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MODELLING AND FORECASTING THE REAL ESTATE SECTOR IN LITHUANIA

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Abstract. The model of an efficient real estate sector as suggested by this research is based on the presumption that the efficiency depends on many micro, meso and macrolevel variables. The presence of specific micro, meso and macrolevel variable factors imposes objective limitations for efficient activities the real estate sector. The real estate sector, in the presence of these limited objectives, tries to perform its functions within the boundaries with utmost efficiency. This research aims at producing the model of the rational real estate sector in Lithuania by undertaking a complex analysis of micro, meso and macro environment factors affecting real estate. Also it aims at making recommendations on the increase of the real estate competitive ability. In order to demonstrate the application of the above research for developing a model of efficient real estate sector a selection of rational housing investment instruments will be considered in this paper as a sample. It is possible to determine analogically and other factors of micro, meso and macrolevel, that increase the efficiency of real estate sector of the certain country. The suggested method of modeling of real estate sector it is possible to apply in other countries of Eastern and Central Europe.

Keywords: real estate sector, micro, meso and macrolevel factors, conceptual and quantitative information, multiple criteria analysis, model.

1. MAIN STAGES OF WORKING OUT A LITHUANIAN MODEL FOR REAL ESTATE SECTOR DEVELOPMENT

The research's aim was to develop a rational Lithuanian real estate sector model by undertaking a complex analysis of micro, meso and macrolevel variables in this paper include: legislation, taxes (tax bracket, tax deduction and tax deferred), liquid secondary market, market transparency, professional bodies, lending institutions, real estate finance, mortgage, the techniques of selling property (sale-leaseback and lease with option to buy), insurance, information technology, education, valuer's liability, valuer's fee levels, contracts, investment instruments, housing subsidy system, credit access (use of low interest loans, waivers of closing costs, government and private mortgage insurance, reduced down payments, sweat equity, flexible debt-to-income ratios, lease-purchase arrangements and deferred second mortgage) variables affecting it as well as giving recommendations on the increase of it efficiency. Alternatives of micro, meso and macrolevel variables are being considered in developing the alternative versions of a real estate sector. The research was performed by studying the expertise of advanced industrial economies and by adapting information to Lithuania. Simulation was undertaken to provide insight into creating an effective real estate sector environment.

To be efficient the real estate sector must operate within certain boundaries imposed by micro, meso and macrolevel factors. It is necessary to utilise this knowledge and related to real estate practices, so as to increase the efficiency of the real estate sector environment in the country

considered. This may be achieved by analysing the experience and knowledge of advanced industrial economies and then applying information to Lithuania.

Also it is necessary to make analysis of experience of well-developed countries in certain time. For example, state of real estate sector in Germany or other countries in the second half of last century had changes in flow of time, and that state of concrete moment corresponds to the current situation of Lithuania. Having made an analysis of history of the real estate sectors and tendencies thereof in well-developed countries within the last fifty years, it is easier to make a prognosis what should be efficient to be done in Lithuania.

While much advice has come from Western countries, little exchange of information and experiences has been shared among countries in transition so as to learn about how others are tackling identical problems. There are many successful models in developed market countries. However, there is no single universal model, but a variety of good solutions for different problems in different countries.

Having investigated the effects of the variables affecting the real estate sector in advanced industrial economies, some differences have been identified between these countries and Lithuania. On the basis of these differences, the main implications for Lithuania can be identified. The study of only one advanced industrial economy could lead to any inferences as being purely subjective. By studying a number of countries any bias can be diminished. In other words, the presence of specific variable micro, meso and macrolevel factors immediately imposes objective limitations on the efficient activities of interested parties. Interested parties, in the presence of these objective limitations, try to perform their activities in a more rational way.

Based on the above considerations, it is possible to propose a Lithuanian model of an efficient real estate sector on the basis of the performed search for rational variable micro, meso and macrolevel factors. Upon completion of such a model, the interested parties will be able to use their financial resources in a more rational manner by taking into consideration existing limitations and existing possibilities of the real estate sector environment.

This research included the following stages:

1. Identification and description of the real estate sector in Lithuania and in developed countries:
 - The formation of a system of criteria, characterizing the efficiency of real estate sector as determined by using experts methods;
 - A description of the present state of Lithuanian real estate sector and developed countries is given in a conceptual (textual, graphical, numerical, etc.) form and based on the above criteria system.
2. Comparison and contrasting of the efficiency factors of Lithuanian real estate sector with those of developed countries (see Table 1):
 - Identification of the development trends and general regularities of the real estate sector;
 - Identification of the differences between real estate sector in Lithuania and in developed countries;
 - Determination of the pluses and minuses of these differences for Lithuania today and in the future;
 - Determination an efficient environment for Lithuanian real estate sector based on Lithuanian conditions.
3. Development of an initial conceptual database of real estate sector.
4. Development of a model for determining rational real estate sector. The model allows for interested parties to identify areas where the Lithuanian situation is comparable, partly comparable or is quite different from levels attained by developed countries. The data obtained, using this model, can identify real estate sector and development trends in developed countries. The data also provides some recommendations for Lithuania and other Central and East European countries.
5. Formation of recommendations to improve the level of efficiency of real estate sector in Lithuanian and Central and East European countries.

Table 1. Comparison and contrasting of the real estate sector efficiency factors in Lithuania and developed countries

Identification of the development trends and general regularities of the real estate sector in developed countries

Factors considered	Significance	Measuring units	The development trends and general regularities (A_{ij}) of the real estate sector in developed countries (A_j)					
			A_1	A_2	...	A_j	...	A_n
Loan broker	q_1	m_1	A_{11}	A_{12}	...	A_{1j}	...	A_{1n}
Bartering	q_2	m_2	A_{21}	A_{22}	...	A_{2j}	...	A_{2n}
...
Leaseback	q_i	m_i	A_{i1}	A_{i2}	...	A_{ij}	...	A_{in}
...
Reverse mortgage	q_t	m_t	A_{t1}	A_{t2}	...	A_{tj}	...	A_{tn}



Identification of differences between real estate sector in Lithuania and developed countries

Factors considered	Significance	Measuring units	The differences (D_{ij}) between real estate sector in Lithuania and developed countries (A_j)					
			A_1	A_2	...	A_j	...	A_n
Loan broker	q_1	m_1	D_{11}	D_{12}	...	D_{1j}	...	D_{1n}
Bartering	q_2	m_2	D_{21}	D_{22}	...	D_{2j}	...	D_{2n}
...
Leaseback	q_i	m_i	D_{i1}	D_{i2}	...	D_{ij}	...	D_{in}
...
Reverse mortgage	q_t	m_t	D_{t1}	D_{t2}	...	D_{tj}	...	D_{tn}



Determination of pluses and minuses of differences between Lithuanian real estate sector today and in the future (P_{ij})

Factors considered	Significance	Measuring units	The pluses and minuses (P_{ij}) between differences of Lithuanian real estate sector today and in the future (P_{ij})					
			A_1	A_2	...	A_j	...	A_n
Loan broker	q_1	m_1	P_{11}	P_{12}	...	P_{1j}	...	P_{1n}
Bartering	q_2	m_2	P_{21}	P_{22}	...	P_{2j}	...	P_{2n}
...
Leaseback	q_i	m_i	P_{i1}	P_{i2}	...	P_{ij}	...	P_{in}
...
Reverse mortgage	q_t	m_t	P_{t1}	P_{t2}	...	P_{tj}	...	P_{tn}



Determination of an efficient environment for Lithuanian real estate sector based on Lithuanian conditions (E_{ij})

Factors considered	Significance	Measuring units	The efficient environment (E_{ij}) for Lithuanian real estate sector based on Lithuanian conditions (E_{ij})					
			A_1	A_2	...	A_j	...	A_n
Loan broker	q_1	m_1	E_{11}	E_{12}	...	E_{1j}	...	E_{1n}
Bartering	q_2	m_2	E_{21}	E_{22}	...	E_{2j}	...	E_{2n}
...
Leaseback	q_i	m_i	E_{i1}	E_{i2}	...	E_{ij}	...	E_{in}
...
Reverse mortgage	q_t	m_t	E_{t1}	E_{t2}	...	E_{tj}	...	E_{tn}

In order to throw more light on the subject, a more detailed description of some above mentioned stages of analysis follows:

?? Development of a conceptual and quantitative description of the real estate sector.

?? In order to demonstrate the application of the above research for the development of a rational Lithuanian real estate sector model, a determination of rational housing investment instruments will be considered as a sample. It is possible to determine analogically other factors of micro, meso and macrolevel, that increase the efficiency of real estate sector of the certain country.

2. CONCEPTUAL AND QUANTITATIVE DESCRIPTION OF REAL ESTATE SECTOR

In order to find the most efficient real estate sector environment for a particular country an exhaustive conceptual and quantitative description should be made. Quantitative and conceptual descriptions provide information of various aspects (i.e. economical, technical, infrastructure, qualitative, legal, institutional, management, social ones, etc.) of the real estate sector. The data of the quantitative and conceptual analysis are used in identifying real estate sector's development trends in Western Europe and USA as well as some recommendations for Lithuania.

Conceptual description of the real estate sector presents textual, graphical (schemes, diagrams), numerical, visual (videotapes) information and the criteria used for their definition, as well as giving the reasons for the choice of a particular system of criteria, their values and significance. Conceptual information is needed to make a more complete and accurate evaluation of the alternatives considered. Information also helps to get more useful information as well as developing a system and subsystems of criteria and defining their values and significance.

The development of a real estate sector conceptual description for Lithuania was done by means of analysing of experiences and knowledge of advanced industrial economies and by adaptation of this analysis data to Lithuania. To illustrate the real estate sector conceptual description a sample problem solution based on this approach is given in Table 2. In the research, different versions of advanced industrial economies practical experiences and policies in the field of real estate sector were analysed. Initially the determination of micro, meso and macrolevel factors describing the real estate sector was made. Then the existing situation of real estate sector in Lithuania and advanced industrial economies was described in conceptual form. Subsequently, followed the determination of development trends (general regularities) of the real estate sector in advanced industrial economies and their differences to Lithuania.

Table 2. Sample of conceptual description of real estate sector

The efficiency of Lithuanian real estate sector can be increased through the use of:	Trends of development and general regularities in Western Europe and USA [5, 6, 7, 8, 9]	A fragment illustrating the development of rational real estate sector for Lithuania
Broker	The broker hires and supervises the activities of real estate agents licensed to him or her, maintains a trust fund for escrow moneys deposited to blind sales contracts, collects all commissions earned by the agency, and pays his/her agents in accordance with the broker/agent agreement. A broker is fully responsible for the action of all agents licensed to him/her. Brokers are those who have been certified and licensed by their State as competent to employ and supervise real estate salespeople and to operate a real estate business. They may or may not be a member of a national, state and local boards of Realtors. Members who have been awarded the Realtors designation are certified after completion of a number of advanced management courses and the completion of a minimum number of years as an active broker. The Realtors designation is awarded by the local chapter after examination by a committee of the broker's peers.	Improvement of brokers system

Loan broker	A loan broker is an organization or person who specializes in arranging loans from his/her client-lenders to qualified borrowers. Broker fees are generally paid by the borrower. Loan brokers may or may not service the loan on behalf of the lender. Residential loans are often handled by mortgage bankers or brokers, who have access to funds of insurance companies and pension plans. Loan brokers usually act as agents for lenders. Their fees (say 1% of the loan amount) are paid by the borrower when the application is made. That fee is earned at the point when the broker provides a firm mortgage commitment from the actual lender. Most often the broker also handles the paperwork involved in processing the mortgage and property transfer.	Development of loan brokers system
Bartering	Bartering is a method of obtaining desired properties in exchange for other properties or services, without the expenditure of significant amounts of money. This provision allows for the effective sale of a property with large capital gains while delaying taxes on those gains. When investment property is traded, the gains in the old property reduce the base cost of the new property. Thus taxes will not have to be paid until the new property is sold.	Development of bartering system
Sale and buyback	A provision of a sale which states that the seller can repurchase the property at the end of the lease. The problem with such an arrangement is the setting of the purchase price at the end of the lease. If the purchase price is less than the fair market value, the Internal Revenue Service will probably declare that no actual sale was made. All rents paid will be disallowed as income and considered as interest paid on a loan. Deductions normally incident to ownership, such as taxes and maintenance, will be disallowed.	Development of sale and buyback system
Sale and leaseback	The sale of a property with the simultaneous leasing back of the facility by the seller. The past owner becomes a tenant, and the buyer assumes the role of landlord. The sale and leaseback arrangement can be a good deal for both parties. The strategy is employed by owners of property who desire capital, but continue to need the facility. The sale is also good for the buyer. Where the tenant-seller is a good risk, the buyer can usually obtain or assume a low interest loan based on the tenant's credit rating and by virtue of the long-term lease which has been executed. There are some risks to the buyer attendant in this type of arrangement.	Development of sale and leaseback system
Leaseback	A leaseback is a contractual agreement for the purchase of a real property with a provision for leasing it back to the seller. Leasebacks are often used by corporations as a means of financial restructuring by simultaneously: (1) reducing debt; and (2) obtaining much needed cash. The procedure may also prove to be a tax advantage to the seller, as the larger lease fees are an increased expense for doing business versus the smaller deduction of mortgage interest, maintenance, and depreciation.	Development of leaseback system
Lease with option to buy	Lease with option to buy an agreement under which an eventual sales price is agreed to as part of a lease. The lessee has the option, at the expiration of the lease period, to purchase the property. This arrangement may include an additional payment, to be applied against a down payment on the property. Or it may be used as an incentive to tie a tenant into a lease, without requiring payments as part of the monthly agreement.	Development of lease with option to buy system
...
Reverse mortgage	A reverse mortgage is a relatively modern technique for removing equity from a property in the form of an annuity. Many property owners reach a period in life in which they would like to obtain some of the equity on their property without selling it. An equity loan would be an alternative but would probably require monthly payments, which defeat the purpose of the loan. The amount of the monthly payment will be based on a percentage of the appraised value of the property and the going FHA interest rate. The loan is an annuity based on the borrower's age and other factors. Reverse mortgage loans are repaid after the death of the mortgagor or sale of the property, whichever comes first. Some private organizations and local governments are also experimenting with reverse mortgage loans.	Development of reverse mortgage system
Contracts	The most common types of contracts encountered by the real estate investor are: the earnest money receipt and offer to purchase; the earnest money receipt and exchange agreement; the earnest money receipt and offer to lease; the lease; the option agreement; uniform real estate contract (land contract); assignment of contract; and the sales agency contract—property listing for sale.	Improvement of contracts system
Property management	The effort required to advertise, show, lease, collect rents, maintain, and regulate the use of a property is called property management. Commercial property can be controlled successfully from off-site with occasional owner visits to ascertain the condition of the property. Warehousing and manufacturing buildings are by far the easiest to manage, particularly where net leases are in force. Management involves more than interface with tenants and the rented structures. Bills must be paid on a regular basis, mortgage payments mailed on schedule, and future replacements and repairs planned. If successfully operated, the property should throw off a cash flow, which must be invested promptly and profitably.	Improvement of property management system

Insurance	Insurance is a contract for protection against a loss, which the insured is unable to protect him or herself. Owners of real property will find the need for several types of insurance. These are: <i>Title Insurance</i> —This protects a buyer from any unknown defects in title, which are discovered at a later date. <i>Hazard Insurance</i> — These may be combination or separate policies and usually cover protection from real and personal property losses due to acts of God. Flood insurance is available in some areas, but is always sold as a separate policy. <i>Liability Insurance</i> — These may be combination or separate policies. Liability coverage protects the owner against judgments for injury to others on the insured's property. <i>Theft Insurance</i> — This protects the owner from losses due to theft or mysterious disappearances. <i>Partnership Life Insurance</i> — These are two or more policies made payable to partners, other than the insured. The purpose of these policies is to provide ready cash to exercise a buy/sell agreement executed by the partners.	Improvement of insurance system
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Conceptual analysis of major trends in advanced industrial economies helped to create a model reflecting the trends of Lithuanian real estate sector development. It should be noted that the choice of an actual trend of development in Lithuania is highly dependent on the real situation. For example, since Lithuania economy is transferring from planned development to the conditions of a free market, it is quite natural that the economic, social and legislative situation in Lithuania and that of advanced industrial economies is different. Therefore, while working out a Lithuanian model of the real estate sector development the real economic, social, legislative, political and technological situation were taken into account.

Quantitative information is made by using the conceptual information presented. Quantitative information is based on the criteria systems and subsystems, units of measure, values and initial significances. The determination of the utility degree of the micro, meso and macrolevel factors under investigation and the establishment of a priority order for its implementation does not present much difficulty if the criteria numerical values and significances are obtained and the multiple criteria decision making methods are used.

The process of determining the system of criteria, qualitative criteria initial significances and numerical values of the micro, meso and macrolevel factors, under investigation, is based on the use of various literature sources, research investigations, expert methods, and the Internet, etc. The magnitude of significance indicates how many times one criterion is more/less significant than the other, in a multiple criteria evaluation of micro, meso and macrolevel factors. The results of the comparative analysis of the micro, meso and macrolevel factors are presented as a grouped decision making matrix where columns contain n alternative, of micro, meso and macrolevel factors considered, while all quantitative information pertaining to them is found in m lines. An example of quantitative analysis is given in Sub-section 3.2.

The above comparative conceptual and quantitative analysis of real estate in developed countries and Lithuania allowed us to identify areas where the situation in Lithuania is comparable, partly comparable with or is quite different from the level attained by advanced industrial economies. The data of this conceptual and quantitative analysis was used in identifying real estate sector development trends in Western Europe and USA as well as providing some recommendations for Lithuania.

In order to give a full assessment of the influences of the micro, meso and macrolevel factors (legislation, taxes (tax bracket, tax deduction and tax deferred), liquid secondary market, market transparency, professional bodies, lending institutions, real estate finance, mortgage, the techniques of selling property (sale-leaseback and lease with option to buy), insurance, information technology, education, valuer's liability, valuer's fee levels, contracts, investment instruments, housing subsidy system, credit access (use of low interest loans, waivers of closing costs, government and private mortgage insurance, reduced down payments, sweat equity, flexible debt-to-income ratios, lease-purchase arrangements and deferred second mortgage)) in influencing the total efficiency of a real estate sector, it is necessary to analyse them in more detail in conceptual and quantitative forms. In order to demonstrate the application of the above techniques for the development of a rational Lithuanian real estate sector model, a determination of rational housing investment instruments will be considered below as a sample. It is possible to determine analogically other factors of micro, meso and macrolevel, that increase the efficiency of real estate sector of the certain country.

III. A DETERMINATION OF RATIONAL HOUSING INVESTMENT

INSTRUMENTS

3.1. Factors and interested parties affecting the efficiency of housing investment instruments

A great number of effective housing investment instruments have been developed and successfully used in advanced industrial economies. They are as follows:

- ?? Fixed-Rate Mortgage,
- ?? Alternative Mortgage Instruments,
- ?? Low-Income Housing Tax Credits,
- ?? Mortgage Credit Certificates,
- ?? Mortgage Pass-Through Securities,
- ?? Housing Bonds,
- ?? Housing Trust Funds,
- ?? Mortgage Revenue Bonds, etc.

The economic, legislative, political, social, technical and cultural situations and traditions are different in every country. Also market economies have been developed in a variety of levels. Often the efforts to introduce housing investment instruments, which proved to be efficient in some countries, were not successful in others.

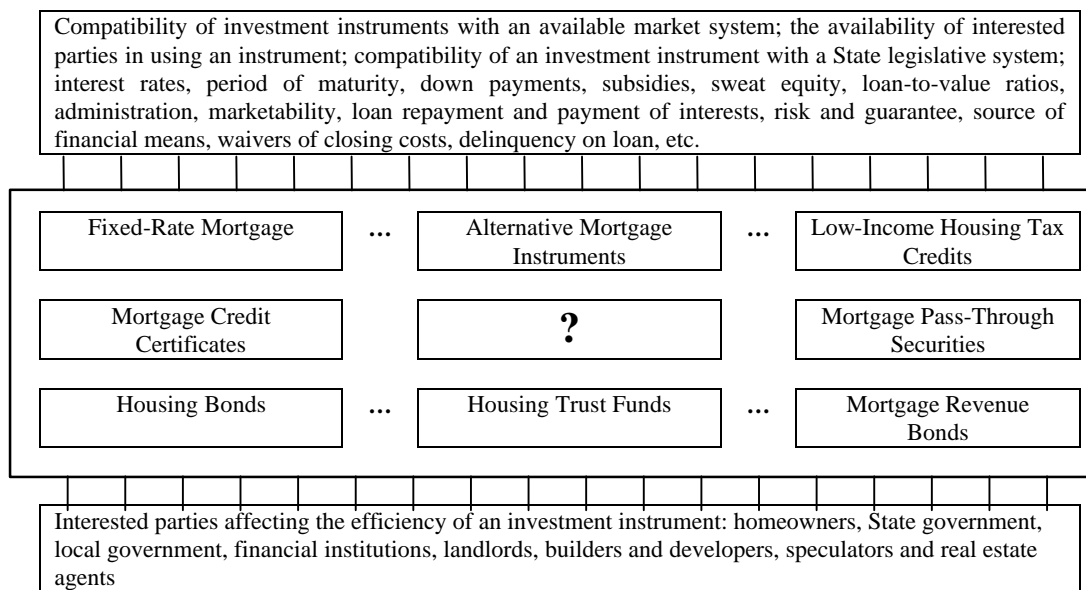


Fig. 1. Some factors and interested parties affecting the efficiency of housing investment instruments

The same housing investment instruments when applied to various economies yield various results as far as efficiency is concerned. Researchers and practical workers use diverse criteria when analysing the efficiency of housing investment instruments. Based on the above mentioned expertise, the efficiency of housing investment instruments may be approached regarding the following issues:

- ?? compatibility of an investment instrument with a market system available (the perspective of its development or expansion);
- ?? the availability of interested parties in using an instrument and skills to use;
- ?? compatibility of an investment instrument with the State's legislative system;
- ?? interest rate,
- ?? period of maturity,
- ?? down payments,
- ?? subsidies,

?? sweat equity,
?? loan-to-value ratios,
?? administration,
?? marketability,
?? loan repayment and payment of interest,
?? risk and guarantee,
?? source of finance,
?? waivers of closing costs,
?? delinquency on loan, etc.

Efficiency of housing investment instruments also depends on interested parties such as homeowners, State government, local government, financial institutions, landlords, builders and developers, speculators and real estate agents.

3.2. Development of quantitative and conceptual databases of housing investment instruments

In order to find the most efficient housing investment instruments for a particular country, the housing investment instruments's exhaustive conceptual and quantitative description should be formed. The data then obtained should be subject to multiple criteria analysis, so as to help to choose the most rational variants.

Conceptual descriptions of an investment instrument life cycle presents textual, graphical, numerical, mathematical and other forms of information about the investment instruments. The criteria used for their definition, as well as giving the reason for the choice of this particular system of criteria, their values and significance is also essential. Conceptual information is needed to make a complete and accurate evaluation of the alternatives considered. More useful information and the development a system and subsystems of criteria and defining their values and significance (see Fig. 2) illustrates the development of a conceptual database fragment containing the information on housing investment instruments.

Quantitative information is based on the criteria systems and subsystems, units of measure, values and initial significance. The determination of the utility degree and value of the investment instruments and the establishment of the priority order for its implementation does not present much difficulty if the criteria numerical values and significance are obtained and the multiple criteria decision making methods are used.

The process of determining the above the system of criteria, qualitative criteria initial significance and numerical values of the investment instruments under investigation is based on the use of various expert methods, on the Internet, etc. Quantitative criteria numerical values are obtained by analysing the data on investment instruments and different documents, Internet, etc. The magnitude of significance indicates how many times one criterion is more/less significant than another in the multiple criteria evaluation of investment instruments. The results of the comparative analysis of the investment instruments are presented as a decision making matrix where columns contain n alternative investment instruments, while all quantitative information pertaining to them is found in m lines.

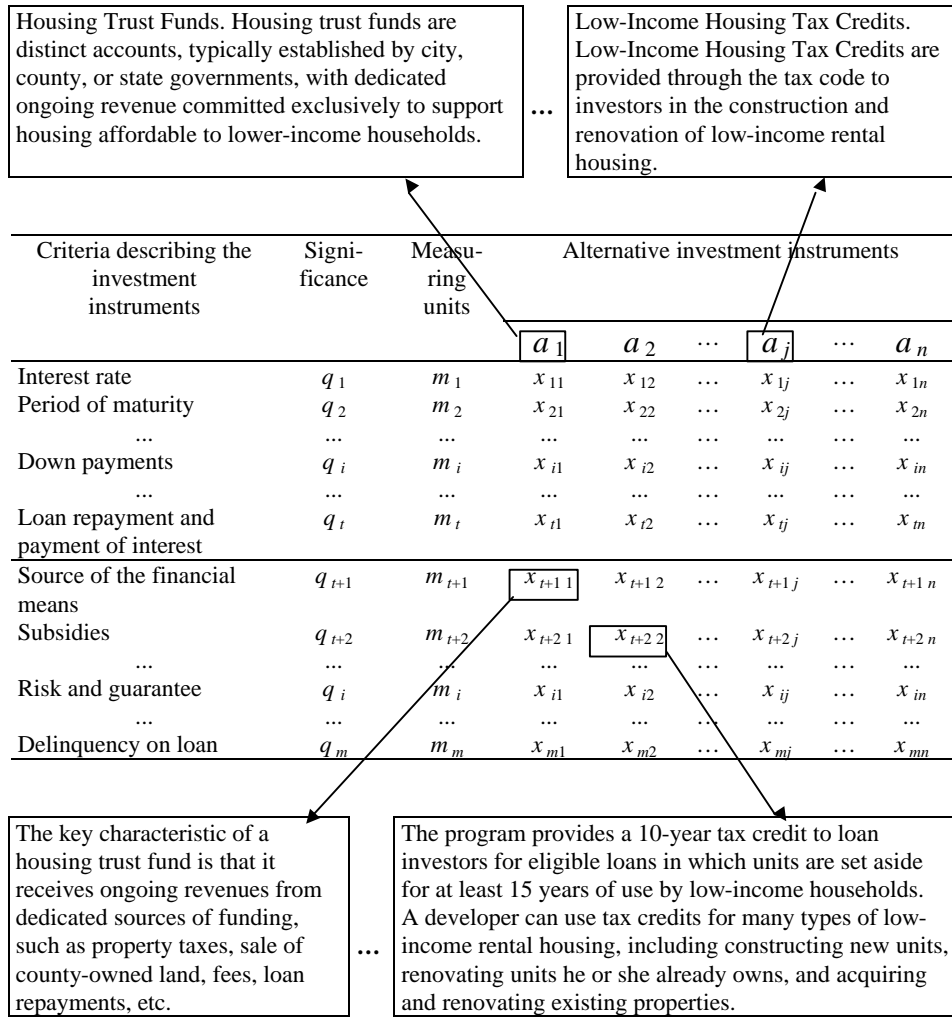


Fig. 2. A fragment of developing housing investment instruments conceptual database

Table 3. A fragment of developing housing investment instruments quantitative database

Criteria describing the investment instruments	Significance	Measuring units	Compared investment instruments					
			a_1	a_2	...	a_j	...	a_n
Interest rate	q_1	m_1	x_{11}	x_{12}	...	x_{1j}	...	x_{1n}
Period of maturity	q_2	m_2	x_{21}	x_{22}	...	x_{2j}	...	x_{2n}
...
Down payments	q_i	m_i	x_{i1}	x_{i2}	...	x_{ij}	...	x_{in}
...
Loan repayment and payment of interest	q_t	m_t	x_{t1}	x_{t2}	...	x_{tj}	...	x_{tn}
Source of finance	q_{t+1}	m_{t+1}	$x_{t+1 1}$	$x_{t+1 2}$...	$x_{t+1 j}$...	$x_{t+1 n}$
Subsidies	q_{t+2}	m_{t+2}	$x_{t+2 1}$	$x_{t+2 2}$...	$x_{t+2 j}$...	$x_{t+2 n}$
...
Risk and guarantee	q_i	m_i	x_{i1}	x_{i2}	...	x_{ij}	...	x_{in}
...
Delinquency on loan	q_m	m_m	x_{m1}	x_{m2}	...	x_{mj}	...	x_{mn}
Utility degree of alternatives			N_1	N_2	...	N_j	...	N_n
Priority of investment instruments			Q_1	Q_2	...	Q_j	...	Q_n

3.3. Search for rational housing investment instruments

The quantitative and conceptual databases, which are being developed now, give an exhaustive description of housing investment instruments and allow for their multiple criteria analysis. This helps to determine the investment instruments efficiency of the country in question.

Since the efficiency of alternatives of a housing investment instrument is determined by taking into account much varied information, a multiple criteria analysis should include methods enabling a decision maker to implement a comprehensive analysis of the variants, leading to and making a proper choice.

The following methods [3] developed by authors are aimed at performing this function:

- ?? a method for the criteria significance establishment,
- ?? a method for multiple criteria analysis and setting priorities,
- ?? a method for determining alternatives utility degree,
- ?? a method for providing recommendations.

When a certain method (i.e. determining the initial significance of the criteria) is used the results of the calculations obtained become the initial data for another method (i.e. a method for multiple criteria analysis and setting the priorities). The results of the latter, in turn, may be taken as the initial data for some other methods (i.e. determining housing investment instrument utility degree and providing recommendations).

For example, the utility degree of investigated alternative investment instruments as determined by using the proposed method [3]. This method assumes direct and proportional dependence of the utility degree of investigated alternatives on a system of criteria describing alternatives, values and significance of the criteria. Experts determine the system of criteria, calculate the values and the initial significance of criteria. Interested parties can correct all this information by taking into consideration their goals and financial capabilities. The assessment results of alternatives fully reflect the initial data jointly submitted by experts and interested parties.

CONCLUSIONS

The development of a real estate sector model for Lithuania was carried done by means of an analysis of experience and knowledge of advanced industrial economies and by their adaptation to Lithuania. In course of this research, different versions of advanced industrial economies practical experiences and policies in the field of real estate sector were analysed. Initially the determination of systems and subsystems of factors describing the real estate sector was undertaken. Then, based on these factors, the existing situation of real estate sector in Lithuania and advanced industrial economies were described. Subsequently followed the determination of trends of development (general regularities) of the real estate sector in advanced industrial economies and their differences from Lithuania. Having analysed the differences in the real estate sector of Lithuania and advanced industrial economies, a model of real estate sector for Lithuania was developed. Also in course of this analysis was produced a few recommendations on how to increase the efficiency of the real estate sector for Lithuania. The suggested method of modeling of real estate sector it is possible to apply in other countries of Eastern and Central Europe.

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