interest rate (4.99% per annum) with relatively low costs for the loan processing (CZK 2,900) in the first option. The second option (5 years fixation period) offers mortgage loans at a minimum 4.99% and a maximum 6.54% of interest rate. The most optimal conditions are again provided by Komerční Banka. As for the third option (10 years fixation period), the interest rates fluctuate from 4.99% to 6.54% per annum. Česká Spořitelna and Komerční Banka provide mortgage loans at the same interest rates for all three fixation periods. Hypoteční Banka, Wüstenrot, LBBW BANK and Raiffeisen bank offer a higher interest rate in case of 10 years fixation period. The loan maturity is 30 years. The mortgage loan covers 80% of the real estate price, in all three options. One’s own financial resources amounting to CZK 500,000 are required. Mr. Moravec and his wife dispose of CZK 375,000. It means that they should lend the rest of the money in some other financial institution or select another type of mortgage loan.

The fourth option differs from the previous ones in the loan maturity, which is 20 years long in this case. All offered interest rates are the same as in case of the first option. The largest change occurs in the monthly payments, which are about CZK 2,000 higher for the 20 year loan maturity. However, the same problem arises, concerning one's own financial recources needed to cover the whole price of the real estate.

The mortgage loan covers 100% of the property value in the fifth option. This type of loan has higher interest rates compared to the 80% mortgage loan. Because of increasing risk for loan providers, 100% mortgage loan has higher interest rates than 80% mortgage. Interest rates fluctuate from 5.19 to 6.49% per annum. The benefit of this type of mortgage loan is that Mr. and Mrs. Moravec don't have to have any of their own financial resources to cover the whole price of the real estate.

As for the last option, a combination of the mortgage loan with capital life insurance is proposed. This type of combination has become very popular during the last few years. Almost all of the large consultant companies in the area of mortgage loans suggest this combination to their clients. The basis of this product is so that the client only pays the interest for the duration of the mortgage loan. The rest of the financial resources (that would decrease the principal in case of the standard mortgage loan) are invested in the life insurance. The principal is then repaid in a lump-sump or gradually from the accumulated money in the capital life insurance at the end of the loan maturity. However, this combination is more suitable for a bank (the interest rates are paid from the total sum of the mortgage loan during the whole period), an insurance company (a good contract) or a financial agent (double commission for the mortgage loan and insurance) than for the client. Financial advisers very often forget to mention fees, connected with investment. Another problem is that the calculations of future earnings often do not take into consideration the current value of the money. The development of accumulated investment depends on future situation on financial markets, which does not always correspond with the data, represented by insurance companies. Furthermore, the final amount of monthly payment consisting of the interest and insurance instalments is in the majority of cases higher than an ordinary mortgage loan monthly payment.

From the analysis executed above, the best suitable solution for Mr. and Mrs. Moravec is a 100% mortgage loan. The loan maturity is 30 years with 3 years fixation period. Interest rates fluctuate from 5.19 to 6.49% per annum in this type of loan. From the four banks that are on the list, Česká Spořitelna offers the lowest interest rate which is 5.19% per annum. This rate is fixed for a period of 3 years. After this period expires, Mr. and Mrs. Moravec can agree on the new interest rate and conditions with loan provider. Česká Spořitelna charges no fee for processing of the mortgage loan and CZK 200 for monthly administration. The monthly instalement is CZK 13,824. Mr. and Mrs. Moravec will get the loan in the total amount of CZK 2,500,000. They can use their own funds (CZK 375,000) for flat reconstruction, household equipment or other fees connected with the real estate purchase.

4.6 Summary of the Practical Part

The practical part analyzes the structure, development and current situation both at the level of European mortgage market and the Czech mortgage market. This part is concerned with the description of the European residential sector and briefly explains housing policies implemented in Europe. The European mortgage market and its development in previous years are discussed. The practical part also contains analysis of the Czech real estate market and the Czech mortgage market. It includes historical facts about the development of the Czech mortgage market, current structure, situation and trends. Finally, there is a practical example including research and proposals.

5 Conclusions

Real estate activity is, in general, one of the mainstays of modern society. All important human activities are performed in buildings. At the level of individual households, a dwelling is used for everyday life; it provides a shelter and protects humans from unfavourable weather conditions. Real property represents a significant part of personal wealth. The property sector itself has a big impact on the financial market and in particular on the mortgage market and influences the activities of financial institutions. Understanding the mortgage market is becoming more and more difficult. The increase in the proportion of mortgage loans in relation to total bank lending has led to huge competition on the mortgage markets. Financial institutions try to maintain or expand their market share inside the domestic market or even in foreign countries.

A mortgage loan represents a lien on a real estate property, which requires periodic monthly payment of both principal and interest during the term of the mortgage. Residential or commercial purchasing of a real property can be provided through a mortgage loan. However, only mortgage loans for private individuals were discussed in this paper.

The aim of the literature review of this thesis was to analyze and interpret basic theoretical notions connected with the mortgage market and mortgage loans. The given aim was fulfilled by the theoretical interpretation of useful concepts. The theoretical part defined a mortgage loan as a long-term loan used for financing of purchasing, construction, reconstruction or modernization of real property. Interest rate and fixation period belong among very important factors of the mortgage loan. The duration and amount of a mortgage loan, inflation rate, monetary policy and other significant factors influence the level and development of interest rates. The average interest rate of a new loan given, valid from the March 1st, 2009 in the Czech Republic, was 5.74%. The highest amount of mortgage loans is provided at a 1 to maximum 5 year fixation period. Banks gather information about the borrower and evaluate the credit worthiness of the client. Credit worthiness could be defined as a current and future ability of the debtor to meet debt obligations, and it serves as a very important aspect for loan approval. Loan costs can vary significantly from one mortgage to another. Nevertheless, there are four basic groups of fees that the borrower can expect: the fees for loan preparation, the fees for processing and administration of a mortgage loan, the fees for changes in contractual conditions, and other fees. There are three types of payments used to repay the loan. The most common way is regular monthly instalments, the so-called annuities, made up of two components – principal and interest. A mortgage loan is always secured by a real property. The lien is an instrument used to secure the mortgage loan, interest and fees. In other words, the borrower gives the lender a lien on the property as a guarantee for the loan. The property appraisal process is also always required by the bank, which uses an appraised value to determine the mortgage loan amount. There is a possibility of combining the mortgage loan with other financial products. The most frequent combinations are the combination of the mortgage loan with the building savings loan and the combination of the mortgage loan with capital life insurance.

One of the objectives of the practical part was to analyze and characterize the European residential sector and mortgage market. The residential sector plays one of the most significant roles in modern society. Housing demand, one of the most important characteristics of this sector, is mainly influenced by population, population density, number of households, standard of living and average family spending. There are 224.1 million of dwellings in the EU-27. Germany, France, Italy and the United Kingdom are the countries with the largest number of dwellings, representing about 53.4% of all dwellings from the EU-27. The Czech Republic had 4.5 million dwellings in 2006. As for the housing production in Europe, the period 1997-2006 can be characterized as a period of wild housing development and intensive housing construction. The leading countries are Spain, France and Germany, where the highest number of building permits were issued in 2006. The Czech Republic issued 49,777 building permits during the same year. Unfortunately, the year 2007 brought a decrease in housing demand; a huge decrease in housing starts was registered mainly in Denmark, Spain, Sweden and Croatia. There was a strong growth of the prices of houses in most European countries during the period 1997-2006. Ireland, the United Kingdom and Spain were the countries where the prices went up the most.

The European mortgage market is a place with a wide range of financial products offered by a huge number of mortgage loan providers. This market has gone through a significant period of development. During the period of 1997-2006, the volume of residential mortgage loans outstanding in Europe doubled and increased from EUR 2.5 billion (1997) to EUR 5.7 biillion (2006). A growth in lending activities has been noted in many countries, mainly in the "new" member states of the EU-27. Increasing bank competition led to a credit cost reduction and an easier access to the mortgage loans. The year 2007 is characterized by financial disturbances affected by the sub-prime sector of the US mortgage market. This situation influenced lending activity and the mortgage market as a whole and bustled the reduction of mortgage lending supply and demand in many European countries.

Other important aim of the practical part was to analyze and discuss the Czech real estate and mortgage market. The Czech Republic has one of the best performing real estate markets in Central and Eastern Europe. In the last five years, since the entrance of the Czech Republic into the EU, the real estate market has been rapidly growing. This progression was encouraged mainly by a strong economy, a relative political stability, an increase of wages, a huge amount of foreign direct investment and a mature mortgage market with low interest rates. There is a total housing stock of about 4,336,000 units, from which only 47% are in home ownership. The property construction has been significantly growing over the last ten years with about 41,649 homes completed and 43,769 of constructions started during 2007.

In terms of development of the mortgage market, mortgage lending has been growing rapidly over the past few years. The mortgage market development has been driven mainly by strong demand and high prices of property. Potential buyers don't have their own resources to buy a property and therefore use financial offers of loan providers. Nowadays, there are sixteen banks on the Czech mortgage market that provide mortgage loans. Hypoteční Banka was the biggest mortgage loan provider on the Czech mortgage market in 2008. Česká Spořitelna, GE Money Bank, Raiffeisenbank, Volksbank, Komerční Banka and Wüstenrot are also main players on the Czech mortgage market. The year 2008 wasn't so optimistic in terms of mortgage lending reinforcement. The mortgage market (based on the volume of provided mortgage loans) fell by 20%. In 2008, banks provided mortgage loans totalling CZK 114 milliard, while in the previous year it was CZK 142 milliard. Banks in the Czech Republic have already gone through the most important stage, and nowadays, they can process mortgage applications relatively quickly and efficiently. Nevertheless, they still face a number of new challenges that occur as new market trends. In terms of the future outlook for mortgage loan providers, mortgage lending presents a number of interesting opportunities. It will depend on the bank's sales strategies and the efficiency of their distribution channels whether or not they will be able to take advantage of these new opportunities.

Finally, a practical example which contains concrete proposals of mortgage loans for an actual family was introduced. Based on the basic needs, wishes, the financial situation of the family, and fundamental mortgage loan parameters, six different options were proposed. The options mainly differ from each other in the fixation period, loan to value ratio and loan maturity. The 100% mortgage loan with the loan maturity of 30 years and a 3 year fixation period was proposed as the most suitable solution. Česká Spořitelna was proposed as the specific loan provider, since it offers the lowest interest rate, which is 5.19% per annum, charges no fee for mortgage loan processing, and CZK 200 for monthly administration.

All the defined objectives, both for the literature review and for the practical part, were fulfilled.

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8 Supplements

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Table 1 Development of interest rates January 2003 - January 2009

Period	Intereset rate (%)
01.2003	5.7
06.2003	4.9
01.2004	4.95
06.2004	4.8
01.2005	4.6
06.2005	3.5
01.2006	3.7
06.2006	4.0
01.2007	4.3
06.2007	4.4
01.2008	5.5
06.2008	5.7
01.2009	5.75

Source: Hypoindex 2009

Table 2 Interest rate comparison in period from November 2008 to January 2009

	1 year fixation period			3 year fixation period			5 year fixation period		
Bank	**5.11.2008 (%)**	**5.1.2009 (%)**	**Variation**	**5.11.2008 (%)**	**5.1.2009 (%)**	**Variation**	**5.11.2008 (%)**	**5.1.2009 (%)**	**Variation**
LBBW Bank	5.64	5.34	-0.30	4.85	4.69	-0.16	4.84	4.75	-0.09
Citibank	5.29	n/a	n/a	5.29	n/a	n/a	5.29	n/a	n/a
Česká Pojišťovna	5.94	5.94	0.00	5.74	5.74	0.00	5.74	5.74	0.00
Česká Spořitelna	5.29	5.29	0.00	5.19	5.19	0.00	5.19	5.19	0.00
ČSOB	5.69	5.69	0.00	5.49	5.49	0.00	5.49	5.49	0.00
GE Money Bank	5.75	6.05	0.30	5.65	5.95	0.30	5.65	5.95	0.30
Hypoteční Banka	5.69	5.69	0.00	5.49	5.49	0.00	5.49	5.49	0.00
Komerční Banka	5.59	5.69	0.10	5.59	5.19	-0.40	5.59	5.19	-0.40
mBank	6.33	6.56	0.23	5.73	6.12	0.39	5.75	6.31	0.56
Raiffeisenbank	5.74	5.34	-0.40	5.54	5.54	0.00	6.29	6.14	-0.15
UniCredit Bank	5.61	4.90	-0.71	5.62	5.15	-0.47	5.66	5.15	-0.51
Volksbank	5.29	7.59	2.30	5.29	7.29	2.00	5.39	7.29	1.90
Wüstenrot hypoteční Banka	5.54	5.54	0.00	5.54	5.54	0.00	5.34	5.34	0.00

Source: Hypoindex 2009

Table 3 Size of dwellings in selected European countries in various years

	Austria 2004	**Denmark 2002**	**Finland 2004**	**France 2002**	**Germany 2002**	**Poland 2002**	**Greece 2001**	**CZ 2001**	**Norway 2001**
Under 50 m^2 (%)	11.9	6.1	22	13.6	11.2	35.6	10.1	**17.7**	8.5
50 to 74 m^2 (%)	24.8	20.8	29.8	25.6	31.5	33.1	28.9	**40.6**	21.9
75 to 99 m^2 (%)	23.1	23.4	21.0	26.5	22.6	12.0	29.7	**22.2**	15.8
100 to 149 m^2 (%)	27.3	31.0	20.9	24.9	25.7	13.2	26.3	**14.5**	30.8
150 m^2 and more (%)	12.9	18.5	5.	9.5	9.1	6.0	5.1	**4.1**	23.0

Source: *United Nations Economic Commission for Europe (2006), Bulletin of Housing for Europe and North America*

Table 4 Total hosing stock in selected EU countries in 1997 and 2006 (in thousands of units)

	1997	**2006**	**Variation 1997-2006 (%)**
EU-27 without Malta		224,115	
Czech Republic	n.a.	4,516	
Germany	37,050	39,740	7
France	28,267	29,133	3
Italy	26,406	26,548	1
United Kingdom	24,721	26,194	6
Poland	11,613	12,987	12
Portugal	4,760	5,520	16
Sweden	4,260	4,436	4
Hungary	4,005	4,238	6
Bulgaria	n.a.	3,729	
Austria	3,610	3,727	3
Finland	2,416	2,669	10
Slovenia	690	805	17
Estonia	620	638	3
Luxembourg	114	125	10

Note: The latest data for Finland, Luxembourg, Slovenia and UK are from 2005
Source: European Mortgage Federation 2007, Hypostat 2006

Table 5 Percentage of owner-occupied houses in Europe in various years

	Latest data available	**Owner-occupation rate (%)**
Romania	2002	97.2
Lithuania	2005	97.0
Bulgaria	2002	96.5
Hungary	2003	92.0
Latvia	2006	87.0
Spain	2005	86.3
Estonia	2002	85.0
Slovenia	2003	84.0
Italy	2002	80.0
Slovakia	2006	79.0
Portugal	2006	76.0
Greece	2006	75.0
Poland	2004	75.0
Luxembourg	2005	74.6
Republic of Ireland	2006	74.5
Malta	2005	74.1
United Kingdom	2005	70.0
Cyprus	2001	68.3
Belgium	2001	68.0
Finland	2005	58.0
Austria	2003	57.0
France	2004	56.5
Denmark	2006	55.0
Netherlands	2002	54.2
Sweden	2005	50.0
Czech Republic	2001	47.0
Germany	2002	43.2
EU-27		**67.0**

Source: European Mortgage Federation 2007, Hypostat 2006

Table 6 Building permits for housing units in Europe, in 1997 and 2006

	1997	**2006**	**Variation 1997-2006 (%)**
Spain	337,730	865,561	156.3
France	299,400	561,700	87.6
Germany	530,263	247,541	- 53.3
Poland	62,000	160,545	158.9
Netherlands	101,501	96,447	- 5.0
Greece	69,867	81,301	16.4
Portugal	44,200	68,615	55.2
Austria	56,925	n.a.	
Belgium	50,194	60,962	21.5
Romania	n.a.	51,065	
Czech Republic	30,819	49,777	61.5
Hungary	n.a.	44,826	
Italy	34,910	n.a.	
Finland	32,750	35,465	8.3
Republic of Ireland	13,729	n.a.	
Sweden	12,500	30,500	114.0
Denmark	17,947	29,180	62.6
Slovakia	12,844	20,529	60.3
Estonia	1,334	12,852	863.4
Malta	3,411	10,409	205.2
Cyprus	6,614	9,794	48.1
Lithuania	n.a.	7,482	
Latvia	n.a.	7,246	
Slovenia	n.a.	6,676	
Luxembourg	3,411	4,411	29.3

Source: European Mortgage Federation 2007, Hypostat 2006

Table 7 Housing starts, selected European countries, 2006 and 2007 (units)

Country	**2006**	**2007**	**Change (%)**
Denmark	12,895	7,765	-40
Spain	810,000	618,000	-24
Sweden	25,900	20,100	-22
Croatia	4,981	3,961	-20
Portugal	22,620	19,327	-15
Belgium	37,129	32,318	-13
Netherlands	86,578	76,835	-11
Norway	32,743	32,278	-1
Finland	27,381	30,114	10
Poland	115,353	133,826	16

Source: Thomson DataStream

Table 8 House price variation, selected European countries (annual variation 2006, cumulative variation 1997 – 2006)

	2006 (%)	**Variation 1997-2006 (%)**
Republic of Ireland	13.6	268.1
UK	6.3	184.5
Spain	10.4	168.9
Greece	9.0	167.6
Denmark	16.2	158.7
Netherlands	4.7	145.0
France	9.9	137.1
Sweden	11.4	130.6
Malta	3.5	125.3
Belgium	12.1	121.1
Finland	7.5	106.6
Portugal	2.1	48.2
Germany	-0.9	-5.7

Source: European Mortgage Federation 2007, Hypostat 2006

Table 9 Residential mortgage balances outstanding in EU-27, 2006 (in millions of Euros and percentages)

	Outstanding balance 2006	**Growth (%) 2005-2006**	**Growth (%) 1997-2006**
United Kingdom	1,583,372	11.9	144.8
Germany	1,183,834	1.8	25.6
France	577,800	14.7	127.5
Spain	571,800	20.2	448.2
Netherlands	525,874	7.9	212.7
Italy	276,102	13.3	267.5
Denmark	221,970	13.4	108.7
Sweden	173,499	9.1	61.2
Republic of Ireland	123,288	24.6	617
Belgium	114,105	16.4	107.2
Portugal	91,895	15.7	117.9
Finland	73,200	11.0	129.3
Austria	60,669	12.7	104.7
Greece	57,145	25.8	912.1
Poland	22,514	53.7	1,005.3
Luxembourg	11,345	13.4	213.8
Hungary	10,215	11.0	710.1
Czech Republic	8,055	33.9	426.1
Latvia	4,680	86.5	9,650
Estonia	4,278	63.4	2,212.4
Slovakia	4,209	36.7	316.3
Cyprus	3,077	43.5	899
Lithuania	2,997	32.1	3,344.8
Romania	2,276	57.1	147.1
Slovenia	1,956	50.3	3,661.5
Malta	1,770	16.5	506.2
Bulgaria	1,745	73.5	3,958.1
EU-27	5,713,616	11.1	119.9

Note: Data used for Estonia, Cyprus and Lithuania is from 1998, 1999 for Latvia, Slovenia, Malta, Bulgaria and Poland, 2001 for Austria, 2002 for Czech Republic and Slovakia and 2004 for Romania
Source: European Mortgage Federation 2007

Table 10 Gross residential mortgage loans, selected EU-27 countries, 2006 (in millions of euros)

Country	**Gross residential loans 2006**
Estonia	2,339
Czech Republic	4,094
Lithuania	1,171
Hungary	2,611
United Kingdom	505,928
Republic of Ireland	39,872
Greece	15,444
Italy	89,657
Spain	155,676
France	149,080
Luxembourg	4,376
Netherlands	119,000
Germany	107,000
Belgium	24,328
Sweden	41,289
Finland	27,000
Denmark	56,171
Total	**1,253,751**

Source: European Mortgage Federation 2007

Table 11 Household indebtedness for housing purposes in selected EU countries, 2006

Country	**Total outstanding res. loans/gross disposable income of households (%)**
Netherlands	222.7
Denmark	222.4
Republic of Ireland	143.1
United Kingdom	131.3
Sweden	116.1
Finland	91.5
Spain	91.5
Portugal	83.3
Germany	79.6
Belgium	62.1
France	51.4
Austria	38.8
Italy	28.3
Czech Republic	14.7
Poland	13.0

Source: European Mortgage Federation 2007

Table 12 Real interbank interest rates in selected European countries, 2006

Country	**Interest rate (%)**
Belgium	1.81
Finland	2.88
France	2.33
Germany	2.63
Greece	0.65
Republic of Ireland	1.03
Italy	1.93
Netherlands	2.33
Norway	2.36
Portugal	1.53
Spain	1.16
Sweden	2.35
United Kingdom	2.75

Source: Thomson DataStream and IMF World Economic Outlook Database

Table 13 Credit institutions subscribing to the European Code of Conduct, 2007

Country	**Number of credit institutions registered**	**Percentage of the total national mortgage market (%)**
Belgium	27	90
Denmark	6	94
Germany	1,454	90
Greece	21	95
France	42	40
Republic of Ireland	12	99
Italy	512	96
Luxembourg	15	90
Netherlands	124	99
Austria	607	99
Portugal	21	95
Finland	334	99
Sweden	90	95
United Kingdom	142	98
Norway	10	40

Source: European Banking Industry Committee

Table 14 Number of completed dwellings in the Czech Republic between 1996, 2006

Year	Completed dwellings in total
1996	14,482
1997	16,757
1998	22,183
1999	23,734
2000	25,207
2001	24,758
2002	27,291
2003	27,127
2004	32,268
2005	32,863
2006	30,190

Source: Czech Statistical Office

Table 15 Volume of mortgage loans provided by banks (in milliard CZK)

Year	**Volume of mortgage loans**
2001	14.728
2002	22.532
2003	36.212
2004	51.959
2005	72.096
2006	100.84
2007	142.289
2008	113.927

Source: Local Development Ministry

Table 16 Mortgage loan providers on Czech mortgage market, 2009

Bank
GE Money Bank
Hypoteční banka
LBBW Bank CZ
Citibank Europe
Česká Spořitelna
Československá obchodní banka
ING Bank N.V.
mBank
Komerční banka
Oberbank AG
Poštovní spořitelna
Raiffeisenbank
Volksbank CZ
UniCredit Bank
Waldviertler Sparkasse von 1842
Wüstenrot hypoteční banka

Source: Finance.cz

Table 17 Total number of mortgage loans provided by selected banks 2000-2008

Bank	**2008**	**2007**	**2006**	**2005**	**2004**	**2003**	**2002**	**2001**	**2000**
Česká spořitelna	14,340	29,140	23,100	17,000	14,000	10,000	6,957	4,878	1,260
GE Money Bank	4,222	5,575	3,726	3,161	3,087	2,657	1,544	1,491	377
Hypoteční banka	21,152	23,412	18,649	14,637	11,078	8,591	6,045	n.a.	n.a.
Raiffeisenbank	12,010	12,715	7,618	3,291	1,412	1,257	739	450	187
Volksbank	1,417	1,213	376	247	n.a.	n.a.	n.a.	n.a.	n.a.
Wüstenrot	2,273	1,424	1,262	754	700	419	n.a.	n.a.	n.a.
Other	14,614	9,865	12,613	11,936	n.a.	n.a.	n.a.	n.a.	n.a.

Note: Komerční Banka doesn't provide this type of information, so it is assumed that KB presents the biggest share in category "other".
Source: Hypoindex

Table 18 Volume of mortgage loans provided by banks 2000-2008 (in CZK in milliard)

Bank	**2008**	**2007**	**2006**	**2005**	**2004**	**2003**	**2002**	**2001**
Česká spořitelna	21.190	45.400	35.700	24.800	19.100	11.500	7.200	4.900
GE Money Bank	5.700	8.900	5.700	4.200	3.500	2.800	1.500	1.400
Hypoteční banka	39.600	40.400	26.400	18.300	11.600	8.400	5.500	n.a.
Raiffeisenbank	21.320	21.350	10.300	4.300	1.895	1.423	0.775	0.499
Volksbank	2.735	2.522	0.843	0.477	n.a.	n.a.	n.a.	n.a.
Wüstenrot	3.209	1.986	1.406	0.867	0.685	0.381	n.a.	n.a.
Other	20.173	21.731	20.491	19.152	n.a.	n.a.	n.a.	n.a.
Total	**113.927**	**142.289**	**100.84**	**72.096**	**51.959**	**36.212**	**22.532**	**14.728**

Note: Komerční Banka doesn't provide this type of information, so it is assumed that KB presents the biggest share in category "other".
Source: Hypoindex

Table 19 Number of mortgage loans provided to population 2002-2008

Year	**Number of mortgage loans**		
	Total	**Purchase (from total)**	**Construction (from total)**
2002	21,002	10,562	7,624
2003	31,478	16,106	9,611
2004	40,985	21,159	10,943
2005	51,026	31,890	14,780
2006	67,244	44,083	18,109
2007	83,344	54,492	20,724
2008	64,497	36,872	13,753
2008/2007	-22.61 %	-32.34 %	-33.64 %

Source: Hypoindex, The Ministry for Regional Development

Table 20 Volume of mortgage loans provided to population 2002-2008 (in CZK in thousand)

Year	**Volume of mortgage loans**		
	Total	**Purchase (from total)**	**Construction (from total)**
2002	22,532,310	10,074,348	9,098,544
2003	36,212,394	17,300,170	12,071,504
2004	51,959,481	25,989,734	15,605,660
2005	72,068,812	43,877,605	22,572,451
2006	100,839,687	65,642,127	28,818,108
2007	142,288,921	95,829,329	35,094,410
2008	113,927,177	68,197,887	23,856,758
2008/2007	-19.93 %	-28.83 %	-32.02 %

Source: Hypoindex, The Ministry for Regional Development

Table 21 Average amount of mortgage loans 2002-2008(in CZK)

Year	Average amount of mortgage loans	
	Purchase	Construction
2002	953,830	1,193,408
2003	1,074,144	1,256,009
2004	1,228,306	1,426,086
2005	1,375,905	1,527,229
2006	1,489,058	1,591,369
2007	1,758,594	1,693,419
2008	1,849,585	1,734,658
2008/2007	5.17 %	2.44 %

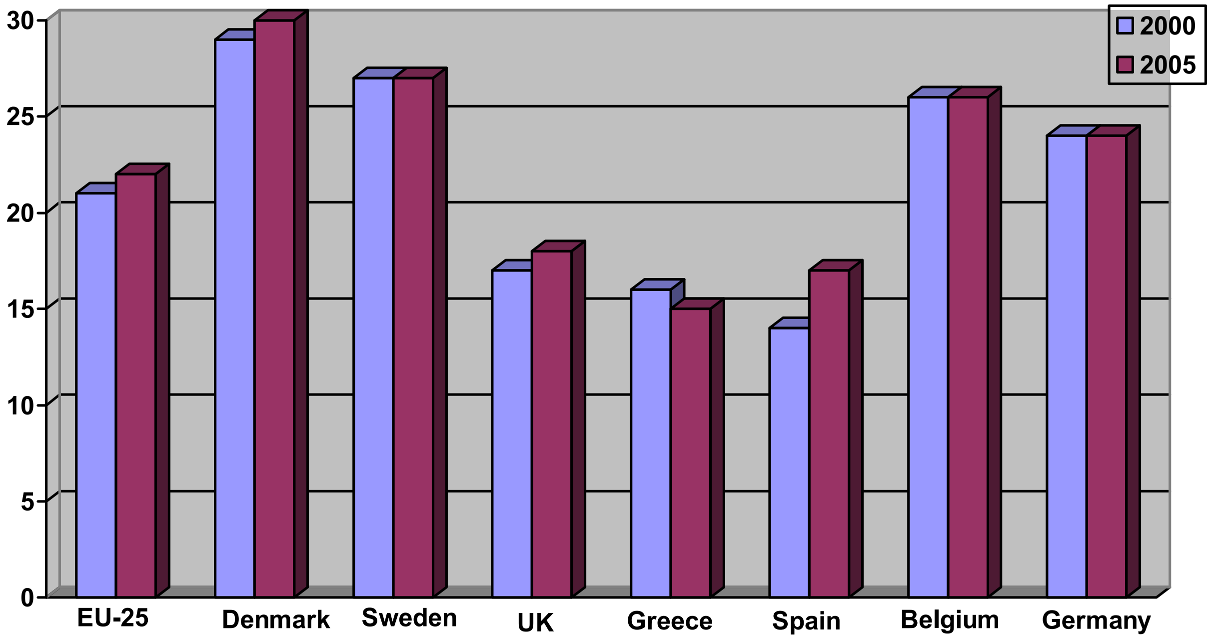
Source: Hypoindex, The Ministry for Regional Development

Table 22 Mortgage loans for citizens according to regions

Region	Number of people per one mortgage loan	Amount of mortgage loan per one person in CZK	Average amount of mortgage loan in CZK
Prague	11.1	172,904	1,927,262
Ústecký	15.7	72,086	1,132,489
Královehradecký	20.0	59,786	1,197,841
Plzeňský	23.6	53,722	1,267,655
Pardubický	24.0	53,284	1,276,417
Jihočeský	25.4	53,525	1,357,042
Liberecký	27.1	47,530	1,286,862
Jihomoravský	29.1	47,289	1,374,866
Olomoucký	31.4	39,152	1,230,545
Zlínský	33.6	34,003	1,143,535
Vysočina	37.8	29,904	1,129,172
Moravskoslzeský	40.6	31,268	1,270,753
Středočeský	45.4	30,897	1,402,352
Karlovarský	47.5	24,135	1,146,327

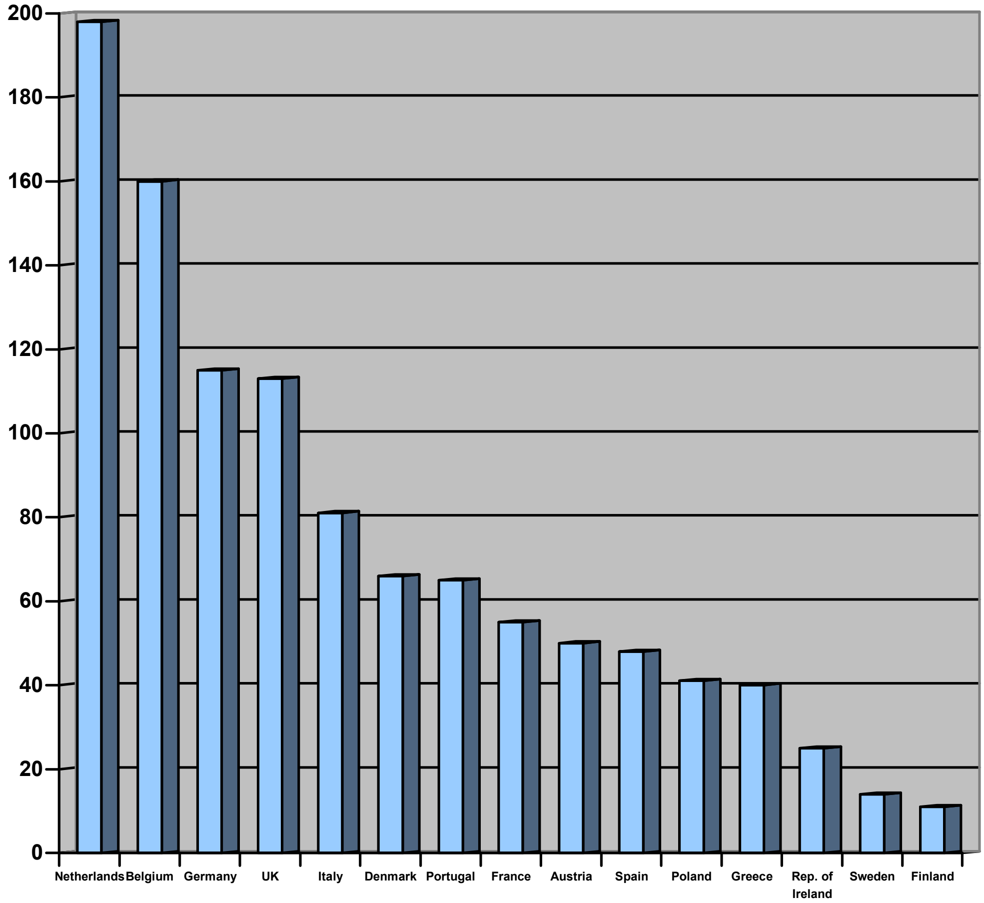
Source: Hypoindex, The Ministry for Regional Development

Graph 1 Family spending on housing in selected European countries in 2000 and 2005 (percentage of total expenditure)



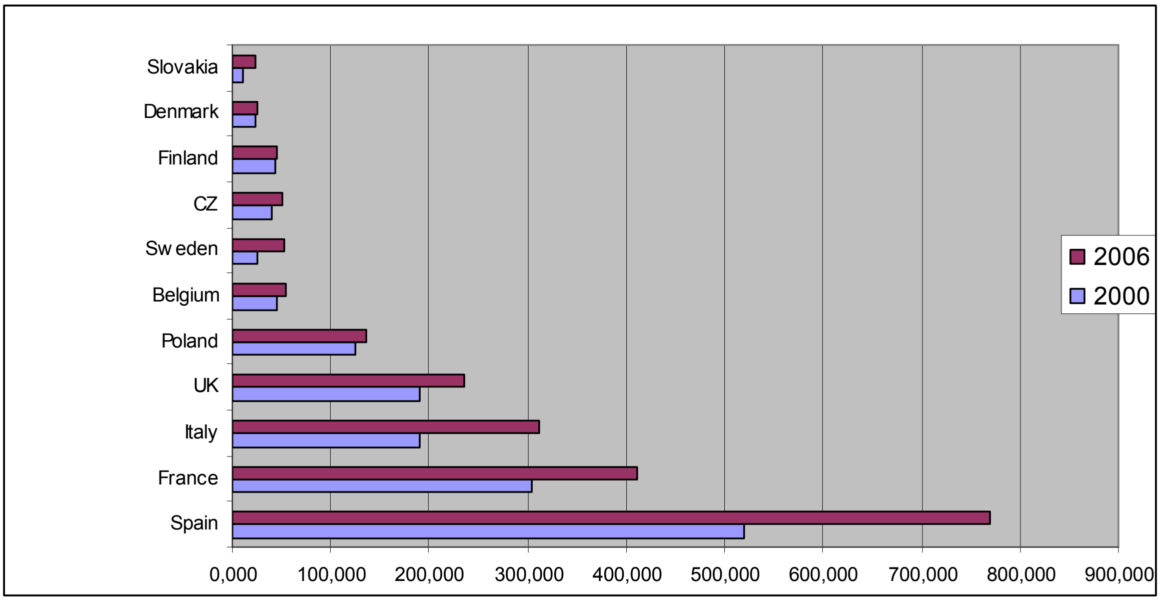
Note: The data for Sweden, Belgium, Spain and EU-25 corresponding to 2004.
Source: Ministry of Infrastructure of the Italian Republic (2006). Housing Statistics in the European Union 2005/2006

Graph 2 Housing density, selected European countries 2006 (dwellings per km²)



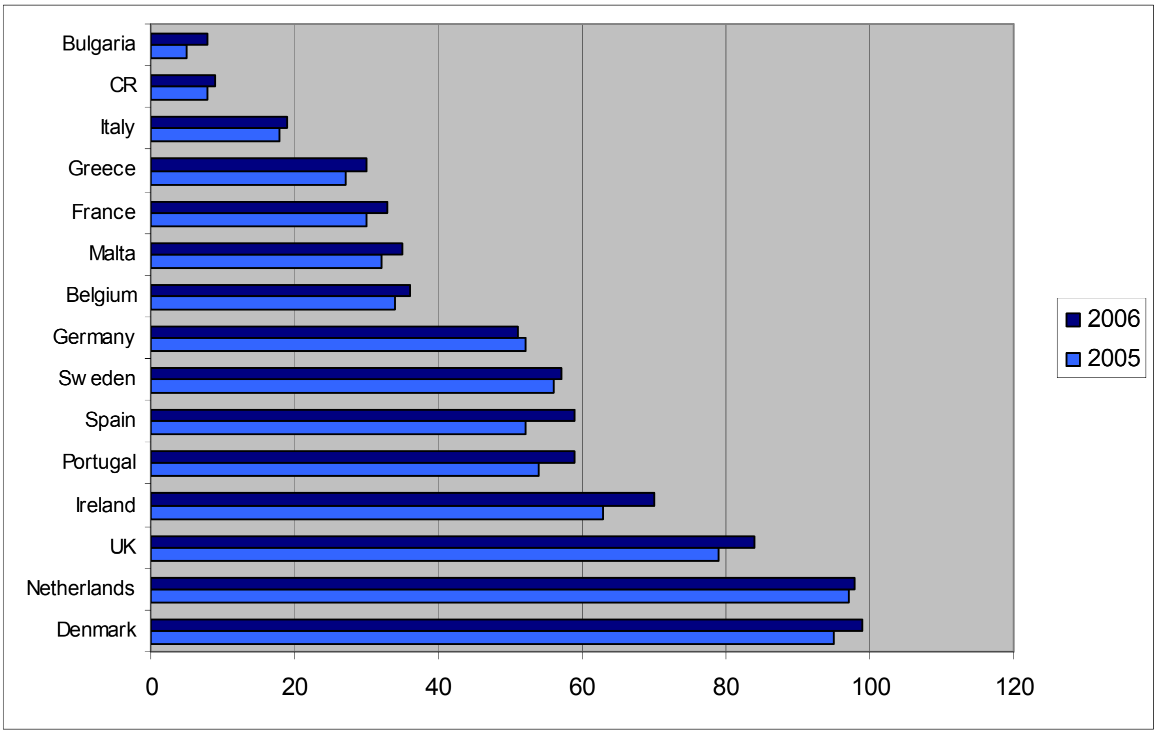
Source: European Mortgage Federation 2007, Hypostat 2006

Graph 3 Housing starts in selected European countries, in 2000 and 2006



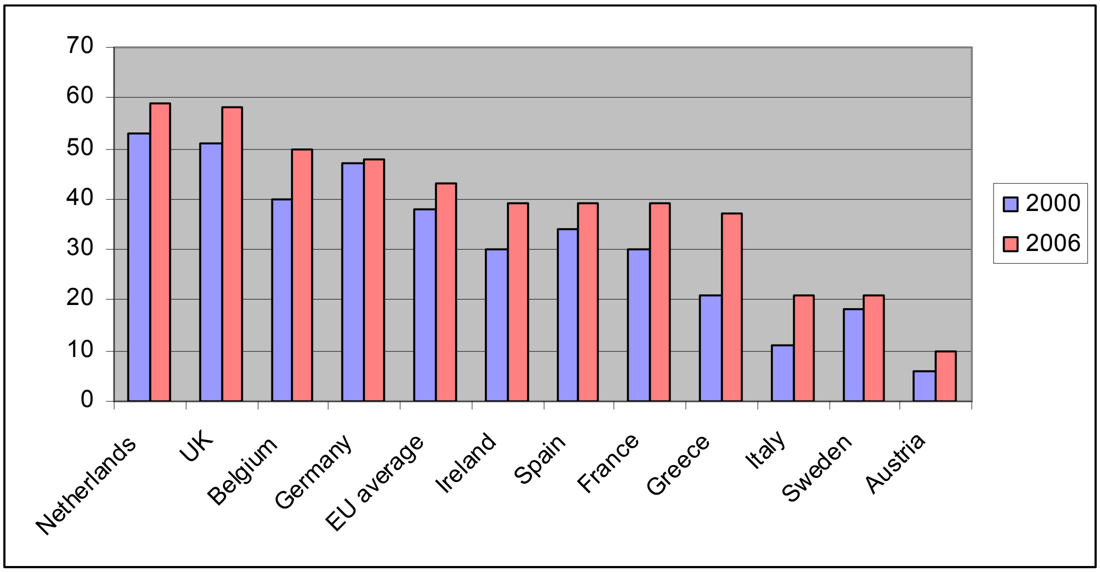
Source: European Mortgage Federation 2007, Hypostat 2006

Graph 4 Residential mortgage loans outstanding in relation to GDP, selected European countries, 2005 and 2006 (%)



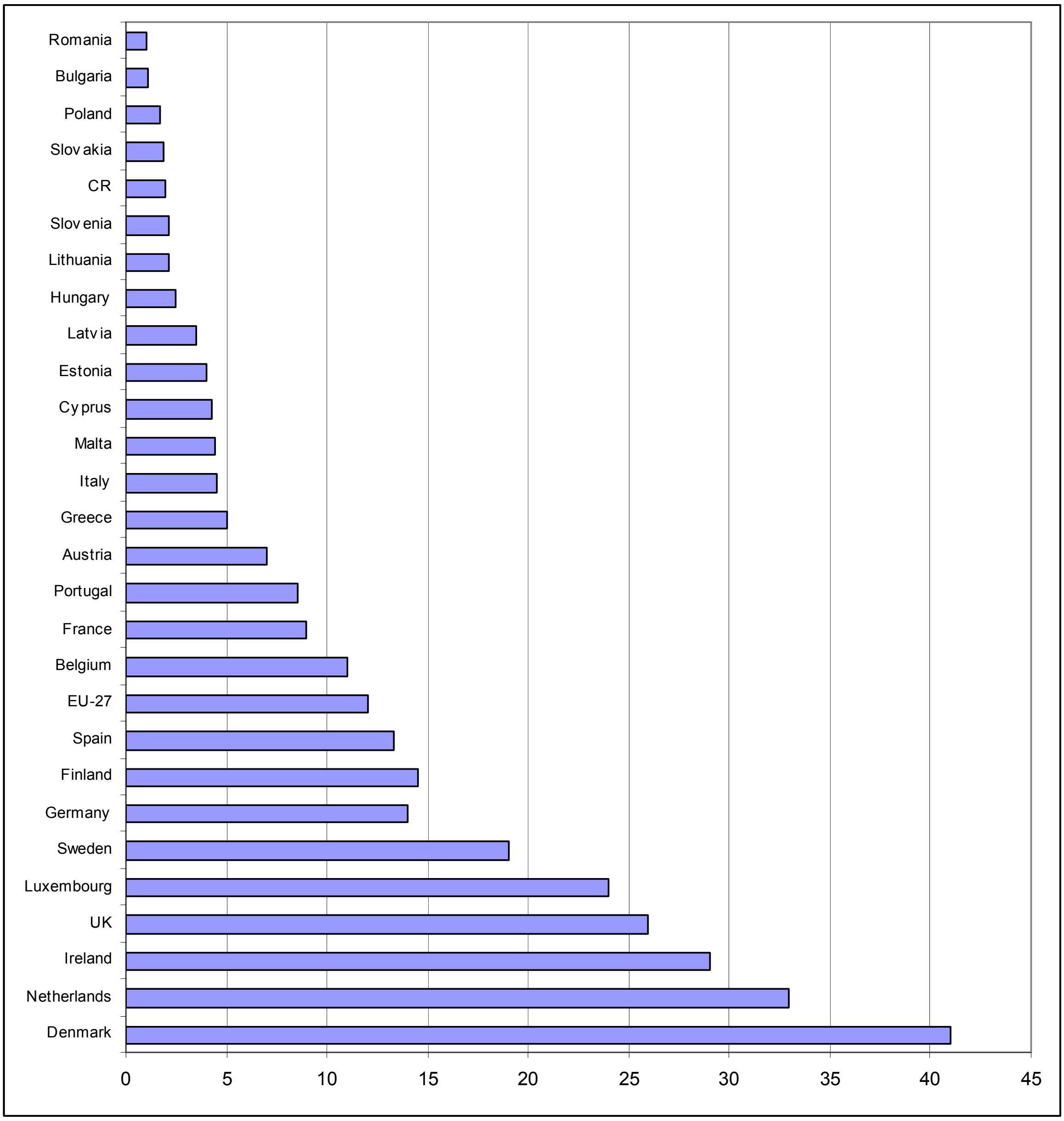
Source: European Mortgage Federation 2007

Graph 5 Residential mortgage loans to total loans in selected European countries, 2000 and 2006 (%)



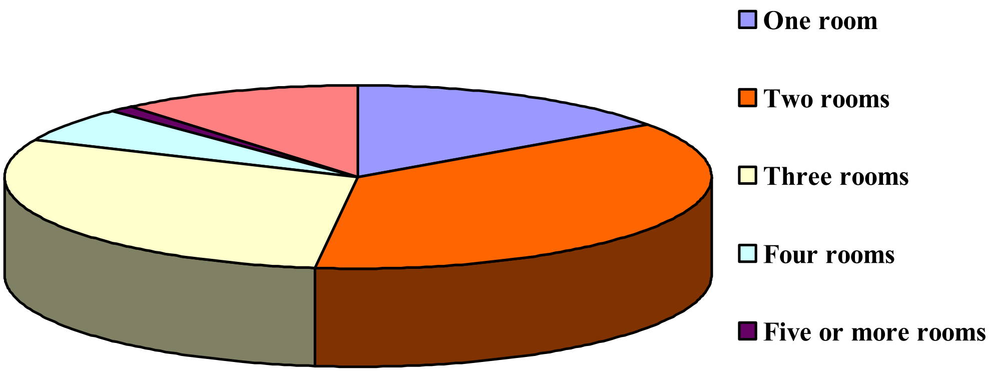
Source: European Mortgage Federation 2007

Graph 6 Mortgage loans outstanding per capita, EU-27, 2006 (in thousands EUR)



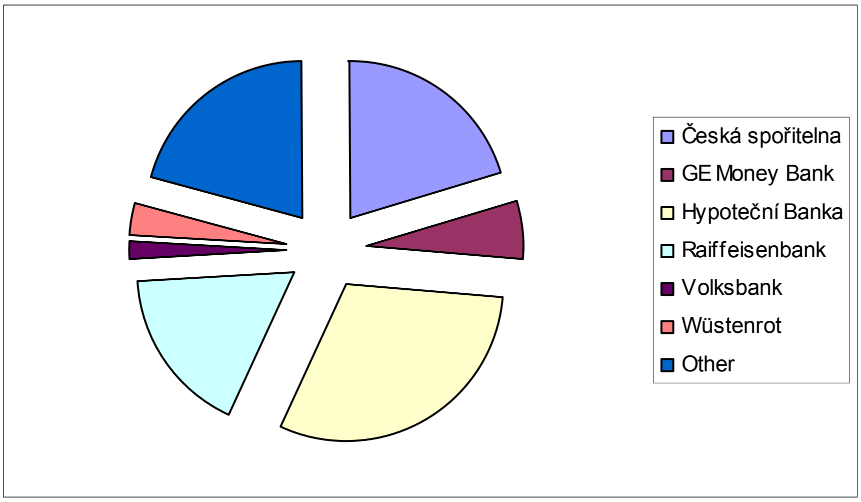
Source: European Mortgage Federation 2007

Graph 7 Types of apartments constructed during 2007 in Czech Republic (%)



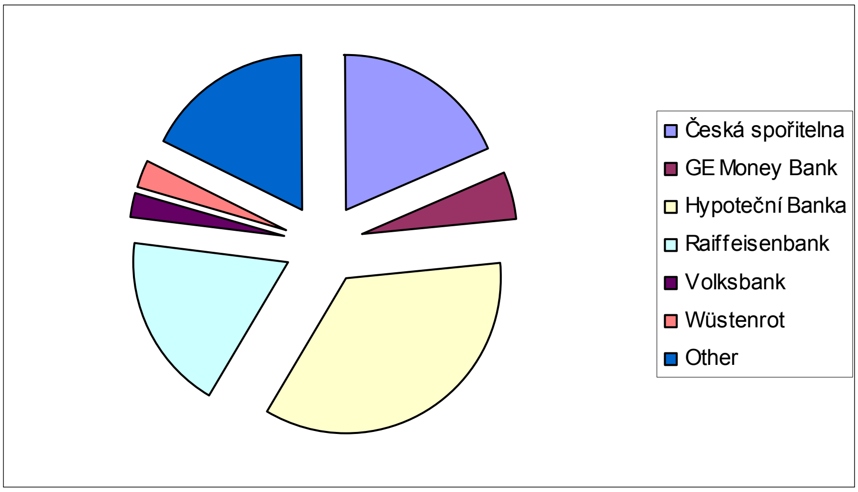
Source: Czech Republic Market Performance Report 2009

Graph 8 Market share according to total numbers of mortgage loans provided by banks, 2008



Note: Komerční Banka doesn't provide this type of information, so it is assumed that KB presents the biggest share in category "other".
Source: Hypoindex 2009

Graph 9 Market share according to the volume of mortgage loans provided by banks, 2008 (in CZK)



Note: Komerční Banka doesn't provide this type of information, so it is assumed that KB presents the biggest share in category "other".
Source: Hypoindex 2009