



## THE ECONOMICS OF HOUSING FINANCE IN SERBIA

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**Abstract:** The paper presents analysis of the achieved development level of the housing market in Serbia. Various factors that have shaped demand and supply are systematized and their impact over the last decade was analysed and monitored. As important ones demographic, macroeconomic and financial factors are singled out and a special importance is given to the analysis of specific historical and socio-political circumstances that have influenced the development of the housing market during the period of analysis.

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### 1. Introduction

Stable and efficient housing market is the basic need of every modern society, since it is an important prerequisite for the life quality of the community. On one hand, the housing market is a place where people meet their existential needs, but also it has an important role in the national economy, financial markets and socioeconomic well-being of individuals. Efficient housing finance system affects various sectors of the economy and creates the basis for an increased activity in the construction industry that creates new jobs not only in home industry but also in a number of related industries.

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The housing market and housing finance have strong national characteristics and differ among states. The differences are primarily formed under the influence of specific political, historical and legal factors affecting the supply and demand for residential real estate, but also due to the different conditions in the housing credit market. For example, in the U.S. some of the most important factors for the development of the housing market were weakening of regulation, high demand for residential real estate, financial innovation, as well as a keen competition in the financial sector. Significant factors in continental Europe were a stable economic growth, deregulation of financial markets, low interest rates, consolidation of the banking sector, the creation of the single market and the emergence of financial innovations. The biggest influence on the housing market in the former communist bloc had a sociopolitical system say a defined system of assignment and later purchase of apartments. Evolution from a transitional to market economy system led to the changes of the basic structure. The main factors that influenced the development of transitional markets are intensive economic growth (especially in countries that have joined the EU), the adoption of legislation in the field of housing and mortgage markets, restructuring and development of financial institutions, financial market liberalization, foreign direct investment in the banking sector, access to cheaper sources of capital, as well as a large and stable demand for residential units. Until the transformation of the banking sector, it was not possible to develop the market for housing loans in Serbia. The entry of foreign banks and capital inflows were the basic prerequisite for the development of this market. Among other factors that have influenced the development of the Serbian housing market, there is a high demand for housing units (construction of new dwellings was at very low or null level in the nineties), the low purchasing power of citizens, the lack of proper regulation in the field of construction and property relations and undeveloped financial markets.

## **2. Financing the Purchase of Housing Units**

One of the most significant expenditure for each household is the cost of housing that occurs as a result of renting the property, the repayment rate for a housing loan or the purchase of property and the payment of the purchase price in cash, so called self-finance. Often expenditures for housing are more than a third of total income of a household. Having this in mind it is obvious that the question of financing costs is of utmost importance from socioeconomic aspects of the individual and the community. This issue is even more important for countries in transition with lower levels of income and higher demand for housing units in which there was no market for housing finance or there was the discontinuity of its functioning.

Developed real estate market is an alternative to financial savings. Investing in real estate is one of the safest forms of long-term investments in which

inflation does not have direct impact and revenue on that basis are regular and stable. Some studies (Ibbotson et al., 1985) show that during the eighties investing in real estate on a global scale accounted for 57% of total savings of which 41% was related to the investments in dwellings. Comparing the investments in real estate to investments in corporate bonds and stocks, these authors concluded that investing in real estate had a greater weight.

Housing loan is defined as a long-term loan that is granted for the purchase, reconstruction or renovation of a residential building, while a mortgage loan is also defined as a long-term loan, but this loan is granted on the basis of collateral – mortgage on purchased real estate. The mortgage collateral may serve for the approval of a cash loan and special purpose loans, but most often it is used for the approval of mortgage loans that are secured by a mortgage. Subsidized housing loans are those where the state participates in the process of crediting the housing needs of the population.

Purchase of residential units can be done in several ways. The first approach involves the purchase of real estate from own funds, usually from a dedicated savings. This type of buying real estate is usually inaccessible to the younger population, because they do not have enough savings. Purchase of residential units can be done with the help of family or friends. Within these relationships the finance is most commonly provided in the form of gifts or various types of formal and informal loans. The third and far the most widespread type of housing finance in the developed countries is credit financing from a bank or other financial institution. If the borrower meets the requirements of credit worthiness, the bank lends him a mortgage loan under defined terms. The fourth method of housing financing involves financing by the seller of the property. The real estate seller enables the buyer to pay off the property at the agreed schedule. Collateral for this arrangement is a mortgage over the subject property. The state can also have a major effect on the housing finance in two ways. The state can be involved in the construction of social housing whose use can claim every citizen over 18 years old (as was the case in the former Yugoslavia and other former socialist countries) or by providing subsidized loans which are distributed to households throughout commercial and state banks. These subsidized loans have better conditions than the market ones (lower interest rate and the reduction in the loan participation).

### **3. Factors Affecting the Economy of Housing Finance**

Housing finance markets (finance for construction and purchase of housing units) are not unique because they are shaped by a set of factors, primarily the specific historical, political, regulatory, economic and financial factors. In this paper we will try to explain the effect of the aforementioned factors in the Serbian market.

### ***3.1 Specific Factors***

Certainly the most specific factor is the legacy of the former social system. Numerous authors state that in the countries of Central and Eastern Europe, housing estates built by the state were a predominant type of housing and that up to date this type of settlement make up 20-40% of the housing stock (Enyedi, 1998, Tosics, 2004). Comparing to the developed countries of Western Europe, this percentage ranges from 3 to 7. In a socialist society organized the housing market almost did not exist because the apartments were not treated as a marketable good but they were considered as a social right. The solving of housing problem has largely been the domain problem of state policies throughout the social housing construction. In Serbia, the dwellings built by the state were not private, but social property. Every citizen older than 18 years claimed the right on these dwellings. The right to access social housing had every member of the society, regardless of whether he himself alone could solve the housing issue. Dwellings were allocated by the state authority according to non-market principles. It is clear that in these circumstances there is no need for housing loans so this market could not be created. In cases where an individual solved the housing issues himself (construction of private residential units), he could rely on government assistance in the form of subsidized loan or on a loan provided by the company he was employed in. Government loans were provided by state banks, according to non-market conditions, usually with a fixed interest rate and long repayment period and no obligation for the collateral.

Residential construction was financed in different ways. In particular, in Serbia, all employees were required to set aside a solidarity contribution for housing construction (as a percentage of personal income) in accordance with the Law on allocation of funds for housing construction and the Law on financing of housing construction (SRS Official Gazette no. 4/86). These funds were used to finance social housing construction and apartments built this way were granted according to the use of predefined criteria. Users of social apartments did not have ownership of these apartments.

Privatization of social housing in Serbia came as a result of changes in the socio-political structure. These changes came in accordance with the Housing Act of 1990 (Official Gazette SRS, no. 12/90, 47/90, 55/90 and Official Gazette of RS, no. 3/90 and 7/90) and then under the housing Act of 1992 (Official Gazette of RS, no. 50/92). This led to significant changes in the ownership structure in next five years. During this period, 98% of dwellings were privatized (Republic Agency for Spatial Planning, 2010). The Housing Act of 1990 abolished the obligation according to which all employees were forced to set aside a contribution for housing and it was decided that the housing needs residents must satisfy on their own by the construction, purchase or rent of an apartment. The government was supposed to provide housing needs for socially

vulnerable persons (Republic Agency for spatial Planning, 2010). The system based on the housing funds ceases to exist and Serbia experienced the collapse of housing construction (Brinkmann, Urosevic, 2001).

The social crisis that has engulfed the country in the nineties, poor economic situation, the lack of market housing loans and the absence of institutions that would qualify for such loans caused the housing crisis that has contributed to the increase in the number of extended households (Milic, 2004: 324) with a number of unsolved cases in the young population. The reforms of the banking sector and the import of capital created the basis for the formation of the home loans market. In addition to the basic method of buying residential units where the buyer must possess the entire amount of the purchase price for the property in cash, the housing loans were offered and commercial banks have become the dominant institution for providing funds for the purchase of residential properties.

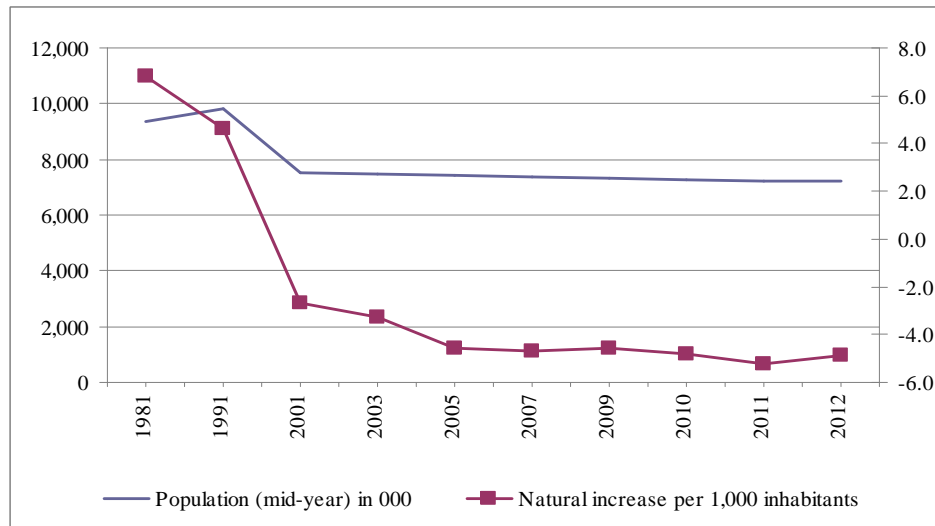
### **3.2 Demand Factors**

Factors that influence the demand for housing units and housing loans could be classified into four parts: demographic factors (natural increase of population, the effects of migration, etc.), macroeconomic factors (GDP, employment, inflation), financial factors (level of availability of financial resources) and customer preferences.

#### **3.2.1 Demographic Factors**

In the classical demand analysis, it is typical to segregate effective or purchasing power demand and latent demand expressed as a need for a certain good. Satisfaction of the population needs for residential space depends on the relationship between the state of the built and functionally equipped housing in a particular location and needs which are largely determined by demographic characteristics of the population that inhabits or plans to displace to the specific area (Marinkovic, 2009, p 83). Key demographic characteristics in this regard are population trends, its structure and the number and average size of the household. Below we will analyze the trends in population and changes in the population structure.

Population growth, especially growth in the number of employees usually creates additional demand for residential units. By analyzing population and natural increase in population (Figure 1) we can conclude that in the last two decades in Serbia a negative trend in the population growth is present. This leads to a decrease in demand for housing units. Figure 1 shows the number of inhabitants in thousands (left vertical axis) and natural increase per 1,000 inhabitants on the right vertical axis. Bearing in mind these trends we cannot expect further increase in the demand for housing units.

**Figure 1 The Trend of Population in Serbia (population in thousands)**

Source: Statistical Office of the Republic of Serbia

Analysis of the migration of population from rural to urban areas and changes in the population structure suggest an increase in demand for residential units. Data from the former Ministry of the Regional Development and Local Self Government show that 60.7% of the total population live in 24.3% of urban areas, (compared to the total area of the Republic of Serbia). On the other hand socioeconomic structure of the population shows (Table 1) permanent transformation from agricultural to the urban population and constant migration from rural to urban areas. This causes additional demand for residential units in the city areas. The latest available data from the Statistical Office of the Republic of Serbia are shown in Table 1.

**Table 1 Changes in the Socioeconomic Structure of the Population**

	1948	1953	1961	1971	1981	1991	1991	2002
<b>Active/total population</b>	50,9	48,4	47,3	45,7	45,4	42,7	48,2	45,3
<b>Agricultural/total population</b>	72,3	66,7	56,1	44,0	25,4	17,3	17,2	10,9
<b>Urban/total population</b>	...	22,5	29,8	40,6	46,6	50,7	54,6	56,4

Source: Statistical Office of the Republic of Serbia

As we can see from these two analyses, there are two trends. The total number of population is decreasing, but the migration from rural to urban areas are increasing the population in urban areas, while further reduce the number of

inhabitants in rural. In an analysis of demographic factors, we should not forget that the need for housing units increased due to several refugee waves from neighboring countries and regions affected by war (Croatia, Bosnia and Herzegovina and Kosovo).

### *3.2.2 Macroeconomic Factors*

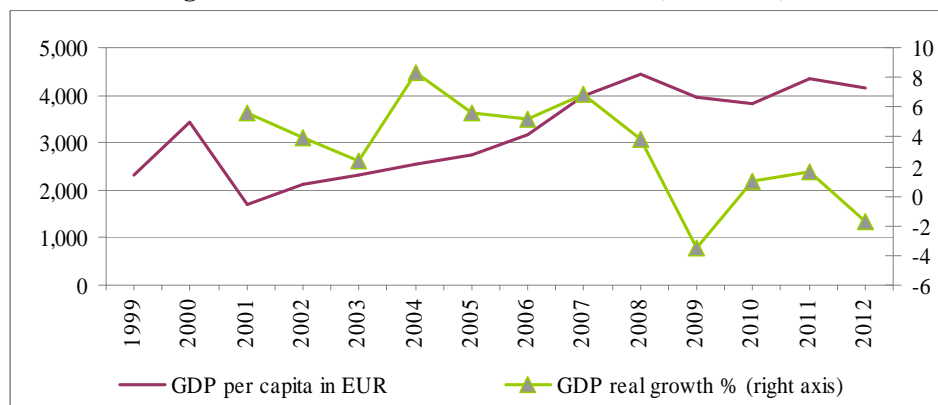
Macroeconomic stability is a prerequisite for the development of the housing market. The most important macroeconomic factors that influence the housing market are level of gross domestic product (GDP), unemployment rate, inflation, as well as activities in the informal sector of the economy – black market. In the period before the economic crisis, Serbia recorded positive trends in most macroeconomic indicators, especially in GDP growth, inflow of foreign direct investment and the development of the financial sector, primarily through the growth of deposits and loans by banks. However, the spillover of the global crisis in Serbia induced a negative economic trend which started in the second half of 2008 and continue up to this day. The effects of the crisis were reflected in all segments of the real sector in Serbia, as well as in the construction sector.

There is no doubt that economic growth stimulates and increases the demand for housing. The connection between these two factors is multi-layered. The factors that stimulate demand for residential real estate as an investment asset should be added to the factors that influence the demand for residential space as well as consumer durables, and primarily for housing. Buying a residential property is often motivated by reasons that are not directly related to the use of property as a direct purpose. Real estate is an investment in which you can invest in order to protect the real value of assets (hedging motive), achieving yields from the rent or presents an asset from whom is expected to gain profit primarily on the basis of its expected growth value (speculative motive). The last motive can be key in initiating a particularly dangerous speculative bubble in the housing market (Marinkovic, 2009, p. 84)

Above mention factors stipulate that the GDP and expenditure for the purchase of housing units should be in a direct mutual relationship. GDP growth enables a higher level of investment in housing units because the purchasing power of the population is growing along with the growth of GDP. It should be noted that GDP growth can be expressed through the components of the real and nominal growth, which still may have a different impact on the relative importance of demand for housing as a durable good and as assets suitable for protection against inflation and speculation. The effect of the inflation in the housing market (asset price inflation) will be particularly important and the influence of inflation as measured by changes in consumer prices (consumer price inflation). On the other hand, the purchase of housing affects the GDP in two ways: by the real estate investment itself and by maintenance of the property.

If we analyze the trend of GDP per capita, positive changes can be identified until 2008. During this period the growth of GDP was relatively stable and ranged from 2.4% (2003) to 8.3% (2004). This gives an average of 5.2% for the period 2001-2008 (Figure 2). Positive trends and economic growth, according to this indicator can be characterized as a stimulant for consumption of which a portion is invested in the real estate in order to solve the housing issue or as an investment. After 2008 GDP per capita has a downward trend, with negative sign in 2009 and 2012. These trends were reflected in the demand for residential units. Steady GDP growth in 2001-2008 gave a strong impulse to consumer spending, which, among other things, manifested through the purchase of residential properties.

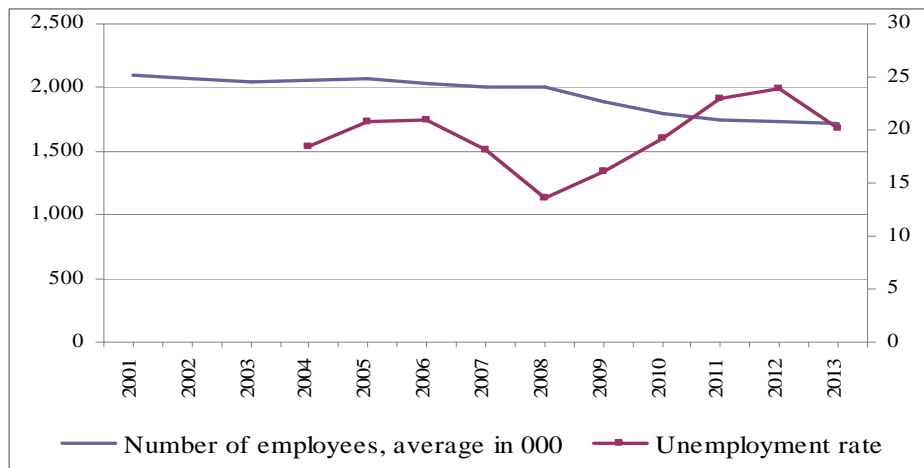
**Figure 2 Gross Domestic Product in Serbia (1999-2012)**



Source: Statistical Office of the Republic of Serbia

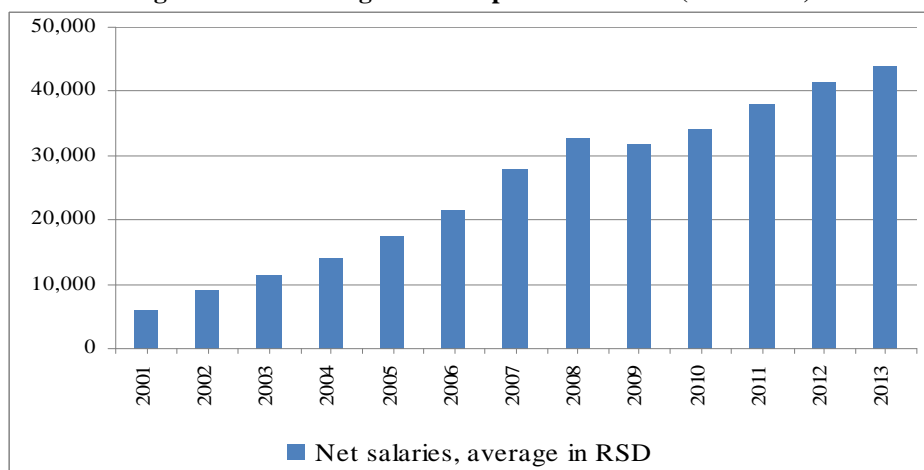
Analysis of the employment status is important because the status of an employee is an essential precondition for a housing loan. The results of employment analysis do not indicate favorable prospects for development of the market of housing loans. In fact, there is an evident trend of downsizing since 2001. The unemployment rate increases, especially after 2008 and in 2012 it reached a level of 24%. Figure 3 shows the employment in the Republic of Serbia for the period 2001-2013. The left vertical axis shows the number of employees in the thousands and the right axis shows the level of unemployment. The problem of high unemployment indicates an unstable economic situation, but also the existence of a sizeable informal sector of the economy (black market) and employees without formal legal employment contract who cannot qualify for the mortgage loan. On the basis of this analysis, we cannot expect an increase in demand for housing loans because the status of the employee's basic assumption of credit worthiness.



**Figure 3 Employment in the Republic of Serbia (2001-2013)**

Source: Statistical Office of the Republic of Serbia

Population growth and the growth in the number of employees are the basis for growth in demand for housing units. However, the increase in net earnings can contribute to an increase in demand. Figure 4 shows the level of net income in the Republic of Serbia in the period 2001-2013. Based on the steady growth of net earnings, we can expect the growth in demand for housing units. However, it should be noted that the problem occurs when the increase in net earnings was not accompanied by an increase in employment levels. In these cases, there may be significant social stratification and differentiation in solving the housing problem.

**Figure 4 Net Earnings in the Republic of Serbia (2001-2013)**

Source: Statistical Office of the Republic of Serbia

It is believed that the existence of the informal part of the economic system - black market is a major constraint to the housing finance market. The problem of the black market manifests in two ways. Population employed in the black market does not have credit worthiness and is disqualified for using housing loans. This part of the population is compelled to solve the housing issue by renting or buying a real estate in cash. Certain studies show different size of the black market in Serbia, but they all agree that the level of this activity is extremely high. Krstic and Sanfey (2011) showed that along with the implementation of reforms and rapid economic growth the level of black market increased in Serbia. Employment in the black market rose from 28% in 2002 to 35% 2007. The authors also conclude that employed in the black markets earn significantly less than employees in similar positions in the relevant sector of the formal economy. Another study about the share of the black market in GDP shows that the black market accounts for 30.1% of GDP in 2010. (Foundation for the Advancement of Economics, 2013). On the other hand, chaotic relationships in construction system where a lot of investors do not have adequate documentation for the property and construction of apartments disqualify these apartments for housing loans.

Many authors, including Hegedüs (2002, p.5) argue that low inflation is necessary for the development of housing finance markets particularly in developing countries and transition economies. However, in practice, inflation has not been confirmed as a significant limiting factor. In countries with high level of inflation, revaluation of housing loans is applied or loans with a currency clause. This means that even though the loan is disbursed in domestic currency its nominal amount is linked to a foreign currency (commonly EUR or CHF).

The reasons for reduced demand in countries with high level of inflation is due to the fact that wages are paid in local currency (in conditions of high inflation this is often impaired) and the rate of the loan is related to the foreign currency. In Serbia currency composition of loans has dominant foreign character with a foreign sub - balance of about 70% of total loans (Table 2). Currency statistics on home loans is not available, but even a simple analysis of the housing loans offer shows the practice of currency indexation.

**Table 1 The Currency Structure of Loans (% of total loans)**

	2008	2009	2010	2011	2012	2013-9
<b>EUR</b>	51.4	55	52.6	57	62.9	61.6
<b>USD</b>	1.9	1.6	1.5	1.7	1.6	1.7
<b>CHF</b>	11.9	8.9	7.9	7.1	6.8	6.2
<b>TOTAL</b>	65.2	65.5	62	65.8	71.3	69.5

*Source: NBS, Quarterly Reports*

### 3.2.3 Financial Factors

A developed financial sector that can support the purchase of housing units and the construction industry is an important requirement for both the demand and the supply of the housing market. Basic financial factors that are analyzed in this paper include the reform of the banking and financial sector or the creation of a basis for the development of an efficient credit market with emphasis on the housing market and government housing and construction subsidies.

We note that financial factors are usually crucial for the development of cyclical trends in the housing market. Partly, cyclical dynamics is a consequence of the subordinated nature of housing expenditures in consumer decisions which leads to a natural discontinuity in spending on residential construction. However, at the level of the economic system this discontinuity is mitigated due to the averaging effect of individual decisions (Marinkovic, 2009, p. 83). Therefore, the major structural breaks in the time series that monitor activity in the property market generally will coincide with major changes in the scope and terms of lending.

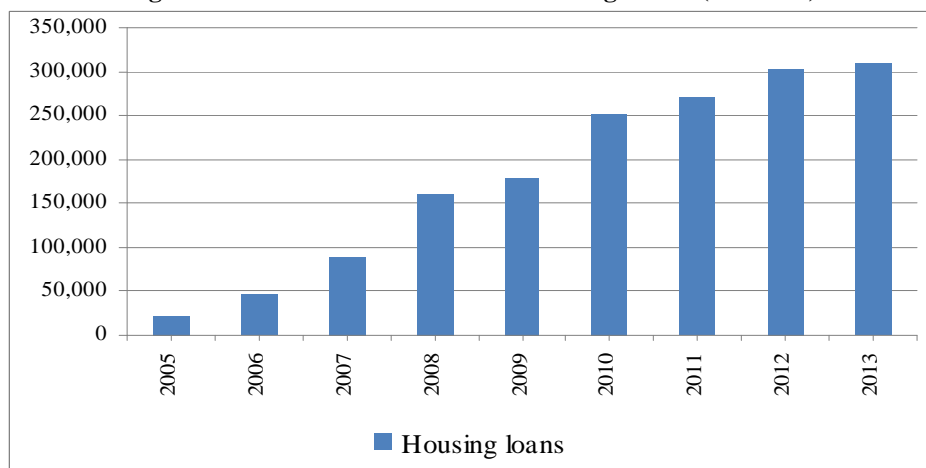
Trend of comprehensive economic change and transformation of the banking sector in Serbia started in 2001. The main feature of this change is the internationalization of the banking sector and changes in the ownership structure in favor of foreign ownership. During this period almost all economic indicators of the banking sector recorded a favorable trend. The scope of the banking sector represented by the ratio of total assets to GDP achieved significant growth and thus point out to the dynamic development of the banking sector. Until recently total assets, capital, deposits and loans had a clear upward trend. From 2001 there was an evident increasing in the volume of retail loans, including housing loans. However, the categories of housing loans to citizens in the reports of the National Bank of Serbia are reported for the first time in 2005 and since then it is possible to analyze the trend of this indicator.

In addition to significant reforms in the banking and financial sector banks are still the dominant lenders in the market of housing loans. Currently in Serbia there are 29 banks that operate of which only five have no offer for housing loan.

Analysis of the housing loan is possible for the period 2005-2013 because data are available only for the specified period. In the beginning of the period the growth rate of housing loans was above 100% annually (Figure 5). The particularly dynamic period was 2005-2008. In 2008, level of residential lending activity slowed significantly, which directly threatened the construction industry that has in the past been one of the industries with the fastest growth in Serbia. Regulation on measures to support the construction industry by subsidizing interest rates on housing loans and long-term housing loans in 2010

was one of the solutions that led to the pre-crisis levels of the construction industry. The effects of the crisis manifested as a reduction in economic activity and a decline in GDP had influenced the demand for housing loans. The decline in foreign direct investment and spillover of the crisis of the country of origin of most of the foreign banks in Serbia, especially the contraction of credit activity of home banking groups reflected in the offer of housing loans in Serbia. Thanks to government subsidy programs, a decline in lending activity was not recorded.

**Figure 5 The Extended Amount of Housing Loans (000 RSD)**



*Note:* Data for 2013 refers to the end of the third quarter.

*Source:* NBS, Quarterly Reports

Throughout history, we encounter various solutions that have been applied by the state in order to help citizens solve their housing problems. Socialist countries were regularly constructing residential buildings and ceded them to the use of the population. A similar practice was applied in capitalist countries where local administrative units invested in residential construction usually rented to vulnerable population under preferential terms. Socioeconomic changes led to less frequent use of this solution, but the state continued to show interest to intervene in this area. Modern "welfare states" accept intervention in this market as their task. Abandoned programs of state direct intervention in housing construction are replaced by state intervention in the area of housing loans (Marinković, 2011, p. 132).

The Government of the Republic of Serbia has repeatedly initiated programs in order to help in solving the housing problems of the population. The first initiative to improve housing loans of citizens happened in 2005 according to the Law on Amendments and Supplements to the Law on Budget for 2005. The practice of subsidized lending continued until 2014 (for details,

see Table 3). During the 2010 the Law on encouraging the construction industry of the Republic of Serbia in the economic crisis (Official Gazette of RS, no. 45/2010 and 99/2011) was enforced in order to overcome the negative effects of the economic crisis in the Republic of Serbia in the field of construction and to help the local construction industry getting out of the crisis. The goal was also to encourage the development and employment of local construction companies and ensure liquidity for the sector; encourage the development and employment of local companies engaged in the production of building materials; maintain the current level of employment and the creation of prerequisites for creating jobs and stimulating economic development in the Republic of Serbia (Article 2).

**Table 2 List of Legislation That Were Used for Subsidized Programs**

<b>Year</b>	<b>Law</b>	<b>Published</b>
2009	Regulation on measures to support the construction industry by subsidizing interest on loans to finance housing construction	Official Gazette of RS, no. 77/2009, 78/2009, 96/2009 and 103/2009
2010	Regulation on measures to support the construction industry by subsidizing interest rates on housing loans and long-term housing loans in 2010.	Official Gazette of RS, no. 2/2010, 4/2010, 50/2010, 72/2010, 76/2010, 94/2010 and 98/2010
	Regulation on measures to support the construction industry by subsidizing interest on loans to finance housing construction in 2010.	Official Gazette of RS, no. 4/2010
2011	Regulation on measures to support the construction industry through long-term housing loans in 2011.	Official Gazette of RS, no. 1/2011, 3/2011, 12/2011 and 87/2011
	Regulation on measures to support the construction industry by subsidizing interest on loans to finance housing construction in 2011.	Official Gazette of RS, no. 44/2011, 89/2011 and 93/2011
2012	Regulation on measures to support the construction industry through long-term housing loans in 2012.	Official Gazette of RS, no. 4/2012, 77/12, 98/12, 109/12 and 116/
	Regulation to establishing support programs to the construction industry in 2012.	Official Gazette of RS, no. 4/2012, 77/12, 98/12, 109/12 and 116/12
2013	Regulation on measures to support the construction industry through long-term housing loans in 2013.	Official Gazette of RS, no. 124/2012, 2/2013, 71/2013 and 113/2013

Help for buyers of the apartments and construction activity was carried out through two types of programs. The first entailed classical subsidized housing loans (Regulation on measures to support to the construction industry by subsidizing interest on loans to finance housing construction - 2009 and the Regulation on the long-term housing loans in 2010, 2011, 2012 and 2013) in which the borrowers were required to provide a 5% participation and 20% share was provided from the budget of the Republic of Serbia in the form of long-term housing loan. The remaining 75% of the price of the property was provided by commercial banks under the limited interest rate. The interest rate for part of the loan to be funded from the budget was 0%. Priority in the repayment had a bank and then the borrower was obliged to return the funds from the budget of RS not later than 30 years after the loan was disbursed. In 2014 there were no subsidized loans for housing issues.

Regulations from 2010 and 2011 relating to measures to support the construction industry by subsidizing interest on loans include giving loans by commercial banks to the investors in which the state subsidizes part of the interest. The principle was as follows: the investor concludes a loan contract with the bank and repay it with interest reduced by 7%. This subsidy is compensated by the Republic of Serbia. During the 2013 and 2014 there was no regulation on subsidizing interest on loans to finance housing construction.

Along with the general subsidy programs, the state has developed programs to help solve the housing problem of the population of certain professions of public servants. They initiated programs such as the program of long-term housing loans for employees in the health sector (2008) and long-term housing loan program of professional military personnel (this program was carried out on several occasions).

Unfortunately for 2014 subsidies for housing issues were not planned. The reason was a lack of funds in the state budget. This problem is present in all countries that are facing persistent budget deficits.

### **3.3 Demand Factors**

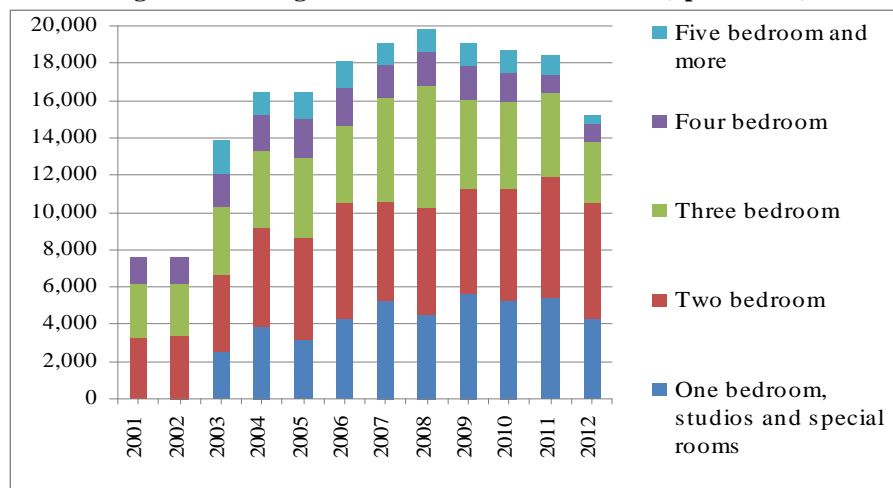
An individual can solve the housing problem by purchasing already constructed property, construction or expansion of existing property and by purchasing a new facility. Construction of new facilities is a priority in defining the national housing policy.

#### *3.3.1 Analysis of Construction Activity*

Analysis of construction activity in Serbia was carried out for the period 2001-2012. As opposite to the pre-transition period, when construction activity was carried out by the state-owned enterprises, the private sector took an active role in the analysed period. A significant increase in the number of dwellings

built is evident in the 2003 when compared to the previous two years the number of dwellings built doubled (Figure 6). Growth in construction activity was accompanied by favourable trends of general economic indicators. Until the 2008 steady growth in this area is evident. The transition of economic crisis to Serbia has slowed construction activity in the period after the 2008.

**Figure 6 Housing Construction in RS 2001-2012 (apartments)**



Source: National Bureau of Statistics of the Republic of Serbia

Note: for the 2012 unofficial data were used

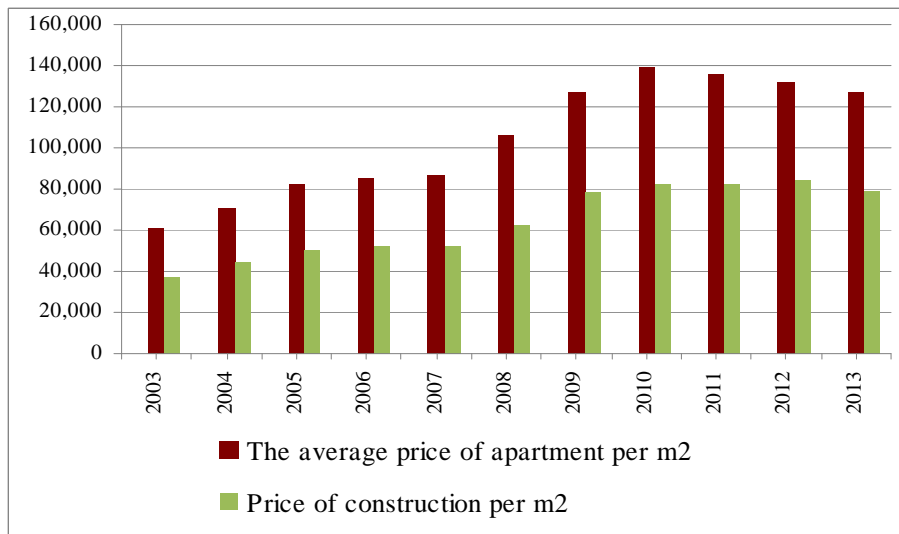
Economic stabilization and growth of economic indicators since 2001 were not the only reasons that led to it. Important cause lies in the fact that there was a significant stagnation in the construction industry in the period 1990-2000 when organized construction activity ceased to exist. Milic (2004, p. 324) found that the housing crisis of the nineties contributed to the increase in the number of extended households, and a large number of unresolved housing issues.

Housing prices have a slight tendency to lag against other market trends since the prices peaked in 2010. During this year the decline of other economic indicators was already evident. Although at this time a slowdown of construction activity was evident housing prices were still rising. In previous periods the economic conditions in the country drastically deteriorated but official statistics did not record significant decline in housing prices (Figure 7).

It is interesting to compare the average wages and housing prices. Thus we can conclude what is the amount of average wage needed to purchase housing units compared to the average price. The analysis shows that this ratio fluctuated in the period 2003-2013. In the early years, it took more than five average wages to buy one square meter of housing units at an average price. By

the 2008 this ratio has fallen to 3.2 average earnings mainly due to significant earnings growth which was not accompanied by a dramatic rise in property prices. The increase in real estate prices in 2009 again raised this ratio to 4 and it remained at this level until 2010. Declining trend is evident from 2011 to 2013 and it amounts slightly below 3.

**Figure 7 Prices of Apartments Built in the Republic of Serbia (in RSD)**



Source: National Bureau of Statistics of the Republic of Serbia

#### 4. Conclusion

It is said that the housing market is operational if it has the following characteristics: it is effective - the interest margin as the difference between the cost of funds and the cost of credit does not exceed 2%, it is available - more than 60% of the population can afford housing loan without government subsidies, it is regulated and it is controlled - identifies risks and manages them appropriately. In transition countries, including Serbia, regulatory reforms are not enough to build an efficient housing market. More important is to build institutions and mechanisms for effective functioning. Fundamental and necessary precondition for the development of the housing market is a stable macroeconomic situation which will enable the construction of new housing on the one hand and on the other it will lead to an increase in the purchasing power of the population. However, demand is also shaped by housing specific factor like state subsidies, demographic trends of population and other factors analysed in the paper.



Looking at demand for housing finance from the group of demographic factor growth could be expected only due to migration to the cities. There is a negative trend of the population that shows a reduction of the demand on this basis. Macroeconomic factors also do not indicate an increase in demand for housing loans. There is no significant growth of GDP nor is it expected in the future. Level of employment is falling and the black market is growing. Here we cannot expect growth in demand for housing loans. Analysis of financial factors showed that the banking sector reform created the conditions for increased level of housing loans. However the absence of subsidies in 2014 will considerably reduce demand for these loans. The demand analysis included the construction activity. Slowdown of activities after the 2008 is evident with a significant decline in 2012. However, the average cost of construction did not follow the decline in activity as well as the general decline in economic indicators in the period after the 2008.

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## **EKONOMIJA TRŽIŠTA STAMBENIH KREDITA U SRBIJI**

**Apstrakt:** Rad predstavlja faktografsku analizu dostignutog stepena razvijenosti tržišta stambenih kredita i tržišta rezidencijalnih nekretnina u Republici Srbiji. Izvršena je sistematizacija različitih faktora koji oblikuju ponudu i tražnju i praćen njihov uticaj u poslednjoj deceniji. Kao značajni izdvojeni su demografski, makroekonomski i finansijski faktori, a poseban značaj dat je i analizi specifičnih istorijskih i društveno-političkih okolnosti koje su uticale na razvoj tržišta rezidencijalnih nekretnina i tržišta stambenih kredita u periodu analize.

**Ključne reči:** tržište stambenih nekretnina, stambeni krediti, građevinarstvo, subvencionisani krediti, inflacija