

RIGA TECHNICAL UNIVERSITY

Faculty of Engineering Economics
International Business and Customs Institute

Valentina Andrejeva

(doctoral student's identity card No. 701758)

**DEVELOPMENT OF LATVIAN MORTGAGE
LENDING SYSTEM.
PROBLEMS AND SOLUTIONS**

Doctoral Thesis

Branch: Management science
Sub-branch: Management of entrepreneurship

Research supervisor:
Remigijs Počs
Dr.habil.oec., Professor

RTU Publishing House
Riga – 2006

UDK 336.763,34 (474.3) (043)

An 224 1

Andrejeva V. Development of Latvian mortgage lending system. Problems and solutions.

Doctoral Thesis – R.: RTU, 2006. – 43 p.

Published pursuant to the resolution of the the Chair of International Economic Relations, Transport Economy and Logistics of the International Business and Customs Institute of the Faculty of Engineering Economics of Riga Technical University of 2006, minutes No. ...

ISBN

**DOCTORAL THESIS
IS PRESENTED FOR BEING CONFERRED
THE DEGREE OF DOCTOR OF ECONOMIC SCIENCES
AT RIGA TECHNICAL UNIVERSITY**

The promotional work was executed at the Chair of International Economic Relations, Transport Economy and Logistics of the International Business and Customs Institute of the Faculty of Engineering Economics of Riga Technical University. The promotional work for being conferred the degree of Republic of Latvia Doctor of economic sciences has been publicly defended on _____ 2006 before the RTU P-09 Promotion Council of the branch of economics and management science at the Faculty of Engineering Economics of Riga Technical University on _____ 2006, a.m. , Room 119, 1 Kalku street, Riga.

REVIEWERS

1. Elvira Zelgalve, Dr.oec., professor
Latvian University
2. Natalija Lace, Dr.oec. as. professor
Riga Technical University
3. Svetlana Rusakova, Dr.oec.
Latvian Bank

ACKNOWLEDGEMENT

I confirm that this doctoral thesis is presented for defence at Riga Technical University for being conferred the degree of Doctor of economic sciences. This doctoral thesis has not been not presented to any other university for obtaining a scientific degree.

Valentina Andrejeva

..... 2006.

The doctoral thesis is presented in Latvian and contains Introduction, 5 chapters with 28 subchapters, conclusions and recommendations, 14 tables, 7 figures, and 7 appendices. The bibliographical list contains 105 references to the sources used.

References with regard to the doctoral thesis are to be sent to:

Professor Anatolijs Magidenko

Secretary of Promotion Council RTU P-09

Riga Technical University

Kaļķu iela 1, LV-1658, Riga, Latvia

E-mail: ief@rtu.lv

GENERAL DESCRIPTION OF DOCTORAL THESIS

Topicality of research

Nowadays problems of mortgage lending in Latvia have become especially topical. Mortgage lending has become a relevant type of crediting and continues its stride of remarkable expansion. The amount of mortgage loans granted by banks in 2004 has grown from 925 million lats at the start of the year to 1432 million lats at the end of the year, and in the first half of 2005 it has already reached 2044 million lats or has increased by 42.7% as compared with the previous year, and its share in the total loans amount granted as of the end of the 2nd quarter of 2005 has reached 37.7%.

The topicality of issues related with mortgage lending is predetermined also by the currently high demand for long-term financial resources. Latvia's rapid economic development has triggered an increasing demand for considerable long-term financial investments for constructing and purchasing buildings and structures, for setting up or expanding businesses, buying plots of land, implementing various reconstruction projects etc.

Mortgage lending can facilitate the solution of the currently topical housing construction development problem if supported by the elaboration of the relevant normative base and corresponding system of guarantees.

Today the issue of mortgage lending has become really topical, since the level of incomes of population has increased and therefore they can afford to expend a bigger share of their incomes on purchasing of new real estate or its improvement.

At the same time, there are quite a few unresolved problems in the field of improvement of the system of mortgage lending. They concern, e.g. perfection of legislation governing issues with regard to mortgage lending and real estate, the issues of more effective utilisation of fiscal policy instruments, tackling of issues of application of the taxation system to the effect of stimulating or restricting mortgage lending etc. Solid practical experience has been amassed in mortgage lending, at the same time, there are few theoretical generalisations and evaluations concerning the system of mortgage lending, its development prospects and effectiveness in Latvia. There are several programmes for crediting housing development, but their functioning is still insufficiently effective.

This necessitates further work to be focused on theoretical and practical aspects of the Latvian system of mortgage lending, and further development and consolidation of the mortgage lending system.

Improvement of the mortgage lending system (MLS) is one of the most relevant preconditions for developing Latvia's economy. The solution of these problems may essentially contribute to the macroeconomic development of the state and its proportions, promote stable sustainable accumulation of cash funds and their capitalisation in Latvia, as well as inflow of foreign investments. Development of an efficient mortgage lending system is a prerequisite for successful implementation of housing construction and other specialised national support programmes related with long-term crediting.

In economy the role of MLS is related with the fact that this system promotes attraction of long-term investments, giving borrowers an opportunity to obtain long-term financial assets on favourable terms. The MLS makes loans widely accessible also to medium income bracket population. Mortgage lending may be a good source of financing for improving living conditions for the middle class, since by using mortgage loans it is possible to raise funds for such long-term investments as building or purchasing a family home, renovation and improving heat insulation of existing housing, the house to be purchased or to be renovated being used as a pledge.

The development of the MLS is to a great extent promoted also by successful development and operation of pension funds, insurance companies and mutual investment funds, development of real estate and securities market, thus the MLS will contribute to the development of the national financial system on the whole.

In the world, special mortgage lending systems have been developed for the purposes of long-term financing, e.g. in Germany, Denmark, France, Sweden, Austria, the USA etc. Mortgage lending worldwide is one of the most popular types of crediting. In Latvia this system is still in a state of further development.

Considering the significant role of mortgage lending in national economy as well as its current state of development in Latvia, the **goal** of the promotional work is to develop, based on the analysis of the currently operating system, a further development model of mortgage lending in Latvia, taking due account of its specifics of Latvia being a European Union member state, and to address problems with regard to the use of the system for crediting housing development.

Main **objectives** of the research are:

- to analyse theoretical aspects of mortgage lending;
- to analyse the system of mortgage lending in the countries where these crediting facilities are most widely developed, including the countries of the European Union;
- to perform evaluation of the existing system of mortgage lending in Latvia;
- to establish the range of problems concerning the system of mortgage lending in Latvia, ways of resolving them and directions for improvement;
- to elaborate practical recommendations for the development of the mortgage lending system in Latvia;
- to investigate the problems related with the use of the mortgage lending system for crediting housing development;
- to make the required financial calculations.

Object and subject of the research

The **object** of the research is the system of mortgage lending and related economic, financial, legal and practical aspects of its realisation. The system of mortgage lending has been investigated in a broad sense, including mortgage lending to raise finance using mortgage bonds, as well as bank mortgage loan transactions without issuing mortgage bonds.

The **subject** of the research is a possible model of development of the system of mortgage lending, and problems related with its further improvement and implementation.

Research methods

The author has used generally accepted qualitative and quantitative methods used in economic science, including analysis and synthesis, logical constructive, mathematical, statistical, economic forecasting and expert valuation methods.

Theoretical and methodological foundation of research

The methodological foundation of the promotional work is theoretical and practical findings in the field of mortgage lending formulated by scholars in Latvia and abroad.

The author has also drawn upon the wealth of resources of foreign and international organisations, informative literature of banks, LR legislative acts,

materials of the National Statistical Board, unpublished materials of the LR Ministries of Finance and Economics, *Latvijas Hipotēku and Zemes Banka*, the materials of the Financial and Capital Market Commission, the Latvian Association of Commercial Banks, the proceedings of Latvian and international scientific conferences and seminars and conclusions drawn thereof, as well as personal experience of the author of the research with regard to the development of the conception of mortgage lending in Latvia and elaboration of related legislation.

Novelty of research

Scientific novelty of the research:

- the author has performed a complex evaluation and comparison of the mortgage lending systems operating in European countries and the USA, and has evaluated their applicability for the development of the mortgage lending system in Latvia;
- the research presents a comprehensive evaluation of economic, financial, social and legal aspects of the Latvian mortgage lending system, including evaluation and classification of the factors impacting its development, and evaluation of the impact of mortgage lending on inflation and the real estate market;
- the author has upgraded the definitions of the concepts of mortgage lending and mortgage bonds to make them more correspondent to the current development state of the Latvian mortgage lending system;
- the author has elaborated a methodological approach and has performed evaluation of the effectiveness of the system of mortgage lending;
- the author has developed a model for the development of the Latvian mortgage lending system, including elaboration of directions for developing the system of mortgage lending and its further improvement with regard to economic conditions and legal aspects;
- the author has elaborated recommendations concerning the use of mortgage lending for crediting housing, including also establishment of the state guarantee system, normative regulation, improvement of institutional structure, and development of financial instruments.

Approbation and practical application of most relevant results of the research

The most relevant results of the research are presented and discussed at scientific discussions, several scientific conferences, and national and international seminars.

The results were used for preparing the resolutions of the steering committee established on 21 May 1997, upon the LR Cabinet of Ministers order No.245 “On the development of the system of mortgage lending”, from 1997 until 2002 headed by the author of this research.

In the fall of 2002, the author together with the management of *Latvijas Hipotēku un Zemes Banka* presented specific results of the research as part of the Housing Development Crediting Programme in Paris at the management meeting of the European Bank for Development.

The results are also used for elaborating the terms for mortgage lending for *Latvijas Hipotēku un Zemes Banka*.

The recommendations on the perfection of the mortgage lending system are used for preparing the amendments to the law “On mortgage bonds”.

The results are also used for the elaboration of Stage I of the Housing Development Crediting Programme (HDCP) (Riga, LR Cabinet of Ministers, 13 June 2000), the elaboration of the housing development crediting programme “Housing Project” (Riga, LR Cabinet of Ministers, 2 April 2002), the elaboration of the principles of operation of the Housing Guarantee Fund (RAPLM Technical unit) (August 2003), and for the elaboration of Stage II of the Housing Development Crediting Programme (Riga, LR Cabinet of Ministers, 2002 - 21 October 2005).

Publications

1. V.Andrejeva. Improvement of the legislative and tax system in the sphere of real estate and mortgage lending. 3rd International conference “Baltic real estate market 2000”, Riga, 28 April 2002. - pp. 21.-30.
2. V.Andrejeva. Problems of housing financing in Latvia and solution possibilities. Scientific proceedings of Riga Technical University. 3rd series. – Economics and Entrepreneurship (National Economy: Theory and Practice). 3rd series. RTU Publishing House, Riga, 2002. – pp. 7-14.

3. V.Andrejeva. Aspects of tax legislation with regard to attraction of investments in the sphere of real estate. 5th International conference “Baltic real estate market”, Riga, 19 April 2002.
4. G.Kauliņa, V.Andrejeva, A.Krastiņš. Development of corporate income tax in the Latvian tax system. Scientific proceedings of Riga Technical University. 3rd series. – Economics and Entrepreneurship (National Economy: Theory and Practice). Volume 9. RTU Publishing House, Riga, 2004. – pp. 52-59.
5. V. Andrejeva. Role of fiscal policy for developing a competitive environment within the context of the Stability and Development Pact. *Averss un reverss*. Bulletin of the Bank of Latvia No.4, 2004. 52.-59.pp.
6. V. Andrejeva. Inflation from the fiscal policy aspect. Bank of Latvia conference “Sustainable development of Latvian national economy. Topicalities, risks, solutions”. *Averss un reverss*. Bulletin of the Bank of Latvia. Special edition. 2005. – pp. 21-22.
7. V. Andrejeva. G.Kozinda. Development of customs matters in Latvia and in the enlarged European Union. Proceedings of the international scientific conference. Riga, 30 June 2005. Riga: RTU Publishing House, 2005. – pp. 7-14.
8. Anticipated changes in the tax policy in Latvia. Interview with V.Andrejeva, State secretary of the Ministry of Finance. “Latvijas Ekonomists”, No.1 (121), 2005. – pp. 5. – 8.

Reports in scientific and practical conferences and seminars:

1. Scientific conference organised by the World Bank “Housing financing”. – Riga, 6-7 October 1997.
2. Scientific seminar organised by the OECD “Housing financing in the transition economy”. – Paris, 2000.
3. International scientific conference “Baltic real estate market 2000”. – Riga, 22 April 2002.
4. European Banking and Financial Forum: “Europe’s Role in the World of 2002 and after”. – Prague, 26 - 28 March.
5. Conference hosted by the Bank of Latvia “Sustainable development of Latvian national economy. Topicalities, risks, solutions”. – Riga, 19 September 2005.

Scope of work

The doctoral thesis is an independent research, is written in the Latvian language and comprises 5 chapters:

1. ANALYSIS OF THEORETICAL ASPECTS OF MORTGAGE LENDING SYSTEM

- 1.1. Theoretical analysis of basic principles and functions of mortgage lending
- 1.2. Problems of defining mortgage lending mortgage lending

2. ANALYSIS OF MORTGAGE LENDING SYSTEMS OF EUROPEAN UNION STATES – ACHIEVEMENTS AND FAILURES

- 2.1. Analysis of German experience
- 2.2. Analysis of Danish experience
- 2.3. Legal regulation in the sphere of mortgage lending i.n the European Union (evaluation)

3. ANALYSIS OF THE USA MORTGAGE LENDING SYSTEM

Participants of the secondary mortgage market

Types of selling mortgages

Emission of securities against mortgage

- 3.4. Types of securities secured by mortgage

4. MODEL OF DEVELOPMENT OF THE LATVIAN MORTGAGE LENDING SYSTEM

- 4.1. Evaluation of the currently operating mortgage lending system in Latvia
 - 4.1.1. Factors affecting the development of mortgage lending
 - 4.1.2. Evaluation of the role of norms of mortgage lending
 - 4.1.3. Evaluation of the effectiveness of the Latvian mortgage lending system
- 4.2. Directions of improvement of the system of mortgage lending
 - 4.2.1. Regulation of the amounts of mortgage lending
 - 4.2.2. Perfection of procedures of mortgage lending
 - 4.2.3. Solution of problems related with the issue of mortgage bonds
 - 4.2.4. Problems related with real estate
 - 4.2.5. Problems of bank operation
 - 4.2.6. Improvement of the procedure of insolvency and bankruptcy
 - 4.2.7. Amendments to the LR law “On mortgage bonds”

5. USE OF MORTGAGE LENDING FOR CREDITING HOUSING DEVELOPMENT

Evaluation of the current housing situation in Latvia

Housing development crediting problems and solutions

5.2.1. Guarantees for mortgage loans for purchasing housing

5.2.2. Purchasing capacity

5.2.3. Interest and awareness of the population

5.2.4. Normative basis of housing issues

5.2.5. Institutional system of provision of guarantees

5.3. Analysis of financing

5.3.1. Goals of Stage II of the Housing Development Crediting

Programme and indicators of achieving performance results

5.3.2. Required financing

The Doctoral Thesis contains Conclusions and Recommendations, Bibliography, 7 appendices. The Thesis contains 7 figures and 14 tables, and, taken together, is presented on 151 pages, excluding appendices. The Bibliography contains 105 sources of reference.

MOST RELEVANT SCIENTIFIC RESULTS OF RESEARCH

1. ANALYSIS OF THEORETICAL ASPECTS OF MORTGAGE LENDING SYSTEM

Chapter 1 of the Doctoral Thesis presents an analysis of the mortgage lending system (MLS) from the theoretical point of view. The analysis:

- discloses relevant specific features of mortgage lending and differences from other crediting systems;
- contains evaluation of basic principles and most relevant functions of MLS;
- includes the analysis of the formulations of the content of the concepts of mortgage lending and mortgage bond, and presents their definitions;
- presents formulation of the methodological approach to the evaluation of effectiveness of MLS operation.

The author demonstrates that the mortgage lending system is a special crediting system – a system in which the banks, within the MLS framework, emit, on the basis of mortgage (pledge of real estate), special public circulation securities – mortgage bonds covered by mortgage credits (mortgage loans) granted by the respective bank. The author demonstrates that generally MLS as a special crediting system has the following specific characteristics ensuring:

- 1) long-term crediting; 2) formation of mortgage; 3) issue of mortgage bonds.

As compared with other crediting systems, the MLS is being developed maximally trying to balance both active lending operations (issuing loans) and passive operations – refinancing of loans (raising finance by means of mortgage bonds). This allows avoiding problems related with possible insufficiency of long-term financial assets. In practice, the balancing of active and passive transactions in the mortgage lending system is a complicated process, if compared with performing these activities separately, as in a simple lending mechanism. Accurate balancing of passive and active operations within the MLS framework ensures attraction of regular and stable long-term credit resources, as well as creates a possibility for reducing the price of credit resources.

The analysis of the basic principles and functions of the mortgage lending system leads to a conclusion that long-term loans granted by the bank under the MLS and thus also investors' (buyers of mortgage bonds) investments are legally firmly secured with a real pledge – mortgage, and therefore in most cases are more reliable than any other type of loans. Investments in mortgage bonds have a lower investment risk level for long-term investors. Investor is protected with the right to receive repayment from the debtors of the bank, i.e. mortgagors, before any other creditors of the bank. The analysis of the situation in Latvia shows that in Latvia it is regulated by the LR law “On mortgage bonds”, Article 24 – 26 stating that in the event of bankruptcy of a bank the value of the mortgage bond cover registered shall not be included in the assets (cash funds) of crediting institutions used for covering the costs of insolvency or liquidation processes and for settling creditors' claims, as well as is specified in the amendments to the LR law “On crediting institutions”, Article 101 adopted on 21 May 1998.

As the research highlights, the high security level of mortgage bonds is also ensured by two relevant management principles concerning securities. The first – the so-called “principle of cover”, i.e., the principle of correspondence between the amount of the loans granted and its refinancing. The second – the principle of congruity or correspondence of terms, which implies that the bank has to ensure that its assets and liabilities are correlated by the length of the term. A mortgage bank may not lend money on fixed terms for a longer period than it may have access to corresponding fixed term resources.

The first part of the doctoral thesis also presents an analysis the way of granting a mortgage loan (whether it is issued in mortgage bonds or monetary units). If the loan is granted in mortgage bonds according to their nominal value, then the bank avoids from possible losses, by selling to itself its bonds on the stock exchange, since thus this risk is transferred to the client's shoulders. The second way of issuing a loan incurs additional costs to the bank resulting from placement of bonds in the market. At the same time, the borrower should not deal with the trade of mortgage bonds himself, which, in its turn, increases the demand for loans, as the borrower receives cash funds at once and should not be afraid that, due to sudden reduction in the price of securities, he will not get the amount of financial resources planned. When issuing bonds to the borrower in the form of a loan, the bank practically cannot control the amount of bonds and the demand for them in the market, thus it cannot impact on the prices of bonds in the market. In this

regard, the author maintains an opinion that in Latvia it is necessary to continue the current practice of granting loans in money, and after that loans are to be refinanced with bonds (according to the scheme presented in the doctoral thesis).

The theoretical analysis presented in the doctoral thesis also highlights the necessity to more clearly formulate the content of the concepts of mortgage lending and mortgage bonds used in the currently effective legislation. Presently, in the Latvian legislation, the concept of mortgage loan (credit) is defined as a loan, which is secured by the mortgage of a real estate site registered in the Land Register in compliance with the requirements of the Civil Law, and mortgage bond is defined as a security issued by the bank, which secures a debt liability that is covered by mortgage bonds and other types of cover as provided for by the LR law “On mortgage bonds”. As can be seen from the studies of legislation of other countries with regard to this problem, these definitions are rather different, which is basically determined by the financial market of each particular country and the specifics of the particular economic development period (in Germany, where the mortgage lending system has been successfully operating already for 225 years, bonds are defined as obligations that are issued to finance loans, which are secured by 1st class mortgage or payment for land (mortgage bonds), or to finance public sector loans). In Latvia, taking into account the current economic situation, the mortgage loan should be defined as:

A loan (credit) that is secured by a pledge (mortgage) of real estate legally registered by a EU member state;

And the mortgage bond as:

A security issued by the bank securing debt liability that is covered with loans secured by pledge (mortgage) of real estate, or by guarantees issued by the Latvia state and self-governments, and with other type of cover as provided for by the law.

To perform an objective evaluation of the MLS and to establish the focus directions for improvement of the system, it is necessary to define the principles and criteria, which could be used for evaluating its practical operation, its ability to effectively realise the functions the system is to fulfil. Presently, the criteria and evaluations that can be found in literature are rather fragmented. Therefore the author has elaborated and comes up with a methodological approach to the evaluation of the effectiveness of the MLS. According to the author, the effectiveness of the MLS should be evaluated by applying an integrated approach, i.e. from the point of view of

all MLS subjects involved, but, primarily, from the borrowers', creditor's, investor's perspective, as well as that of the state.

From the creditor's perspective, when evaluating the effectiveness of the MLS, first, it is necessary to take into account the annual credit rate to be repaid for the loan taken. The borrower will evaluate the MLS first considering how cheap the loan is. The lower the rate on the loan for a particular term, which is ensured by the MLS as compared with other types of loans, the more acceptable the MLS. The borrower is specific about the term for which he can get the loan, which affects both the size of the mortgage loan, and the annual principal amount to be repaid. From the borrower's point of view, the conditions of repayment of the loan, "simplicity" of the procedure of getting the loan, the scope of documentation, the time spent on arranging the loan agreement, as well as related costs also play their role.

From the creditor's perspective, legislation and other requirements governing the process of mortgage lending and issuing of mortgage bonds and their turnover on the whole, including both issue of mortgage loans, service, debt collection in the event of non-payment, the procedure and regulations of issue of mortgage bonds etc. It is important for the legislative norms and governing regulations not to be too restrictive, complicated or "bureaucratic", it is important to easily apply uniform or even standardised procedures for considering issue of loans, granting of loans, issue of mortgage bonds etc. From creditor's perspective, the MLS may be evaluated positively, if there is a possibility to "easily" refinance loans, if the offer is highly attractive for refinancing and it is easy to find sources of financing by means of issue of mortgage bonds. From the creditor's point of view, for the MLS to operate effectively, it has to contain also required and adequate regulation of real estate valuation and the real estate market. And, finally, from the creditor's point of view, the costs incurred due to issue of mortgage bonds and other related procedures are also important.

From the investor's perspective – the MLS is first evaluated by the degree of security, taking into account the fact that mortgage bonds are secured by law. Therefore this requirement has to be ensured to a full extent by all MLS elements, the principles of establishment and functioning, since otherwise it may lose attraction and trust on the part of the investor. The MLS has to ensure a possibility of low risk

investment. In principle, the MLS has to ensure the possibility for investments in low-risk securities, which may be used by insurance companies, pension and other funds having restrictions with regard to allocation of investments by the degree of risk.

At the same time, from the investors' point of view, there is no requirement for a high return on the investments, this being compensated by an appropriate level of security.

From the point of view of the state, it is important to evaluate the MLS by taking into account how it ensures the development of national economy on the whole, whether its functioning has a favourable impact on the macroeconomic indicators (attraction of investments, balance of payments, inflation, profit from business operation, cover with real estate etc.), how the MLS impacts the banking sector, whether it enhances the development of living standards of the population. It is important to evaluate to what extent the mortgage lending system can be influenced by the rapid changes in the economic development (e.g., decline in the growth rates), to what extent it depends on the possible economic "shocks", for example, rapid changes in export in specific branches, currency stability, unexpected growth of credit rates etc. Effectiveness of the MLS to a large extent depends on whether it can be used and how it can be used to help to realise nationally relevant projects, which are related with, for example, tackling social problems (e.g., housing problems), implementation of infrastructure development projects etc.

Finally, the effectiveness of the MLS has to be evaluated considering its development potential, the possibility of further development. It is necessary to evaluate what place the MLS may take in the perspective in the capital market, in what forms and types it can develop, and to what extent it may enhance general growth of the national economy.

The MLS could be evaluated to be effective on the whole, if all these opinions are considered. And vice versa – negligence of any of the aspects referred to above reduces the effectiveness of the NCS. At the same time, the national economy (state) aspect could be the main one, reflecting the effectiveness of the MLS in a concentrated form.

From the quantitative perspective, the MLS should be evaluated with a number of indicators, such as number of mortgage bonds in circulation, amounts of issued bonds, amounts of mortgage loans (balance amounts), security of mortgage

bonds, relation of mortgage loans against the value of housing, rating and liquidity of mortgage bonds, the share of credit rates in the GDP, credit rates of mortgage loans (profitability) and amounts by term, extinguishing terms, structure of mortgage (land, housing, commercial real estate sites), losses from mortgage loans, amounts of mortgage loans with late payments etc.

2. ANALYSIS OF EUROPEAN UNION MORTGAGE LENDING SYSTEMS – ACHIEVEMENTS AND FAILURES

In order to further develop the mortgage lending system, Chapter 2 of the doctoral thesis presents a survey and critical evaluation of the experience of other countries, successful solutions, achievements and failures in the establishment of the mortgage lending system. In this research the author has focused her analysis on two states of the European Union with the most solid experience of mortgage lending – Germany and Denmark, and the USA – which are countries with long-standing and diversified mortgage lending systems.

The analysis of the German experience shows that the development of German mortgage banks in the long history of operation of these institutions has not been smooth and constant at all. This is reflected both in the conditions of establishing specialised mortgage banks, replacing the existing institutions, and the changes in their legal form, and in the reduction and growth of the role of these banks in the credit sector, especially taking into account the big losses incurred by the whole banking sector due to the disastrous growth of the inflation rate after both world wars. However, despite the difficulties encountered in its development, the German MLS continues to successfully operate also to date taking the leader's position in the European mortgage bond market.

In Germany, the most relevant legislative act in the sphere of MLS is the Law on Mortgage Banks (LMB), which came into force in 1990, simultaneously with the Civil Law, the Land Register System and a number of other normative acts. The LMB governed the operation of mortgage banks and state supervision of the operation of these banks. The law stipulated the requirements with regard to mortgage banks, as well as the content and scope of borrowing and lending transaction, and, in cases of communal loans, also defined the requirements with regard to business partners. Since 1900, the LMB has been amended several times. On 12 December 1990, a new

version of the LMB was adopted, which included all changes made until 1 January 1991. Later the law was still amended several times – in 1992 and 1995. After Germany was united, the scope of operation of this law was extended to make the law fully effective also in the new federal territories.

Irrespective of several amendments to the LMB, the principles established in the German mortgage lending system have remained unchanged already for 100 years. These principles and norms could be split into three main groups:

- principles and norms that are connected with specialisation of mortgage lending (specialisation principle);
- principles and norms that envisage coordination of the terms and regulations of the loans issued (balance principle);
- principles and norms with regard to provision of cover (principle of cover).

Compliance with the principles referred to above and the combination of different methods available to banks allowing to avoid general bank operation risks and specific risks directly related with issuing of credits have allowed German banks to reach an outstanding level of security unrivalled by other operating banks for already 100 years.

When developing the MLS in Latvia, it is essential to consider the fact that security of the German MLS is based on three levels of protection:

1) Special economic and legal value of the collateral that has been achieved by special requirements with regard to the establishment of the sustainable value of the pledge;

2) privileges of mortgage bond holders, in case of the bankruptcy of the bank, to satisfy their claims before any other bank creditors (bankruptcy privilege);

3) specific restrictions of scope of operation, so that the bank would not face a situation when it is forced to use the assets included in the value of the mortgage bond cover.

The history of development of mortgage lending in Denmark is also measurable in centuries. From the legislation point of view, the starting point of the systematic development of the Danish mortgage lending system is 1850, when the Danish law “On mortgage lending” (DMLL) was adopted. However, the origins of the system date back to an even earlier time, when in 1779 the first mortgage bank was established in Denmark.

When comparing the Danish and German system, it may be seen that some elements of the system are the same or alike (e.g., the principle of specialised banks, “bankruptcy privilege principle” and “balance principle” – the amount of mortgage bonds in circulation and payment liabilities against the holders of these mortgage bonds must always be covered by the same amount of mortgage loans at a corresponding credit rate), but some elements are different, e.g., refinancing of mortgage loans – in Germany mortgage loans are granted and then mortgage bonds are issued, at the same time, in Denmark loans are, in essence, issued in mortgage bonds; evaluation of real estate for collateral is also different: in Germany they establish the future value of real estate, but in Denmark the current market value of real estate etc. This testifies to the fact that, in essence, good results in mortgage lending can be reached by different methods. However, the main principle in this area still remains the same – provision of security of mortgage loans and mortgage bonds covered by them by special legal norms.

3. ANALYSIS OF THE USA MORTGAGE LENDING SYSTEM

The USA mortgage lending system may be characterised by several specific features, when compared with mortgage lending systems of Germany, Denmark and other European countries. The analysis of these specific features is important when developing the Latvian MLS.

The most relevant specific feature – in the USA mortgage lending system, there operate several secondary mortgage market participants: government sponsored agencies, lenders, investors, and intermediaries.

Three major agencies sponsored by the government are: the Federal National Mortgage Association, Fannie Mae, the Federal Home Loan Mortgage Corporation, Freddie Mac, and the Government National Mortgage Association, Ginnie Mae. They all are federal agencies that operate in the secondary mortgage market, purchasing mortgages and issuing securities against them.

Lenders, investors and intermediaries are, in their turn, saving and lending associations, commercial banks and mutual savings funds, mortgage bankers, state apartment procurement agencies, pension funds and life insurance companies, credit unions. Traditionally, saving companies invest deposits in housing mortgage loans, in order to hold them as part of their investment portfolio thanks to favourable

legislation and taxation terms. Banks try to invest their clients' deposits in possibly most varied financial instruments. They issue greater amounts in construction and commercial loans than in housing mortgage loans and often keep mortgages in their portfolio. In contrast to commercial banks and credit unions, mortgage bankers do not have a deposit base for supporting crediting operations. Usually they sell all mortgages that they have created. State apartment procurement agencies ensure mortgage lending by means of special housing procurement programmes, which are intended for persons with low or medium incomes. These agencies attract funds for mortgage lending by selling municipal bonds. Pension funds and life insurance companies invest premiums paid by policyholders. For premium investment they look for secure long-term investments in mortgages.

Besides, intermediaries are mortgage market participants that offer intermediary services in the primary and secondary mortgage market. Intermediaries may be: mortgage brokers, private intermediaries, correspondents and investment bankers. All these intermediaries receive fees for their services.

The system of mortgage lending in the USA is characterised by several patterns of trading mortgages. In the USA, they practice the sale of aggregate loan amount (sale of an unsecured loan or an unsecured loan pool to a 100% amount), the sale of stake (partial sale of the costs or a loan pool, the initial seller keeping a stake in interest), the sale of securities secured by mortgages, the reflexive and non-reflexive sale, the sale without retaining or with retaining servicing and different other types.

An essential specific feature is the pool factor (formation of big batches of mortgage bonds), as well as different types of securities secured by mortgages – transit securities, bonds (USA), special securities secured by mortgage bonds (MBS).

On the whole, when evaluating regulation in the field of mortgage lending in Germany, Denmark, the USA, and the EU, it has to be concluded that the Latvian MLS is mostly based on a comprehensive analysis of the German and Danish experience. The Latvian MLS has incorporated most of the norms of the mortgage

lending system of these states. This, on the whole, testifies to the fact that the legislation governing German and Danish systems are best suited to the Latvian conditions and the possibilities for drawing on it (taking it over) also in the future, should the systems in these countries be further improved. This may not be said about the system operating in the USA, which is considerably different from the systems functioning in the European countries. The main focus in the USA is on the formation of big mortgage pools as provided for also by the effective legislation, which, considering the relatively small scale of Latvian national economy, in the near future seems unlikely to be topical for Latvian conditions. In the current conditions in Latvia it is necessary to upgrade the effective legislative norms governing mortgage lending or change them in the fields in which the existent regulation contradicts, restricts or hampers further development of mortgage lending.

4. MODEL OF DEVELOPMENT OF LATVIAN MORTGAGE LENDING SYSTEM

The model for upgrading the Latvian mortgage lending system developed by the author of this doctoral thesis is based not only on the results of the analysis of the experience amassed in other countries but also on the evaluation of the present day situation of the mortgage lending system in Latvia, its legal framework and effectiveness.

When evaluating the current status of the mortgage lending system, the author has first of all analysed the situation of mortgage lending in Latvia, and after that systematised and evaluated the factors affecting the development of mortgage lending.

The current mortgage lending situation is to a great extent characterised by the rapid dynamics of the amounts of mortgage loans issued in Latvia over the recent years, as well as by the remarkable increase of their share in the total loan amount issued, as compared with different other types of lending (see Table 1).

Table 1

Loans issued to companies and private persons in Latvia
(million Ls, as of the end of the year)

	2001	2002	2003	2004	2005*
Total amount	1565.7	2073.8	2884.7	4309.9	5427.4
incl.:					
Loans for increasing current assets	663.6	768.7	895.5	1223.5	1596.1
Industrial loans	392.5	476.6	604.2	838.5	997.7
Loans for purchasing consumer goods	59.8	88.6	143.6	193.3	216.7
Mortgage loans	238.2	411.7	806.0	1431.9	2044.0
Other	211.6	238.2	435.4	622.7	572.9
Per cent					
Total amount	100	100	100	100	100
incl.:					
Loans for increasing current assets	42.4	37.1	31.0	28.4	29.4
Industrial loans	25.1	23.0	20.9	19.5	18.4
Loans for purchasing consumer goods	3.8	4.3	5.0	4.5	4.0
Mortgage loans	15.2	19.9	27.9	33.2	37.7
Other	13.5	15.8	15.1	14.4	10.6
	42.4	37.1	31.0	28.4	29.4

Source: Financial and Capital Market Commission.

* 2nd quarter of 2005.

As can be seen from the table, there is a rapid growth in mortgage loans over the recent years. Since 2000, they have increased from 15.2% in 2001 to 37.7% in the second quarter of 2005.

When evaluating mortgage lending, it is necessary to consider also the numerous factors that presently impact the growth of mortgage lending. These factors are varied, they refer to different spheres of their operation and they impact the development of mortgage lending to a different extent. Therefore, according to the author, for a systematic analysis (with a view of further development and improvement of the MLS), it would be reasonable to classify these factors by the following characteristic features:

- I – factors related with Latvia's economic development;
- II – factors related with the development of operation of banks;
- III – factors related with the living standards of the population; and
- IV – factors related with legislation and statutory norms.

The main factors determining mortgage lending related with the development of Latvia's national economy are: 1) growth of the gross domestic product (GDP); 2)

development of construction; 3) activity of real estate market; 4) prices of real estate; 5) Latvia's entry in the EU.

The factors related with the operation of banks are: 1) rates of mortgage loans; 2) loan repayment term; 3) availability of credit resources; 5) the amount of the loan against the value of pledge; 6) competition among banks.

Factors related with the living standards of the population are: 1) considerable increase of population incomes; 2) amount and quality of housing fund; 3) increasing desire of the population for more spacious and more qualitative apartments.

Factors related with legislation and statutory norms are: 1) factors that are related with the provisions of the LR law "On mortgage bonds" and other related laws; 2) factors that are related with taxes and taxation system; 3) the fact that the 7-year period when owners of private houses could not raise the size of rent payable is coming to an end; 4) state support programmes.

The doctoral thesis presents a detailed analysis of each of these factors.

When evaluating the norms effective in Latvia with regard to mortgage lending, the author concludes that, in the present situation, essential are the norms stipulated by the LR law "On mortgage bonds" that refer to mortgage loans, issue of mortgage bonds and circulation, as well as several norms stipulated by the LR Civil Law which the author has dealt with considering their harmonisation with the LR law "On mortgage bonds".

When evaluating the effectiveness of MLS, the author concludes that when analysing the MLS from the point of view of the borrower, it has to be evaluated positively, considering both presently low fixed and variable credit rates, which is one of the most essential aspects of the effectiveness of the system from the borrower's point of view. From the borrower's point of view, when the MLS is evaluated considering legal norms and other provisions governing the whole process of mortgage lending and issue of mortgage bonds, it is necessary to separately evaluate mortgage lending, in general, and mortgage lending by issuing mortgage bonds for its cover, specifically. In the first case – its operation has practically reached its maximum. In the second case it has to be concluded that mortgage lending by issuing mortgage bonds is a considerably long and labour-intensive process. It is related with rather many legal norms and provisions that govern and which have to be observed when issuing mortgage bonds and granting mortgage loans. The downsides listed may

be the reason why presently mortgage bonds are still issued by banks in small amounts. Currently they are issued only by two banks – *Latvijas Hipotēku un Zemes Banka (LHZB)* and *Baltijas Tranzīta Banka (BTB)*. The *LHZB* has, all in all, has issued 16 series (series AA – AM, BA, and BB), out of which 11 are presently in circulation, but the *BTB* – has issued 5 series (series A01, A02, B01, B02, C01). From the investor's point of view, “tough” regulation has to be evaluated positively, since it increases security of mortgage bonds. Practically, it means that in Latvia a sufficiently adequate legal base has been established to guarantee security of investors by fixing strict requirements with regard to the issue of mortgage bonds, management of cover register, sufficiency, quality and reporting procedures. As so far all issues have been bought out, this testifies to the trust of investors to these securities and their issuer. In principle, they ensure a possibility of low risk investments. Latvian mortgage bonds are secured with high quality mortgages. This is also proved by the high rating A1 given by Moody's Investors Service Limited, one of the three world's most influential rating agencies, to mortgage bonds issued by *Hipotēku Banka*. This means that, in essence, mortgage bonds issued in Latvia, considering their quality indicators, correspond to West European standards.

When evaluating the MLS from the state perspective, it is possible to differentiate between positive and negative aspects.

Positive aspects relate to its impact on the banking sector. The MLS allows banks both to attract and allocate investment resources, and earn from intermediary services. The MLS favourably affects also development of several production and service branches of national economy – construction, production of construction materials, real estate market, financial intermediation etc., stimulating growth of business profits and improving employment situation. The MLS in Latvia is increasingly used for implementing major projects of national significance, including tackling social problems (housing issue). The MLS is certainly having a positive impact on the improvement of living conditions and overall living standards of the population.

At the same time, it is hardly possible to under-value several negative aspects in the development of the MLS in Latvia from the national economy perspective:

- despite the rapid development of mortgage lending in Latvia, its scope is still considerably smaller than in other European states (both in absolute terms, and per capita). The banks are still not very active issuing mortgage bonds, they do

not refinance mortgage loans using mortgage bonds, and thus are risking with their equity, assets deposited by individuals and legal entities and financial resources of non-residents;

- there is no competition within the framework of the MLS, it is to a great extent distorted by the inflow of foreign capital in Latvia;
- in Latvia, there are risk factors related with the high increase of the amounts of mortgage loans and, simultaneously, high prices on real estate. Liquidity of pledged real estate is overstated, especially in a perspective. The MLS is to a great extent dependent on the real estate valuation and speculative transactions with real estate;
- the impact of the MLS on inflation, balance of payment, import, export and other macroeconomic indicators is insufficiently evaluated;
- The MLS in Latvia is not safeguarded against possible economic “shocks”, e.g., rapid changes in export volumes in some branches, currency fluctuations, unexpected increase of variable interest rates etc.
- Regulation resulting from currently effective norms of the LR law “On mortgage bonds” fragments the refinancing of loans of one issuer into smaller issues, and does not allow to effectively focus on the activities of refinancing. Such small issues of securities have lower liquidity in the secondary securities market.

On the whole, taking due account of all points of view, as well as the factors, legal framework and the evaluation of real situation with regard to the MLS, it has to be concluded that the MLS in Latvia does not operate sufficiently effectively. Which calls for its further development and perfection.

The analysis of MLS factors of other countries, as well as of current real operation of the system, effective legal framework and effectiveness shows that presently the most relevant problems of MLS requiring further attention are:

1. Regulation of amounts of mortgage lending.
2. Improvement of procedures of mortgage lending.
3. Problems related with issue of mortgage bonds.
4. Problems related with real estate.
5. Problems of bank operation.

6. Improvement of insolvency and bankruptcy procedures.
7. Amendments to the law “On mortgage bonds”.

1. Currently, in Latvia the amounts of mortgage lending are not regulated. In principle, commercial banks are not restricted in issuing mortgage loans. There is also no indirect restriction, by using, e.g. the possibilities of the tax system, credit dues etc. Therefore one of the most important problems related with currently considerable mortgage lending development growth rates, their impact on the growth of inflation and the real estate market is regulation of the amounts of mortgage loans issued by using macroeconomic and legislative levers as well as other national economic and fiscal policy instruments. However, when choosing the most appropriate instrument, it is necessary to consider several essential conditions.

First, it is necessary to consider to what extent mortgage lending impacts these or other economic processes. To establish whether mortgage lending influences, for example, the inflation rate in the country and to what extent, how it impacts the prices of real estate, the development of industries related with construction etc.

In order to find the answer to the question on the impact of mortgage lending on inflation, it is necessary to have a clear picture of the pricing mechanism in each case when inflation grows, comparing it with the growth of amounts of mortgage lending. In order to establish the impact of mortgage lending on inflation, the author has performed the correlation-regression analysis, by establishing the interrelation between the changes of consumer prices and the factors affecting them. The regression analysis, by using these indicators and forming an interrelation model between the changes in the consumer prices and the factors determining demand inflation, shows that the impact of mortgage lending on inflation is not very big; price changes are mostly affected by the incomes of the population.

As a result of the analysis, it was possible to establish the following regression equation with essential factors:

$$\begin{aligned} \Delta \text{ INFLATION} = & 94.98278288 - 0.03165430411 * \Delta \text{ POPULATION_INCOMES} + \\ & t = 31.64747 \quad t = -3.959751 \\ & + 0.04501520562 * \Delta \text{ POPULATION_INCOMES} (-2) + \\ & t = 5.419785 \\ & + 0.0002731937191 * \Delta \text{ MORTGAGE LOAN} \\ & t = 0.080601 \\ & R^2 = 0.829944 \quad DW = 1.910091 \end{aligned}$$

Where:

t – value of statistical significance (t-statistics) of each parameter;

R – determination coefficient;

DW – Durbin-Watson criterion;

Δ – denotes growth of indicator.

From the equation it can be seen that determination coefficient is high (0.83), and thus the changes in the incomes of the population and mortgage loans explain 83% of the changes in consumer prices. The biggest impact on the inflation is due to the half a year lag in the population income – the growth of income by 1 million Ls brings about a price increase on average for about 0.045 percent points after two quarters. The incomes of the current quarter (and also of the previous quarter) have a small negative impact (the parameter is negative) – the growth of incomes by 1 million Ls brings about a price reduction by, on average, 0.032 percent points (apparently, incomes are first saved up). Judging from the value of mortgage lending regression coefficient, it can be seen that the growth of value by 1 million Ls could bring about the growth of inflation by, on average, 0.00027 percent points. It means that, if, in 2004, the amount of mortgage lending increased by 625 million Ls, then consumer prices, as a result, could increase by $0.00027 \cdot 625 = 0.17$ percent points. In fact, as a result of operation of all factors, consumer prices grew by 6.2% and thus the impact of mortgage lending could be only 2.7% ($0.17/6.2 \cdot 100$).

When evaluating the impact of mortgage lending on inflation by this approach, it does not, however, take into account its indirect impact. It may manifest itself as growth of population incomes from sale of real estate, if real estate is purchased using mortgage loan funds. Similarly, evaluating the impact of mortgage lending on inflation by applying this approach no account is taken of incomes resulting from the transfer of title to property created by mortgage loans (e.g., in case of failure to repay the loan). It does not consider also incomes related with shadow economy, EU structural funds and subsidies. According to the valuation performed by the author of the research, the impact of these factors could be 10-15% of the share of the unexplained inflation changes in the regression equation.

Regulation of inflation requires other instruments of regulation and, primarily, fiscal policy instruments. Several of them have been developed, with author's participation, by the LR Ministry of Finance and it is planned to implement them in the near future. So, in order to reduce the growth of prices on energy resources, the Ministry of Finance is investigating possibilities that would allow Latvia not to

introduce the requirements imposed by the EU directives, which would lead to an increase of prices. Application of the value added tax on heating energy supplied to households has been postponed for a year, and Latvia is trying to achieve that this exception is approved at the EU level. The government has approved the position for the excise tax on fuel, which envisages a possibility of deferment and exemption from re-calculation of excise tax rates to reach the minimal level fixed in the EU directives.

When analysing then impact of mortgage lending on real estate prices, it is necessary to evaluate this impact considering both its content and quantitative correlations.

As to their content, real estate prices are determined by both the demand and supply factors. From the supply side, these are cost factors and, first of all, construction costs, which are constantly growing due to an increase of the wages in construction, a price increase on import materials, the necessity to comply with EU normative acts etc., which trigger the growth of real estate prices. From the demand side, they are – excessive demand in comparison with supply, mortgage loans issued, growth of income of the population etc.

As calculations show, the correlation coefficients for the real estate sites (standard apartments, apartments in the buildings in the city centre, apartments in newly built residential blocks in housing estates) between the apartment prices (both minimum and maximum) and the amounts of mortgage loans in most cases (except minimum prices for apartments in newly built residential blocks in housing estates) are high (over 0.8).

As a result, it may be concluded that regulation (towards reduction of amounts of mortgage loans) is necessary, first of all, aimed at reducing the rapid growth of real estate prices. Such an increase of real estate prices may have negative consequences also in the event of different “shocks”, e.g., if there is a considerable increase of variable interest rates (especially on credits in foreign currencies). Besides, the increase of real estate prices also indirectly affects (increases) inflation. It means that by regulating mortgage lending with an aim of reducing real estate prices, inflation is also reduced.

2. According to the author, the most essential elements in the sphere of mortgage lending procedures that require further development and perfection, are

related, first of all, with establishment of the purpose of using the mortgage loan, and, secondly, with evaluation of the creditworthiness of the borrower.

3. In issuing mortgage bonds to date it is possible to differentiate among three major problems:

1) In order to undertake the issue of mortgage bonds, it is necessary to form the required cover, and here, besides mortgages, a relevant role can be played by replacement cover (liquid securities of the Latvia state or securities guaranteed by the Latvia state, cash funds in the till and corresponding accounts in the Bank of Latvia). In Latvia currently replacement cover can account for 20% of the total nominal value of the bonds in circulation together with interest expenditures. This restriction to a great extent concerns the competitiveness of the MLS as compared with other types of lending and affects the possibilities of issue of mortgage bonds. When establishing a higher margin for replacement cover, e.g., up to 25%, it would be possible to increase the competitiveness of the MLS by issuing mortgage bonds and increasing the amounts of issues of mortgage bonds.

2) The amounts of mortgage bonds in Latvia are insufficient. Already today banks-issuers do not have problems with allocation of mortgage bonds as high-security-level securities. It is a demanded security; besides, the demand is higher for larger series of issue. In the future the demand may even rise just because of the rapid development of Latvia, and the fact that funds are accumulated by pension funds and other funds, whose investment portfolios may contain a big share of mortgage bonds. At the same time, operation of issuers is essentially complicated by regulation with regard to compliance with accurate terms, greatly fragmentising total possible issues into smaller series. However, attention of global investors can be attracted by issue amounts that are worth at least 100 million euros. The changes in legislation should ensure the possibility of two-stage refinancing activities.

3) The changes of EU directives are effected to the effect that investments by banks and other investors in mortgage bonds would be effective. But then a question arises – will Latvian mortgage bonds be competitive from the profitability aspect?

4. Several MLS problems are connected with real estate and they are especially topical, considering that 40 - 50% of bank loans are related with real estate. One of them – establishment of the value of real estate for the purposes of mortgage lending. An important problem is also provision and availability of information on real estate and the real estate market. It is necessary to establish a system of collecting information about the real estate market for the purposes of its valuation, analysis and supervision.

5. One of the problems of bank operation is evaluation of the specialisation principle.

It would be necessary to elaborate the law on mortgage lending. The law should specify the status of mortgage banks as of a specific lending subject, its scope of operation, obligations and rights, operation rules and restrictions, as well as powers of supervisory institutions. Of course, it has to be evaluated whether in a small state like Latvia a specialised mortgage bank can operate successfully, especially, within the EU framework with a free capital flow. Initially it would be possible only with the assistance of state capital and for some time – with state subsidies.

A topical problem in the banking sector is related with the minimisation of the risk of failure to return the loan. This problem exists irrespective of the fact that the quality of bank loans is still retained very high – in 2005, only 1-2% of total loan amount were loans with repayment delayed for longer than 90 days. This problem is created by many factors that make many banks become dependent on mortgage loan repayment. First of all, due to considerable amounts of mortgage lending. The number of transactions with real estate is also increasing as well as the debt level of companies and households and investments of banks in these segments. But, most significantly, due to the fact that banks are not protected against the increase of variable interest rates of possible loans (at present, historically it is at its lowest level), which may create problems for borrowers to repay loans at increased credit rates. It is especially so also because presently banks, in most cases, do not strictly and consistently require borrowers to prove and justify their creditworthiness, loan amounts granted are often larger than 75% of the value of the pledge which is fixed by the law "On mortgage bonds", so if a crediting institution does not observe the requirement to issue mortgage bonds to refinance the loan granted, it is not obligatory

for it to observe all the norms specified in this law, including also the requirement with regard to the statutory fixed relation between the loan amount and the value of the pledge, the pledge may also be property encumbered with debts etc. However, if the loan is granted against pledge of real estate 90-100 % of the value of the pledge, but the prices of real estate fall and, simultaneously, borrowers incomes shrink, banks may incur problems.

The dependence of banks on their parent banks and financing of other foreign crediting institutions, possible unfavourable price changes in the real estate market, increase of liabilities of private persons – all of them are considerable risk factors to banks. A topical issue in the sphere of operation of banks in this situation is improvement of financial supervision.

6. In currently effective legal provisions the question of regulation of the bankruptcy procedure of issuer banks is not yet finalised. The legal base of the insolvency and bankruptcy process in Latvia has been effective already for about two years, but during this time it has not been possible to check its practical realisation, therefore, presently it can be said that it is theoretical. However, this issue has to be regarded as a highly important element of the mortgage lending system, since this is the high level of security of mortgage bonds and protection of buyers of these securities that in the event of bankruptcy ensures the demand for mortgage bonds.

7. Several of the problems referred to above may be dealt with by appropriate amendments to the LR law “On mortgage bonds”. This refers, for example, to the establishment of the purpose of using the mortgage loan. To this effect, the law “On mortgage bonds” could include an article specifying that a mortgage loan can be issued only for the purposes that create a new or increase the existing value of real estate. This refers to the definitions of mortgage lending and mortgage bonds; mortgage bonds issue procedures, their cover etc.

A general scheme of upgrading the model of the mortgage lending system in Latvia is presented in figure 1.

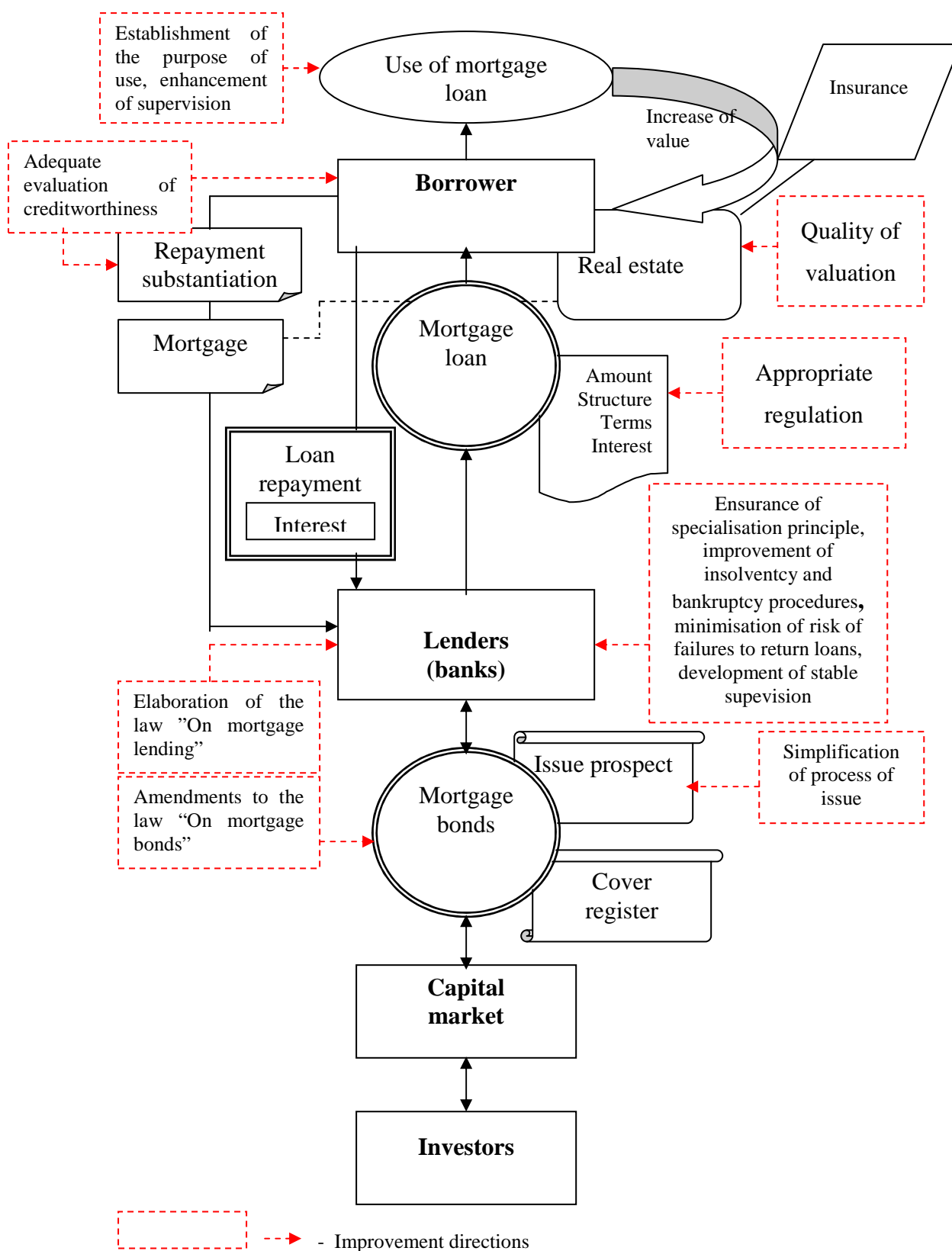


Fig. 1. Scheme of upgrading of the model of mortgage lending system in Latvia.

5. USE OF MORTGAGE LENDING SYSTEM FOR CREDITING HOUSING DEVELOPMENT

To date, one of the most important national projects to be dealt with using the facilities offered by the MLS is housing development. This project comprises promotion of housing construction, renovation, refurbishment, improvement, expansion of existing housing, development of infrastructure and objects of the service sphere, types and amount of attracting loan resources for these purposes. A project is being realised within the framework of the Crediting Housing Development Programme.

At the same time, in order to effectively use the MLS for realising housing development, it is necessary to elaborate normative documents, legal acts, to perform economic evaluation of consequences, which may result due to issue of these loans etc. Here the mortgage lending system encounters new problems requiring new solutions.

In this field, the author has performed research with regard to evaluation of housing situation in Latvia and has highlighted existing problems and obstacles concerning the use of the MLS for crediting housing development, the required additional legal regulation, establishment of state guarantees, improvement of legislative and institutional structures, development of financial instruments etc. This chapter presents most relevant results of the research.

The evaluation of the current housing situation shows that:

- there is deficiency of apartments and housing space that would ensure acceptable living standards of the population. The area of the housing fund in Latvia at the end of 2004 was 56.0 million m², or 24.3 m² per inhabitant, which is twice as little as in the countries of the EU;
- the existing housing fund (more than 90%) does not correspond to quality and energy effectiveness requirements and is considerably lagging behind European Union standards;
- The structure of housing has undergone considerable changes. From the beginning of denationalisation up to 1 January 2003, the lawful owners of real estate have been restituted the title to 10321 residential houses (with total area 3636.5 thousand m²). Until 1 August 2005, 401 609 apartments were privatised

in Latvia, 95 000 apartments are still left unprivatised.

- the situation is not improving sufficiently rapidly. Since 1990, total housing fund area in Latvia has increased only by 5.86 %.

The analysis allows to conclude that unless the housing problem is dealt with effectively in the near future, it may result in quantitative reduction of housing, additional expenditures born by state and municipal budgets for housing and losses of existing investments, increased energy resource consumption and running up of utility bills.

Taking into account these conditions, in the near future, to improve the situation it would be necessary:

- 1) to continue to stimulate housing construction, including completion of unfinished construction sites, and promote construction of new housing (especially construction of cheap standard individual homes that would allow families with medium incomes to purchase such housing);
- 2) to carry out renovation of existing housing, differentiating between different groups: renovation of commonly used premises of multi-storeyed residential blocks (thermal insulation of multi-storeyed residential blocks, upgrading of heat supply systems etc.), renovation of one-family owned homes, and renovation of separate apartments in multi-storeyed residential blocks;
- 3) to carry out demolition of irreversibly dilapidated and wrecked buildings, if their renovation is not economically justified;
- 4) to promote the development of housing market (buying and selling, renting and leasing), giving the possibility to inhabitants to acquire suitable housing correspondent to their purchasing ability.

Special attention has to be focused on the renovation of existent housing and completion of unfinished construction sites, since realisation of these activities would give the biggest effect to the development of housing development with the least investment of funds.

A very topical issue is financing of reconstruction or renovation of completely or partially privatised apartment blocks. Presently, 8150 houses are transferred to the holding and management of apartment owners. However, involvement of tenants in renovation of public premises is hampered by several factors:

- different purchasing ability of tenants of apartment blocks;
- low interest in the improvement of the existing commonly used premises of apartment block.

No legal procedure has been elaborated on how to legally, promptly and effectively fight with non-payers, which in its turn restricts attraction of financing. There are also gaps in legal acts governing procedures of management of houses and legal relations of owners of individual apartments with all other apartment owners or the apartment block on the whole. Unless these issues are dealt with in the near future, the housing situation will deteriorate drastically. In order to solve problems related with housing, the state has to create a situation that would stimulate the owners of housing to invest personal assets in the improvement of housing in their ownership.

As the amount of cash savings by inhabitants is limited, the housing improvement policy has to be focused on the possibilities to take a loan and on stimulating the availability of loan funds. Loans granted for this purpose have to be with a medium (5-10 year) or a longer (10-30 years) repayment term and they should be available at a low interest rate. It is also necessary to stimulate involvement of banks in financing such projects, which they currently are reluctant to finance due to the high risk, by ensuring state support and thus minimising the financial risk to banks.

Considering the results of the analysis with regard to the current housing situation in the Latvia presented in this chapter, it may be concluded that the mortgage lending system may be a relevant instrument to improve the situation.

According to author's evaluation, there are several essential problems to be addressed for attracting loan resources to meet the goals of housing development. Most relevant of them are:

1. Provision of guarantee for mortgage loans

It is necessary to establish effective mechanisms to stimulate the owners of apartments to be ready to borrow loan funds in the financial market for renovation or reconstruction of multi-storeyed apartment blocks, which would stop further rapid deterioration of housing fund.

A solution for promoting such activities could be provision of a guarantee. A guarantee would be provided for loans granted by a commercial bank to the borrower – an apartment owners company, a company managing the house (if the owners have authorised the manager of the multi-storeyed block to do it under a management agreement), or apartment owners as a group of borrowers.

A loan for renovation or reconstruction of a multi-storeyed house would be granted without pledge of real estate. The only security for repayment of the loan could be the monthly management fee collected from the owners of apartments – future cash flow, since otherwise all individual owners of the apartments of the residential block will have to mortgage their apartments in favour of crediting institution and will have to register the mortgage to their apartments in the Land Register, which is expensive (mortgage agreement, application to register the pledge, chancellery and state duty, consent of the spouse etc.), complicated (part of the apartments of the apartment block is not privatised, owned by municipalities, mortgaged when buying the apartment etc.), as well as owners of apartments have psychological difficulties to mortgage their personal apartment in favour of crediting institution for renovation of publicly used part of premises.

An additional tool for reaching the goal in case of a loan could also be registration of mortgage on each apartment in favour of the company of apartment owners constituting approximately 5% of the value of the apartment, which would give the bank the required collateral in case of a loan and the company of owners would be secured that joint property management and loan payments are made and are recoverable in case of non-payment.

2. Solution with regard to purchasing capacity of population

As there are considerable differences in the growth of monthly gross earnings of working population and in the growth of real estate prices (see fig.2), the issue of purchasing capacity of the population is becoming increasingly topical.

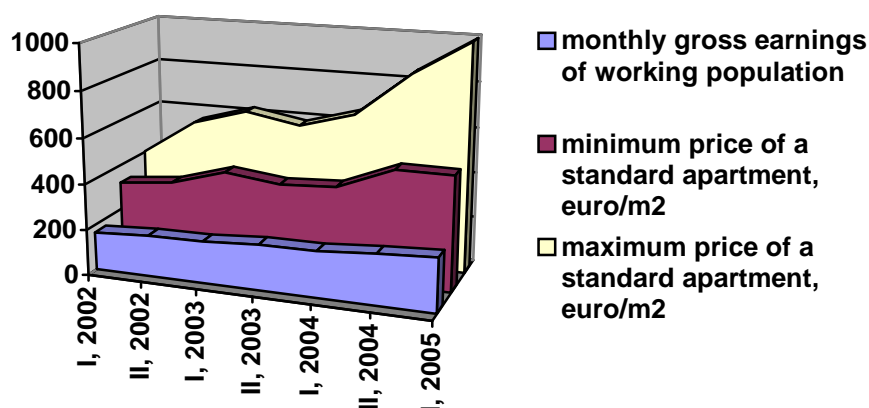


Fig. 2. Comparison of growth of monthly gross earnings of working population and apartment prices

In order to resolve the problem of purchasing capacity, it is necessary to develop a state support mechanism for increasing creditworthiness of borrowers, as a result of which the range of families that will be able to improve their living conditions by means of loan funds will essentially expand. By reducing, for example, the taxable amount of income tax on costs related with purchasing housing for private needs, reconstruction or other renovation expenses, it would be possible to stimulate inhabitants to participate in the development of the housing sector, as well as to increase the incomes of private persons and to improve their purchasing capacity, as well as to support the accessibility of small loans.

In case of mortgage loans, the purchasing power of borrowers could be improved by elaborating a mechanism of subsidising credit rates and the principal loan amount. A solution here could also be mortgage loans with a reduced borrowers initial instalment, since presently there are many persons, it especially concerns young people with good educational and competitive salaries, who would be really ready to make monthly payments for the loan granted, but they do not have funds for making initial payments and thus are deprived of the possibility of receiving a loan. Therefore, according to the author of this research, it is more important to subsidise the reduction of this first instalment for solvent categories of the population, which would give a faster and more palpable result with regard to improvement of housing situation.

3. Upgrading of legal base with regard to the housing problem

Financing of renovation and reconstruction of multi-apartment blocks is basically hampered by imperfect legislation governing the procedures of management of such houses as well as legal relations of individual apartment owners with all other owners of apartments or the apartment block on the whole. The system of legal acts with regard to housing calls for further upgrading, there are no legal provisions specifying procedures how in an appropriately legal way to effectively fight with non-payers, which, in its turn, hampers involvement of commercial banks in crediting multi-apartment houses. Therefore a vital task is to improve the system of legal acts with regard to management and crediting of multi-apartment houses.

By incorporating into the legal acts referring to multi-storey apartment blocks (including also the LR law “On apartment ownership”) the norms protecting creditors’ interests and ensuring recovery of funds expended on management of areas of commonly used property of the house from apartments owners, the number of apartment houses managed by apartment owners themselves will increase and commercial banks will also be ready to get involved in financing innovation projects of apartment houses to provide the required financing for this sphere.

In addition, according to the author, the effective working experience amassed by apartment owners companies with regard to organisation and payment collection may serve as a positive indicator in its favour when evaluating its loan application and creditworthiness as well as trust on the part of the bank.

CONCLUSIONS AND RECOMMENDATIONS

Conclusions:

1. The analysis of theoretical aspects of the mortgage lending system (MLS) shows that Latvian legislation and normative acts generally incorporate the most relevant mortgage lending principles – “the principle of cover” (the correspondence of aggregate mortgage loan amount issued by the bank and its refinancing) and the congruity principle (coordination of assets and liabilities by the length of the term). The analysis shows that legal norms strictly protect the interests and rights of buyers of mortgage bonds. This refers to both the regulations on banks that have the right to issue bonds, and the cover of mortgage bonds, as well as bank supervision regulations. In essence, the provisions included in special laws ensure a high security and quality level of Latvian mortgage bonds.
2. The theoretical analysis of the matter of mortgage lending and mortgage bonds in the contemporary financial market conditions, as well as the study of definitions of mortgage lending of different countries allows to conclude that in the current situation it is necessary to change the definitions of mortgage lending and mortgage bonds used in Latvian legislation, specifying that mortgage loan is a loan (credit) that is secured with a legally registered real estate pledge (mortgage) of a EU member state, but mortgage bond is a security issued by a bank, which specifies debt liability that is covered with loans secured with a real estate pledge

(mortgage) or with guarantees of the Latvia state and guarantees of self-governments, and other cover provided for in other laws.

3. The analysis of the lending systems of the EU and the USA shows that German and Danish legislation has been a successful basis for developing the MLS in Latvia. The Latvian legislation has successfully integrated legal norms of mortgage lending systems of these countries. At the same time, the USA MLS is essentially different from the systems effective in European states. The main trend of the USA MLS is related with formation of big mortgage pools and corresponding legislation, which, considering the relatively small scale of Latvia's national economy, in the near future will hardly be topical for Latvia.
4. Despite the fact that the MLS in Latvia has been developed based on the successful practical solutions of other countries, the presently operating system is still incomplete. The currently effective legal base still needs to be brought into line; there are still gaps in the existing legislation. The development of the mortgage lending system is hampered by imperfections in legislation governing issues with regard to real estate, as well as in the provisions of the LR law "On mortgage bonds" relating to mortgage loan, issue and circulation of mortgage bonds etc. The MLS norms require new reassessment and analysis, and based on these, a further upgrade.
5. In order to evaluate the effectiveness of the existing MLS, the author has come up with a methodological approach how to perform an integrated analysis, with due consideration of the various perspectives – the effectiveness of the LMS from the point of view of all subjects involved in the MLS, but, first of all, from the borrower's, creditor's, investor's point of view and that of the state. The effectiveness of the MLS has to be evaluated both from the qualitative and quantitative aspect. From the qualitative aspect, it is important to evaluate the positive gain or the negative impact for each particular subject. From the quantitative aspect, the MLS can be evaluated by a number of indicators, such as the amount of mortgage bonds issued, the amount of mortgage bonds in circulation, security, interest rates, rating and liquidity, balance amounts of mortgage loans in relation to the GDP and the value of housing, losses from mortgage loans etc.

6. The evaluation of the effectiveness of the Latvian MLS allows to conclude that the Latvian MLS is effective mostly from the borrower's and investor's point of view, but is less effective from the creditor's point of view and that of the state. In its turn, the quantitative analysis shows that the amount of mortgage bonds issued in Latvia is relatively small. In 2004, in Latvia it comprised 5% of the GDP. At the same time, in Denmark it was more than 55%. The segment of borrowers is also rather small – in Latvia it presently constitutes only 4 - 5% of the loans used by households.
7. To date, major directions in perfecting the Latvian MLS in the current phase are related with regulation of amounts of mortgage lending, improvement of mortgage lending procedures, tackling problems with regard to issue of mortgage bonds and the real estate market, problems related with bank operation, and the required amendments to the LR law “On mortgage bonds”.
8. The regulation of amounts of mortgage bonds is to a great extent connected with the evaluation of its impact on inflation and the real estate market. The correlation – regression calculations made show that currently the direct impact of mortgage lending on inflation is about 3%, but the indirect – about 10-15%. There is considerable correlation between the prices for real estate and the amounts of mortgage loans (correlation coefficient 0.8 - 0.9). Therefore regulation of mortgage lending is required (first of all towards reduction of mortgage loan amounts), primarily, targeted at reduction of the rapid growth of real estate prices. To this effect the author recommends to apply the regulation instruments dealt with in the present doctoral thesis.
9. From the point of view of improvement of mortgage lending procedures, given currently growing amounts of mortgage lending and taking into account the present situation in mortgage lending when many borrowers take such loans for the first time, it is important to assess the borrower's creditworthiness, since this determines the quality of the loan, the risk of the loan not to be repaid and the consequences thereof. Besides, in the present day changing economic environment the importance of creditworthiness is increased also by additional difficulties of establishing long-term solvency, since economic development forecasts, the possible changes in remuneration in the future, changes in consumption, changes in the labour market, social protection of the population etc. also have to be taken into account.

10. The amounts of mortgage bonds issued in Latvia are insufficient. The issuer banks do not have problems with allocation of mortgage bonds, which are securities having high security level. Mortgage bonds are highly demanded securities; besides, the demand is highest for bigger series of issue. In perspective, the demand may still grow as a result of rapid development and accumulation of financial assets by pension funds and other funds, whose investment portfolios may have a considerable share of mortgage bonds.
11. From the MLS point of view, the banking sector currently is facing a topical problem related with minimisation of risk of cases when loans are not returned. This risk exists irrespective of the fact that the quality of loans granted by the banks remains high – in 2005, only 1-2% of the aggregate amount of loans were loans with repayment delayed for more than 90 days. This problem is created by the dependency, due to a number of reasons, of banks on repayment of loans. First of all, due to considerable amounts of mortgage loans. The number of transactions with real estate is also growing, the same as the level of mortgage loan debts of companies and households and investments of banks in these segments. But, still increasingly, due to the fact that banks are not protected from the possible increase of variable credit rates on loans, which may create problems to borrowers to repay the loans in case credit rates grow.
12. Many of mortgage lending problems highlighted in the doctoral thesis can be resolved by appropriate amendments in the LR law “On mortgage bonds”. This refers to both mortgage lending procedures, and bank operation, utilisation of loan funds, mortgage bond cover, valuation of real estate and other provisions with regard to the MLS compliant with the new economic conditions due to the changes in the economic, financial and legal situation in Latvia after it became a EU member state.
13. An upgraded mortgage lending system may be an effective means for realising projects requiring attraction of big financial resources. Presently, one of the projects having national significance to be addressed by using the MLS facilities is housing development, including stimulation of housing constructing, refurbishment, renovation, improvement of housing, development of objects of infrastructure and service sector, and ways and amounts of attracting the required loan funds. The use of the MLS specifically for these purposes is necessitated by the fact that in Latvia a

big part of the population belongs to the low-income bracket and they cannot afford to take mortgage loans from commercial banks without corresponding national support programmes and an appropriate national social policy.

14. The evaluation of the current housing situation shows that the existing housing fund fails to ensure appropriate living conditions for the population. In Latvia, housing area per one inhabitant is two times smaller than in other EU states. Presently, provision of population with housing is insufficient both in quantitative as well as in qualitative terms and is considerably lagging behind European Union standards. 90% of all houses do not meet up-to-date requirements with regard to energy effectiveness standards, but more than 10% are in a critical state. Improvement of the situation can be observed only starting with 2004.
15. In order to effectively use the MLS for ensuring housing development, it is necessary to also elaborate additional legislative documents, legal acts, and to perform economic evaluation of the consequences that may result from the issue of loans etc. Here the mortgage lending system encounters several new problems requiring new solutions. According to author's evaluation, considering the current critical situation in the sphere of housing, several relevant problems may be highlighted that require solution aimed at attracting sufficient loan funds for housing development purposes. The most relevant problems are related with: 1) elaboration of an appropriate guarantee system for mortgage loans for purchasing housing; 2) increase of purchasing capacity of the population; 3) growth of interest and awareness of the population; 4) upgrading of legal base regulating housing matters.

Recommendations:

1. For ensuring security of mortgage bonds and to protect investors, it is necessary to develop stable financial supervision compliant with international standards and EU directives. It is necessary to upgrade the existing organisational supervision structures and supervision procedures, to evaluate to what extent the present institutional structures correspond to the aims of supervision, whether they have the necessary provision (requirements to staff and job descriptions, necessary

financial, material and technical resources, appropriately qualified and experienced staff etc.).

2. In order to increase the competitiveness of the MLS and the amount of issued mortgage bonds, a higher level of mortgage bond replacement cover could be established (up to 25%) instead of the currently applied 20%. When establishing a higher replacement margin, it would be possible to increase the competitiveness of MLS without reducing security of mortgage bonds, as well as to increase the amounts of mortgage bond issue.

3. The problems of real estate valuation have to be addressed by establishing appropriate training and qualification advancement systems, including developing training programmes for real estate valuation, organising courses and seminars, elaborating methodological materials, manuals, guidelines etc. It is necessary to develop a system for collection of information about the real estate market for the purposes of valuation, analysis, and supervision.

4. In order to improve supervision, it is necessary to upgrade information provision of supervisory institutions, including establishment of a uniform organisational structure for performing analysis, the required data bases, it is necessary to streamline information flows, methods of information collection and processing, approaches and techniques. It is necessary to ensure the necessary publicity.

5. It is necessary to make corresponding amendments to the LR law “On mortgage bonds” (Article 1, 4-7, 9, 11-15, 17, 23-26) as formulated by the author in the doctoral thesis. These amendments are intended to change the formulation of definitions of mortgage loan, mortgage bond, housing and other definitions, the regulations of mortgage bond circulation, conditions with regard to replacement cover and valuation of real estate, it is necessary to more accurately define the articles in the law concerning changes in legal acts and EU regulations.

6. For solving the housing problem, it is necessary to make mortgage loans more accessible, artificially, by means of state subsidies, reducing credit rates. This could be done, for example, with the help of *Hipotēku un Zemes Banka*, which would grant such loans at reduced credit rates to special target groups, such as families with small children, tenants of denationalised houses etc. Thus the number

of persons able to take and repay a loan will increase. A similar result could be reached if the state bought up mortgage bonds and sold them at a lower price to the target groups of the population.

7. The demand for mortgage lending and state supported lending for housing development is growing, therefore it is important for the state, with the support instruments at its disposal, to adequately get involved in the mortgage lending system, thus promoting and improving the development of housing situation in the country. An additional solution could be also the formation of special mortgage bond series for financing housing.

8. In order to promote housing development, the state has to get involved in construction of residential homes. Presently, the prices of apartments in Latvia are very high, since the supply fails to satisfy the big demand for housing. If the state got actively involved in construction of residential homes, the supply of apartments would grow, the prices of apartments would fall and much more inhabitants would be able to take a mortgage loan to buy housing.