FACTORS AFFECTING THE DWELLING SPACE MARKET PRICES IN LATVIA

Didzis ĀDMĪDINŠ, Jānis ZVANĪTĀJS
Riga Technical University, Meža iela 1/7, Riga, Latvia, LV-1048
Telephone: + 371 28381875, e-mail: didzis.admidins@gmail.com, janis.zvanitajs@rtu.lv

Abstract. This paper describes the factors that influence the length and deepness of real estate market cycles in the dwelling space market in Latvia. Real estate market cycle length and deepness is influenced by factors like crediting, income level, demographic situation in the region and other factors. In this paper, the authors describe the ways that these factors affect the dwelling space market in Latvia. Understanding the factors that influence the real estate market and knowing the interconnections between them give an opportunity to develop an economically sustainable real estate market from which all participants of the sector would benefit.

JEL classification: E39.

Keywords: real estate market, real estate economy, real estate market forecast, real estate market cyclicity.

Reikšminiai žodžiai: nekilnojamojo turto rinka, nekilnojamojo turto ekonomika, nekilnojamojo turto prognozė, rinkos cikliškumas.

Introduction

The real estate market in Latvia has not had any lengthy periods with stable prices. They have been quite volatile during the past decade and the market has seen both rapid price increases and decreases. In the last decade, the real estate market has lived through a full real estate market cycle and has currently started the next cycle. The length and deepness of the real estate market cycle depends on the external environment and factors affecting this market. The total demand and supply in the real estate market depends on the environment in which the real estate market operates and in Latvia it has changed a lot, leading to an uneven development of the real estate market.

In Latvia, the real estate market prices dropped more than 70% in two years time, compared to its peak point. [15] This sector is a very important part of the national economy and in 2010 operations in the real estate market added up to 18.9% of the GDP that only partly shows the importance of this sector because the real estate market is strongly connected with other sectors of national economy and with the country's
economy as a whole. Real estate objects are an essential ingredient for functioning of people, thus to ensure an effective functioning of the economy it would be important to sustain an economically effective development, however, the effect resulting from external factors can be completely different. [6]

This paper examines more deeply the dwelling space market in Riga. Although the dwelling space market can be divided into several segments like apartment houses, private houses, and terraced houses, only apartment house market in Riga was chosen for the data analysis, however, the market prices and development tendencies are similar in all of these market segments.

This paper examines the possible influence of factors like income level, employment, crediting, demographic situation, government’s policy and tax policy on the dwelling space market.

The purpose of this paper is to draw attention to the cyclical development of the real estate market and factors influencing it, as well as the particular ways that these factors affect the real estate market. In this paper the factors influencing the real estate market are analysed with a purpose to find recommendations for effective development of the real estate market.

1. Factors influencing the real estate market and its cyclical structure

Dwelling space market segment is just one of several real estate market segments but the dwelling space market is the most socially sensitive segment. In a country or a certain region economy develops as a whole and changes in the macroenvironment affect the national economy. These changes in the macroenvironment are caused by consumption market as well as the real estate market. Changes in the macroenvironment can affect demand and supply level in the real estate market that results in possible real estate market price fluctuations. The real estate market develops cyclically and these cyclical fluctuations, length and deepness of the cycles are influenced by the macroeconomic environment in the region or country, but country borders may not be an obstruction. [5] The specific feature of the real estate market is that the real estate market participants react very rapidly to changes in demand, because deals in the real estate market are made relatively slowly and it can take several years for new objects to enter the market from the date of making the decision and this can cause price fluctuations in case the demand and supply equilibrium is disrupted. It is truly possible that insufficient demand is replaced by overcrowded supply. The real estate market participants either tend to undervalue object price when the situation in the market is negative or overstate its value when the situation is positive. The optimal or nominal market price is the fundamental or replacement price of the real estate; those are the real costs to develop a real estate. [1] The fundamental market price often helps as a guide in choosing whether to buy a real estate or build it, it also regulates the market prices because in the long run the price cannot be much higher than the fundamental one.
Many researchers of the real estate market have tried to determine the factors that influence real estate market prices, though there is no single right formula or answer to this question as each region has its specific features that can influence supply and demand factors. To determine the factors that will influence the real estate market in the future one can analyse the factors that have influenced real estate price fluctuations in the past. However, there is a possibility that historical factors can have little or no influence at all in the future. Possible scenarios of the real estate market development have to be considered in a context with the overall economic development as well as the fact that the economics develops at the state level as a whole and changes in one of the factors to some extent will definitely affect the overall situation.

While researching the development of the real estate market in Latvia in connection with the factors that influence its development, conclusions were drawn that the most significant factors influencing the real estate market prices in Latvia in the past years were the amount of given out mortgage loans, income level, employment rate, demographic situation, government decisions and policy, inhabitant expectations and others. Although, in the past years, there is no direct correlation between real estate market prices and the demographic situation in the country, which has become a very important problem in Latvia, it does not mean that this factor does not affect the market, however, other factors have been more influential. In the future, the influence of this factor can be much stronger, because of decreasing number of inhabitants. [6]

Those are the factors that influenced the real estate market and the macroeconomic situation of the country. Factors most commonly examined by researchers of the real estate market are crediting, income level, employment rate of the region, demographic situation, future expectations of the people, overall economic situation of the country and other factors influencing the real estate market. The authors of the ‘Real Estate Market Analysis’ named following factors as having the largest impact on the real estate market demand:

The economic and demographic factors that affect the level of demand are as follows:

1. Net household formation;
2. Age composition of the household;
3. Household income;
4. Credit conditions;
5. Prices of substitute units;
6. Ownership costs;
7. Expectations about the future;
8. Seasonality. [2]

In his book ‘Timing the Real Estate Market’, real estate investor and researcher Craig Hall from USA mentioned the following factors as impacting the real estate market: inflation, credit interest rate, investments in the real estate, employment rate in the region, migration saldo, economy growth and new real estate objects.[6]
The actual impact on the real estate market is dependent on macroeconomical situation and ‘condition’ of the factor, e.g., employment rate could have neutral or destructive impact if it sharply fell down, similar situation with crediting. In his book ‘Freefall’, analysing the main initiators of the economical crisis in 2008, the world-famous economist, Nobel Prize winner J. Stiglitz draws special attention to the unreasonable crediting in the real estate market, which largely caused the crisis and not only in the USA. In the previous years crediting was also one of the main factors that influenced the dwelling space market in Latvia.

After performing the analysis of researches, the author concludes that the most influential factors affecting the real estate market, including dwelling space market, are crediting, demographic situation in the region, employment rate, income level of households, government actions and future expectations of the people.

There are both economic and other factors among the above-mentioned ones, influencing the real estate market, however, these are mainly measurable factors. A very important factor affecting the demand level is the mood of inhabitants and their expectations for the future. Purchase of real estate is a very significant investment for an individual that buys for living. We can also look at it as an essential good but it will be bought only if the potential buyer clearly believes that its acquisition will not be a burden. Depending on its type and value, the real estate market can be also a market for the luxury goods. Different real estate reacts differently to the macroenvironment but in the long run the real estate market can be influenced by the society as a whole, culture, climate and also other factors directly unrelated to the economic environment.

In a way the decisionmaking influence of the government and local authorities is unpredictable or at least hardly predictable on the real estate market, as their decisions can be completely unexpected as well as restrictive or, on the contrary, growth-stimulating with an aim to adjust or change completely the direction of development of the sector. It can be unpredictable, because the previous possible directions of development where forecasted using the policy of the government and local authorities at that exact point in time. Important, but incorrect decisions at the State level can strongly damage the sector’s growth opportunities and significantly impact the industry’s profitability indicators.

Knowledge about the factors influencing the development of the real estate market and possible directions of development of the industry is extremely valuable to all the stakeholders in the real estate market from project developers to end consumers. One or few deals will not affect the national economy, however the real estate market trends can significantly affect the economy as a whole. From the perspective of sustainable national economy, it is preferable that the real estate market prices are close to their fundamental prices. Too volatile fluctuations can lead to bankruptcy of some households or decreased solvency. In case of no significant restrictions in the market, prices in the real estate market will naturally move towards the fundamental value of the real estate.
2. Latvia’s real estate market trends in the past years

The Baltic States regained their independence almost at the same time and the real estate market started developing afterwards. Just like the other Baltic countries, Latvia does not have deep traditions in the real estate market. In Latvia, the real estate market began developing more actively in the late nineties, when dwelling spaces were developed more actively and as a result they also entered the real estate market. However, compared to the total amount of dwelling space, it was a very small amount.

From the end of nineties, and more actively – from the second half of 2004, after Latvia entered the European Union, the Latvian real estate market was flooded with additional financial resources. Strong competition between commercial banks and activity in mortgage crediting provided Latvian citizens with cheap loans that ensured an increasing demand for dwelling space. Dwelling space supply could not absorb the rapid demand growth, hence prices increased. They increased by around 5% in several months, summing up to a 60% yearly price growth in several real estate sectors. [11]

Real estate prices grew in all dwelling space market sectors. For example, from 2000 to April 2007, the peak period of the block apartment market segment, block apartment market prices increased sevenfold from 250 euro per square meter in 2000 to 1720 euro per square meter in 2007. [17] After their peak, real estate prices dropped again and reached the lowest point in September 2007 and then again started gradually growing. In September 2009, the average price of a block apartment in Riga was 480 euro per square meter, now it is around 600 euro per square meter. In other real estate market segments the price development was similar. [10]

![Credit portfolio given to households, portfolio changes](image)

Fig. 1. Commercial banks’ credit portfolio given to households, credit portfolio changes [16]
Although a correlation between increase in the real estate market prices and activation of mortgage lending can be seen from the above graph, it would be incorrect to consider that mortgage lending was the only factor that determined the real estate market trends. However, it was one of the instruments that allowed realising it and without active mortgage lending the situation would have been completely different. Another important factor was the improved income level, average salary growth, increase in employment rate, improvement of country’s overall economic situation that accordingly improved future expectations of inhabitants. Completely opposite trends were seen from the second half of 2008.

The desire to improve living conditions was well grounded when the income level increased and crediting became more accessible, as many dwelling spaces consisted of deteriorated buildings that failed to meet the preferred level of standard and the dwelling space per square meter as well as the average EU level. In Latvia, the dwelling space per inhabitant is around 27 m$^2$. That is 30% less, if compared to the old EU Member States where dwelling space per inhabitant is around 40 m$^2$. In order to increase the average dwelling space to 40m$^2$ per inhabitant, the total dwelling space in the country should increase by 50%, which is around 30 million square meters. To compare, from 2000 to the end of 2009, total dwelling space increased by 7.6 million square meters. [6] However, the amount and quality of the dwelling space in the old European Union Member States is not a factor that stimulates demand for additional dwelling space. The emphasis should be drawn on the fact that the Latvian people live in relatively smaller dwellings marked by the desire to improve living conditions in the previous years. Yet, the recent economic crisis has changed priorities of inhabitants, which was reflected in the real estate market prices.

A study carried out by Eurostat shows that 57.7% of all Latvian inhabitants live in narrowness, comparatively 49% in Lithuania and 41.2% in Estonia, while, for example, in Ireland this indicator is 3.7% and in Germany 7%. A relatively high number of people living in narrowness is also in Romania 55.3%, Poland 49.1%, Bulgaria 47%, Italy 23.3%, and Greece 25%. A satisfactory dwelling space standard is set to be: one shared room in the household, one room for each couple living in the household, a separate room for each person that is of full age, and a separate room for each child (though, it is also possible that children of one sex younger than 12 can share one room). In Latvia, 25.7% of all inhabitants live in a dwelling with inappropriate hydroisolation, 10.9% live in dwellings with insufficient lighting, 16.6% do not have flushable toilets, and 18.2% dwellings do not have a bath or a shower at all. [18]

If we look at the European Union context, more Latvian inhabitants than anywhere else live in apartment houses – 66% of all inhabitants, 29% live in private houses, while 4% live in terraced houses or twin houses. The most similar situation in this respect is in Lithuania and Estonia, where around 65% of all inhabitants live in apartment houses. [3]

The relatively small amount of space and living conditions are several reasons for increase in the demand for dwelling space in the future, when consumers’ purchasing power, future expectations and life standards improve.
3. Factors affecting the real estate market

The real estate market price trends, cyclicity, beginning and end of the cycle as well as its length and deepness can be affected by economic, social, demographic and other factors. The way that each factor influences the real estate market depends on the interaction between the factors and the macroeconomic environment at that exact moment in time.

3.1. Mortgage lending

A significant part of the real estate sale–purchase transactions in Latvia take place by using mortgage lending as a source of financing. The presence of mortgage lending in the real estate market dealings allows concluding that the cost of mortgage loans and their conditions as well as their availability can affect the demand and supply in the real estate market. The availability of mortgage loans can affect both the end consumer of the real estate market and the developers as well. In times when supply of mortgage loans is sufficient and respective demand exists on the inhabitants’ side, the real estate market is positively stimulated. Mortgage loans do not affect price stability when there are no rapid fluctuations of the amount of given out loans, however, the price stability can be affected by the rapid increase or decrease in the amount of given out mortgage loans. Such trends can be seen in Latvia after 2004 when mortgage loans had a swift growth and in 2009 when the trend was opposite. In the beginning of 2004, loans taken by households amounted to less than 1 billion lats, but in the beginning of 2008 the amount exceeded 6.5 billion lats. [7]

The real estate cycle fluctuations can be affected by actions that increase or decrease crediting. The real estate purchase and sales market is stimulated when a loan is given to a person who previously could not acquire a loan or did not want to acquire it, while the same signals are negative signs for the real estate lease market. Negative signals for the real estate market can also arise if credit institutions limit or completely stop issuing loans for some reason. In such circumstances, there is money outflow from the real estate market that can result in decreased real estate prices. Credit institutions can decrease the amount of issued mortgage loans based on many factors, for example, when the economic situation of the country rapidly worsens or in a situation when the real estate market prices are considerably exceeding their fundamental price. Correlation between block house prices and increase in the amount of issued mortgage loans can be seen in Figure 1.

Banks can affect the model of action of potential borrowers and flat buyers by adjusting the total amount of loans they offer and by their crediting policies. That in the end can affect the demand for dwelling space.

3.2. Employment and Unemployment

Unemployment is a notable social and economical problem of the national economics. Unemployment can affect economic and social processes in the country;
hence, it is an important factor that can affect people’s behaviour under certain circumstances. Unemployment affects decisions and actions of individuals as well as the society as a whole. Inhabitants relate employment and unemployment with their welfare. Unemployment also affects the social condition and mood of inhabitants.

When evaluating their ability to pay and making decisions that will affect them for years to come, knowingly or not, the inhabitants relate their decisionmaking with their financial independence; however, employment directly affects the welfare of society and its financial independence, thus employment can be the determinant factor when making a decision. The use of resources available to and individual will depend on the psychological state of the individual. Psychologically, high unemployment rate negatively affects individuals’ behaviour and future expectations, thus operations with direct expenditure of monetary resources can be delayed or cancelled at all with a tendency to limit expenditure and decline everything that is unnecessary.

Such pessimistic economical condition resulting from unemployment can lead to a decreased demand for a certain group of goods in the country.

‘Unemployment is the main problem of economics that causes widespread social and political resonance. Unemployment affects production volume. The direct costs of unemployment can be determined but it is rather hard to measure the social, psychological or moral consequences of unemployment.’ [4]

Unemployment is not just an economic and social status of a certain individual. It is a country level problem that affects processes not only for an individual but also for the national economy as a whole. When unemployment increases as some individuals lose their jobs, the demand is affected in the industries in which the particular individual consumed goods and services and also in the whole national economy, considering the fact that economic development acts as one entity and changes in one industry can influence other industries. The real estate market is not an exception here, as unemployment affects it much more heavily than most other industries. Increased employment rate will have a positive effect on demand for dwelling space, while it is the other way round when employment rate decreases.

During the economic crisis unemployment problems severely affected Latvia. On average, unemployment rate in the country increased from 4.8% in April 2008 to 17.3% in May 2010. [8]

During the first half of 2011, the unemployment level has decreased to 14%. High unemployment rate and decreased employment is connected with the country’s worsening economic wellbeing, decrease of society’s purchasing power as well as declining society’s mood with all the ensuing consequences. To fully exploit the human capital, economy has to function in full and it cannot be combined with high unemployment rate. When the unemployment rate is high, the gross domestic product is not created to its full potential, thus the national economy suffers. Unemployment and employment are one of the most important macroeconomic factors most influencing the demand in the real estate market. The lowest prices in Latvia’s dwelling space market are in the periods of high unemployment rate.
3.3. Inhabitants’ income

Objects and dwelling space in the real estate market are bought by households or individuals. Households can make such purchases only out of their savings or income, or out of the combination of both. Household income consists of salary, social benefits, pensions and other payments from the State budget, as well as dividends, interest payments and others. The above-mentioned ways of gaining income compile the income of households, which distribute and spend it to acquire various goods and services. According to expert calculations, the proportion of shadow economy in Latvia amounts to almost 40% of the economy. [12] That includes illegal salaries distributed and used just as official ones to acquire various goods, including acquisition or rent of dwelling space.

When evaluating the real estate market as a whole, an important factor is the amount of money that inhabitants are ready to spend for using dwelling space and for acquisition of real estate. The total amount of money can affect the overall demand, hence an increase or a decrease in the income level has inverse effects on real estate objects.

The income level and its changes currently is and will continue to be a significant factor that will affect demand for dwelling space, because acquisition of real estate is a substantial purchase usually made when a person is sure about their income. One also has to consider the possibility to financially maintain the object to be obtained. Such factors as public utility payments, real estate taxes and other expenses connected with maintaining a property also affect the demand. By analysing the relationship between the income level and the real estate object price, one can see a clear relation between the average market price of one square meter and the average salary in the region. The income level is connected with the ability to obtain a mortgage loan as well as the maximum amount that one can borrow. Thereby, the average income level of the society affects the amount
of money invested in real estate objects through mortgage loans given by commercial banks. There is a significant correlation between the average wage and block apartment prices in Riga proving the influence of this factor on the real estate market.

3.4. Demographic situation

In the last years, the demographic situation in Latvia has become a very acute problem, because during the last twenty years the number of inhabitants was constantly decreasing each year. In the real estate market, people are the ones that create demand as there is no need for real estate if there are no people. If the remaining factors influencing the demand for real estate objects affect the behaviour of people, then the demographic processes characterise the number of people and their structure. The number of inhabitants and current structure affect the approximate amount of needed dwelling space. In a large number of countries, it is the increase in the number of inhabitants that is one of the factors most significantly affecting the development of the real estate market. Although, during the last twenty years, the number of inhabitants in Latvia decreased by 420 thousand or 15%, there is no direct correlation between the fluctuations in the number of inhabitants and the real estate prices, however, this only means that these years other real estate demand factors have been stronger but demographic factors will become increasingly dominant when other factors will level out. Since 1990, the number of inhabitants has been decreasing each year. The decrease in the number of inhabitants is connected with lower birth rates so apparent in the nineties and with negative migration saldo. [13]

To determine the effect of demographic situation on the real estate market, one has to study the specificities of a particular region: decrease or increase in urbanisation level, population age structure, because people from different age groups may have different dominant actions towards the real estate market. The demographic situation is also connected with migration, which is a strong factor that can considerably influence demand in the region in a relatively short period. Emigration is one of the problems in Latvia. In 2009, more than 4700 people officially emigrated from Latvia, while the real number of emigrated people is much higher. [6]

Without inhabitants and a certain density of population, the real estate market will not be able to develop in the long run, thus the development of the real estate market has to be adjusted to match the demographic processes in the region. If the real estate market is not commensurate with the demographic situation in the country, real estate owners who will want to sell their properties may bear loses as the demand will be rather low. The positive aspect of this fact is that, compared to other factors influencing demand in the real estate market, demographic situation is the easiest to forecast and it should be used when making prognoses.

Although the urbanisation level in Latvia is relatively high – 68%, increase in migration is very possible among people of working age in search of better employment opportunities when the economic structure changes and leads to even smaller demand for dwelling space in more remote parts of the country.
3.5. Government decisions

When evaluating inhabitant demand for dwelling space in a country, one has to take into account all of the abovementioned factors that influence the demand. Another factor not previously mentioned and able to significantly affect the real estate market is government decisions and regulations directly relating to the real estate market. It is almost impossible to avoid them at least on an individual level. It is a positive sign, if such decisions have economic grounds and are really necessary, however, looking at the speed and specifics of decisionmaking, one can see that the bureaucracy can do more harm than good with unreasonable interference in the real estate market. An example is the Government decision of 2007 as part of the plan to decrease inflation to introduce a mandatory first payment of 10% if one takes a loan in a commercial bank to acquire real estate.\[13\] It is not a wrong decision, but it was adopted when the real estate prices had already started declining. In Latvia, real estate owners have also faced significant changes in the real estate taxation policy. In 2010, the Government introduced a dwelling tax intended to supplement the Government’s budget and not to fulfil a regulatory role. That definitely resulted in the negative pressure on the overall demand. Moreover, in 2011 this newly introduced tax rate was doubled. \[9\] It should be added that it all happens at a time when the average dwelling space per inhabitant is relatively low, compared to other EU countries, furthermore, the quality of these dwellings is quite low. In addition, the government as part of its budget consolidation has planned to re-evaluate the real estate tax applicability that will affect the real estate market in a currently unknown way. The author wants to stress that the main focus of the tax should be regulation, control of the real estate market, and not maximising the return from the money of collected taxes. Higher real estate tax would have been much appreciated before the real estate crisis; it would have stimulated more effective real estate market development and slowed down the extremely fastgrowing demand.

Taxes, dues and regulation or limitation of draft laws can be either an obstructive factor or a factor stimulating growth in the real estate market, but in Latvia the factor that slows everything down is that in most cases such government actions are unexpected and businessmen and inhabitants cannot timely forecast their actions. The cost and quality of property usage for real estate developers, potential buyers as well as current owners of real estate can significantly change in result of various government regulations and taxes. Unreasonable introduction of various taxes, dues and laws can change the total demand or supply and thereby put the real estate market development on a wrong path, thus affecting the direction in which the industry is developing.

Conclusion

During the last decade, the economic situation in Latvia has not seen a constant development; several economically important events took place, such as joining the European Union, economic upturn and crises afterwards that inescapably left an im-
impact on all national economy and lived through a full real estate market cycle in the past decade. Factors that affect the real estate market like employment, income level, crediting and others changed due to changes in the economic environment as a result of these changing processes and their interaction.

By researching the recent processes in the real estate market, we can understand the factors that influence both the situation in the real estate market and the demand and supply balance. The most significant foreseeable factors that will affect the development of the real estate market in the near future are the demographic situation in Latvia, commercial bank crediting activity, welfare level of inhabitants, mostly depending on household income and employment, as well as governmental policy of laws and decisions targeted at the real estate market.

Understanding the factors that affect the real estate market and their effect can significantly improve forecasts as to the direction of development of this industry and also the direction in which it should develop. This understanding would also give an opportunity to ensure a sustainable real estate market development that would be compatible, for example, with the current demographic situation.

If the cyclical development of the real estate market is too severe, it can negatively affect the development perspectives of the industry and also the overall economic situation in the country as this industry is very significant in the national economy. The recent events with threefold price drop in some real estate market sectors act as a proof of what can happen if the real estate market development is not compatible with the macroenvironment and other important factors.

The main conclusion of this paper is that the real estate market develops cyclically and this cyclical development, depth and length of the cycles are affected by various economic, social, and political factors. Understanding these factors and application of the obtained knowledge can help ensuring an economically reasoned real estate market development that would benefit both the society and the other market participants.

References

Factors Affecting the Dwelling Space Market Prices in Latvia


VEIKSNIAI, ĮTAKOJANTYS BŪSTO RINKOS KAINAS LATVIJOJE

Didzis Ādmīdiņš, Jānis Zvanītājs

Santrauka. Aprašomi veiksniai, įtakojantys būsto rinkos ciklų trukmę ir gylį Latvijoje, tokie, kaip kreditavimas, pajamų lygis, regiono demografinė situacija. Supratimas, kaip šie veiksniai sąveikauja ir įtakoja būsto rinką suteikia galimybę plėtoti tvarią nekilnojamąjį turto rinką, kurioje visi sektoriaus dalyviai turėtų naudos.

Didzis Ādmīdiņš – Author was conferred a Master’s degree in 2008 in Business Management in Riga Technical University and afterwards he continued the studies in Business and administration faculty in doctoral program. Currently the author is employed in “Lombards24.lv” Ltd. as chief operating officer, located in Raunas street 44, Riga. Previous work places were “Hansabanka” joint-stock company, “Property Pool” Ltd., “Vecpilsētas viesnīcas” Ltd.


Jānis Zvanītājs – Author was conferred a Doctor’s degree in 1985. Currently author’s work place is Riga Technical University and his position is a professor in business management and economical study courses.