

THE REPUBLIC OF AZERBAIJAN

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**ACTIVATION OF THE REAL ESTATE MARKET IN
AZERBAIJAN AND DEVELOPMENT DIRECTIONS OF
APPRAISAL ACTIVITY**

Specialty: 5311.01 – Organization and management of enterprises

Science field: Economics

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ABSTRACT

of the dissertation submitted for the degree of Doctor of Philosophy

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GENERAL DESCRIPTION OF WORK

Relevance and elaboration degree of the topic. In the context of global economic challenges, the problems of raising the development of the national economy in Azerbaijan to a new level, improving the structure of the economy, accelerating the development of value-added sectors are noteworthy. In solving these problems and generally, deepening the market economy relations in the country, it is important to make maximum efficient use of existing real estate, as well as the potential of enterprises, and to accelerate the development of the real estate market in the country. For this, first of all, the development of the real estate market in the country should be accelerated, and the appraisal activities here need to be improved in line with progressive world experience. It is no coincidence that one of the 4 main strategic goals in the Strategic Road Map for the National Economic Prospects of the Republic of Azerbaijan, approved by the Presidential Decree dated December 6, 2016, is to improve and develop the real estate market. In connection with the implementation of the Strategic Road Map, serious steps are expected to be taken in our country to make maximum efficient use of the real estate, as well as potential of enterprises. These measures include updating the management mechanisms of real estate, especially enterprises by taking into account global trends, improving the existing legislation, significantly intensifying the privatization process, efficient organization of inefficient use of state enterprises, as well as privatized enterprises. expanding the use of advanced mechanisms that have proven themselves in world experiences, etc.

The problems of developing the real estate market and appraisal activities in Azerbaijan remain relevant. There is a need to accelerate the process of improving the main functions, elements, forms and economic methods of state regulation in this field. Despite

continuous measures taken in our country to deepen institutional reforms and establish the principles of a market economy, it has not been possible to develop the real estate market and appraisal activities in accordance with modern requirements and to increase their efficiency. At the same time, measures taken to strengthen the investment attractiveness of the real estate market, especially of enterprises in the real estate market, do not yield the expected results, as the investment medium in most non-oil and service sectors remains low, and the process of attracting foreign investment in these areas is quite weak. Another important issue is the improvement of state control mechanisms in the management of enterprises related to the real estate market and appraisal activities. The renewal of a significant part of the existing mechanisms in this area has emerged from the objective realities of today. The use level of real estate, as well as a significant part of the potential of enterprises, is inefficient, as noted earlier, and the control mechanisms for the implementation of this work in a lawful, transparent and timely manner do not fully justify themselves.

In modern times, in the development of the real estate market, in modeling the efficient use of state property, enterprises, and in the intensification of privatization processes, it is important to determine the methods and approaches of appraisal in accordance with the interests of flexible and real estate market participants, protection of principles and criteria. The focus should be on the accuracy of the appraisal database, the objectivity of the reports, the effectiveness of the used mechanisms, and the development of appraisal mechanisms in accordance with the real estate market conjuncture. It is important to have a balanced and optimized appraisal activity and its working mechanisms in the process of ensuring the flexibility of real estate purchase and sale processes and related procedures, active involvement of real estate in production and commercial turnover.

These problems and issues are relevant for our country and there is a serious need to fundamental study these problems in terms of ensuring the growth rate of the national economy, organizing the value-added activities, improving the structure of the economy and to conduct and expand research and analysis in these areas. Considering the above, the dissertation on “Activation of the real estate market in Azerbaijan and the development of appraisal activities” is characterized as a research project in need of fundamental research, and all this indicates the relevance of the dissertation in general.

Theoretical and methodological issues of the principles of formation and development of the real estate market have been the subject of fundamental research in the world economy for the last 50-70 years. In the past, these problems have not been considered in detail and the study of these problems on the basis of market economy principles has not been organized. The development of the role of enterprises in the real estate market, along with all types of property, and the study of problems related to appraisal activities are of greater interest in the economics of developed countries. In these countries, like in all types of real estate, the problems of efficient use of enterprises have been studied systematically and fundamentally, and scientific works have been written by defining advanced methods and approaches in these directions.

In the post-independence period, scientific research has been conducted for the implementation of land reforms, the actualization of processes of management and regulation of property issues, the implementation of privatization policy, the development of the real estate market in connection with the privatization of state-owned enterprises and the study of the basics of its appraisal activities. We can mention scientific works of a group of scientists and researchers of the country – Z.A. Samadzadeh, A.Kh. Nuriyev, A.F. Musayev, T.A. Huseynov, Kh.H. Kazimli, R.T. Hasanov, T.N. Aliyev, G.A.

Safarov, B.Kh. Atashov, Sh.T. Aliyev and others in the formation of scientific and practical views on the improvement of the structure of the country's economy, the creation of value-added areas, increasing the efficiency of using the existing real estate potential in these processes, expanding the mechanisms of economic activity by accelerating the privatization process and in the development of conceptual approaches. In addition, a group of young researchers – M.A. Movsumov, A.J. Binnatov and I.V. Abdullayeva defended their dissertations at the level of Doctor of Philosophy in Economics in one or another area of real estate problems.

Scientific ideas and approaches of the classical and modern world scientists on the theoretical, methodological and practical aspects of the effective organization of the economy, the efficient use of national resources, as well as property, and the management of related processes draw attention. Among them, the scientific views and works of A. Smith, A. Marshall, A. Weber, M. Keynes, P. Samuelson, P. Krugman, J. Stiglitz, N. Thomas and others are of great importance.

In the works of a group of other researchers, the problems of development of the real estate market and the improvement of the mechanisms of appraisal activities were considered. Among these scientists and researchers we can mention the scientific works, as well as doctoral dissertations of A.N. Asaul, B.M. Bedin, A.D. Chudakov, S.V. Gribovskiy, V.V. Kokhanenko, I.A. Rahman, V.A. Sirotkin, M.M. Solovyov and others.

Despite all this, there is a need to intensify the development of promising sectors of the national economy, to study the problems of development of the real estate market, as well as the role of enterprises in the real estate market and the mechanisms of appraisal activities, to conduct scientific research works in these areas.

The object of research was the existing chemical industry enterprises in the country, Sumgayit “Ethylene-Polyethylene” plant and other local and foreign enterprises.

The subject of the research is the activation of the real estate market in Azerbaijan and the development directions of appraisal activities, the main principles, mechanisms, advanced appraisal methods, innovative applications and existing problems in the appraisal of enterprises and the efficient use of real estate, which is an integral part of enterprises.

The aim of the study. The main aim of the research is to identify the ways to activate the role of the real estate market, as well as enterprises in the real estate market in Azerbaijan and to develop of appraisal activities; to prepare the latest improved results of innovation and invention for ensuring the innovative development, high efficiency and progress.

In this regard, the following aims and objectives have been identified in the dissertation:

1. Study and generalization of the processes of formation of the real estate market and related issues;
2. Research of innovative solutions related to the organization of the real estate market and study of the features of the applied methods;
3. Creation of an electronic database on the real estate market, study of digital methods on market analysis and research;
4. Analysis of the current level of development processes of the real estate market in Azerbaijan and identification of potential opportunities of enterprises in this field;
5. Research and review of mechanisms and methods of individual and collective appraisal of real estate, including enterprises;
6. Study of international standards on the real estate market and appraisal activities; analysis and generalization of

development paths based on international experience in this field;

7. Approaches to appraisal activities in the organization and management of economic activities of enterprises, as well as analysis of the real situation of the use of real estate in enterprises and assessment of factors affecting the value;
8. Analysis of the legislation, state control mechanism related to the real estate market and appraisal activities in Azerbaijan and comparison with the field legal acts and local experience of developed countries;
9. Preparation of recommendations and proposals on improving the real estate market and appraisal activities, etc.

Research methods include analysis-synthesis, induction, deduction, comparative analysis, abstraction, generalization, statistical grouping, functional analysis, empirical methods, correlation-regression analysis, econometric modeling, forecasting, etc.

The main provisions of the dissertation are as follows:

1. Substantiation of the formation of an electronic database and maps that contain reliable and accurate information on the real estate market;
2. Exploring the possibility of establishing and applying a model for the creation of a system of mass appraisal of real estates in digital form;
3. Advantages and analysis of measures for digitization and automation of operations in the real estate market;
4. Study of stimulus measures in the real estate market and identification of methods and mechanisms for the development of investment attractiveness;
5. Substantiation of ensuring, appraisal and other issues of maximum efficient use of real estate in the organization and management of chemical industry enterprises, Sumgayit “Ethylene-Polyethylene” plant, large state enterprises;

6. Disclosure of the need to develop new draft laws that will contribute to the development of the real estate market system in our country and to develop normative legal acts to bring appraisal activities in line with international experience.
7. Development of directions for the definition and application of duties and rights in this area by analyzing the effective directions of the formation of state control mechanisms in the real estate market.

The scientific innovation of the research is the formation of a modern scientific and practical view on the activation of the real estate market in Azerbaijan and the development of appraisal activities in the context of global economic challenges and the implementation of strategic roadmaps. It consists of:

1. Substantiation for the creation of a digital market database and local zone market value maps under the title of “Real Estate Market Data Register”;
2. Analysis of the “computer-assisted mass assessment” system and the needs and requirements for the establishment of this system in our country;
3. Analysis of digitalization of real estate market procedures and electronization of services;
4. Analysis of the development level of the real estate market and identification of measures to be taken for its development by defining the existing mechanisms and problems of its investment attractiveness;
5. Substantiation of the importance of ensuring the maximum efficient use of real estate in large state-owned enterprises, based on the technical and economic indicators of the chemical industry enterprises, including the Sumgayit “Ethylene-Polyethylene” Plant, the analysis of real estate potential and the assessment of factors affecting value;

6. Preparation of a bill “On real estate market activity in the Republic of Azerbaijan” that will contribute to the development of the system of real estate market in our country and a new version of the law “On appraisal activity in the Republic of Azerbaijan” that will contribute to the adaptation of appraisal activities to the international experience and the formation of a appraisal system that meets modern requirements, as well as disclosing the need for necessary additions and changes to the National Appraisal Standards and other normative legal acts;
7. Develop a plan to define and implement the activities, responsibilities and rights of the Monitoring Group in this field by analyzing the effective directions of the formation of state control mechanisms in the development and management of the real estate market in Azerbaijan.

Theoretical and practical significance of the research. The results of the research can serve as a scientific-theoretical and scientific-practical basis in the development of the real estate market, as well as the role of enterprises in the real estate market, in the effective organization of the activities of real estate market participants, in the establishment of digital market databases, in conducting the computer-based mass appraisal, in strengthening the legal and normative base of real estate market development and appraisal activity, in formation of modern appraisal system, in the identification of relevant scientific directions, and in the preparation of state programs and investment projects.

Proposals and recommendations given in the dissertation work can be used in the teaching of “Economics of Real Estate”, “Management and Analysis of Real Estate Market”, “Real Estate Appraisal”, “Real Estate Examination and Management”,

“Fundamentals of Real Estate Appraisal and Registration” and other subjects in higher and secondary schools and also in the development of relevant methodological guidelines for the development of the real estate market and the improvement of appraisal activities.

Approbation and application. 16 reports were published at scientific and practical conferences of national and international importance on the main provisions and main results of the research.

16 articles and theses were published, 3 of them abroad, reflecting the main provisions of the dissertation.

Name of the organization where the dissertation work is carried out: Azerbaijan Technical University.

Volume and structure of the dissertation: The total volume of the dissertation consists of 184 pages (324223 characters) with symbols, indicating the separate volumes of structural units. Thus, the introduction (14806 characters), Chapter I (100487 characters), Chapter II (108838 characters), Chapter III (52774 characters), conclusion (18516 characters), reference (26108 characters).

STRUCTURE OF DISSERTATION WORK

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MAIN PROVISIONS PROVIDED FOR DEFENSE

1. Substantiation of the formation of an electronic database and maps that contain reliable and accurate information on the real estate market.

Formation of a reliable electronic database on the real estate market allows to study the real estate market in an operative and flexible form, to conduct relevant statistical calculations, to identify market features and market trends. Thus, the formation of an electronic database on the real estate market in developed countries will contribute to the economic development of the country in the field of real estate, especially in attracting investment, mortgage and insurance markets, the establishment of a mass appraisal system to obtain a property tax, conducting the objective assessment of individual valuers, the development of zone value maps, the conclusion of notarial transactions on the basis of real market values and to the other issues.

Figure 1 shows the block diagram of the structure of the electronic database on the real estate market.

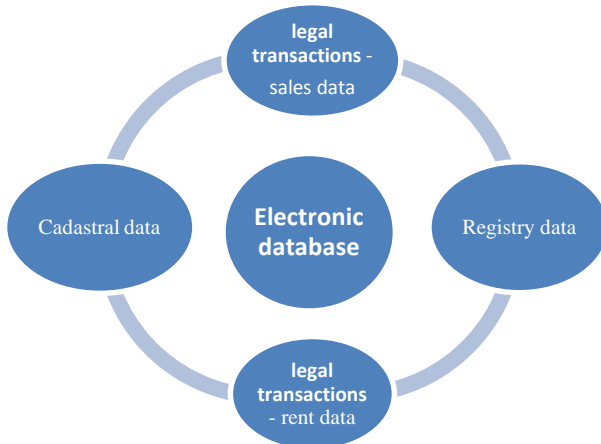


Figure 1. Structure of electronic database

Note: Prepared by the author

Figure 2 shows the sales data and a real ortho-photo map of the electronic database of the real estate market.



Figure 2. Electronic sales data and real ortho-photo map

Note: Prepared by the author

2. Investigation of the possibility of establishing and applying a model for the formation of a system of mass appraisal of real estate in digital form.

There are two types of real estate appraisal. One of them is single appraisal of real estate, and the other is mass appraisal. Mass appraisal is the determination of a specific date in a group of real estate markets or other values that have similar features for different purposes on the basis of special software.

Figure 3 shows the step-by-step business processes for a real estate appraisal system.

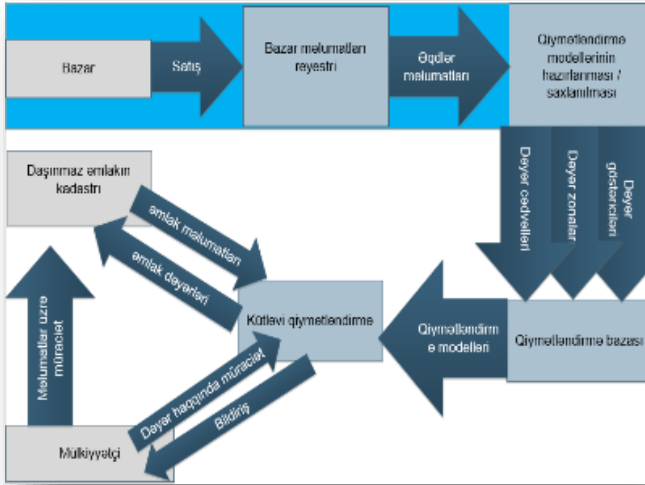
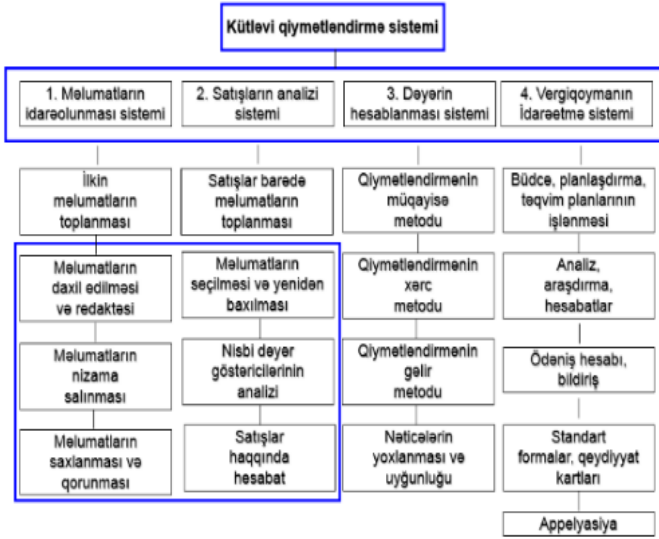


Figure 3. Mass appraisal system

Note: Prepared by the author.

Figure 4 shows the main components of the mass appraisal system of real estates.

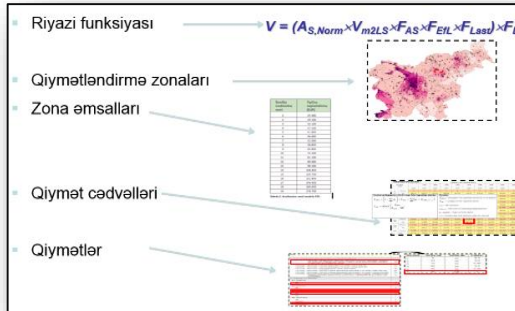


Figure 4. Components of a mass appraisal system

Note: Prepared by the author.

The process of mass appraisal of real estate objects is carried out after the selection of methodological approaches and styles for all parameters of the real estate market and the definition of the main criteria and principles of appraisal activities.

The establishment of a system of mass appraisal of real estate has contributed to many fields. Thus, by using figures in database and appraisal models without requiring additional financial resources and time, the existence of this system allows automatic appraising of hundreds of thousands of real estate properties in the country for different periods, creating the database on the real estate market, determining the cadastral prices of real estate in accordance with the actual market prices and fair taxation of real estate, as well as enterprises on the basis of market value. In international experience, market values determined as a result of mass appraisal are used for various purposes in the socio-economic issues of the country.

3. Advantages and analysis of measures for digitization and automation of operations in the real estate market.

As in many countries around the world, a number of services provided by government agencies have been provided to citizens electronically in our country, thanks to the measures to form an “e-government”. Thus, the inclusion of some services related to the real estate market in the scope of provided e-services has had a partially positive impact on the development of the real estate market.

In modern times, full automation, electronization of these processes, minimization of officer-citizen contact, deepening of public-private sector cooperation, ensuring accuracy and transparency of registration procedures and accounting related to real estate. At the same time, the full digitalization of procedures related to the real estate market will prevent a number of negative cases.

As noted, in response to the challenges of the time, the goal is to automate all procedures covering the real estate market by digitizing, creating a single real estate cadastre and database in the country, studying international experience in real estate management and applying scientific and technical achievements, improving property relations. The dynamic implementation of privatization, as well as the modernization of property management should be continued in a comprehensive manner and all possible measures should be taken in this direction in the near future.

As noted, in response to the challenges of the times, the dynamic implementation of privatization, as well as the modernization of property management should be continued in a comprehensive manner and all possible measures should be taken in this direction in the near future in order to automate all procedures covering the real estate market, create a single cadastre and database of real estate in the country, study the international experience in the field of real estate management and apply scientific and technical achievements, and improve property relations.

4. Study of stimulus measures in the real estate market and identification of methods and mechanisms for the development of investment attractiveness.

In a market economy, the optimal organization of control functions for the management of the real estate market and the privatization of state-owned real estate, the formation of a modern appraisal system, the improvement of sectoral legislation and other measures are important for stimulating the real estate market. The problems of development of the real estate market and appraisal activity, which are closely connected with the development of investment attractiveness, remain relevant in our country. There is a need to accelerate the process of improving the main functions, elements, forms and economic methods of state regulation in this field.

A number of principles are highlighted to determine the level of development of the real estate market and to justify the attractiveness of investment, and these are presented in Figure 5.

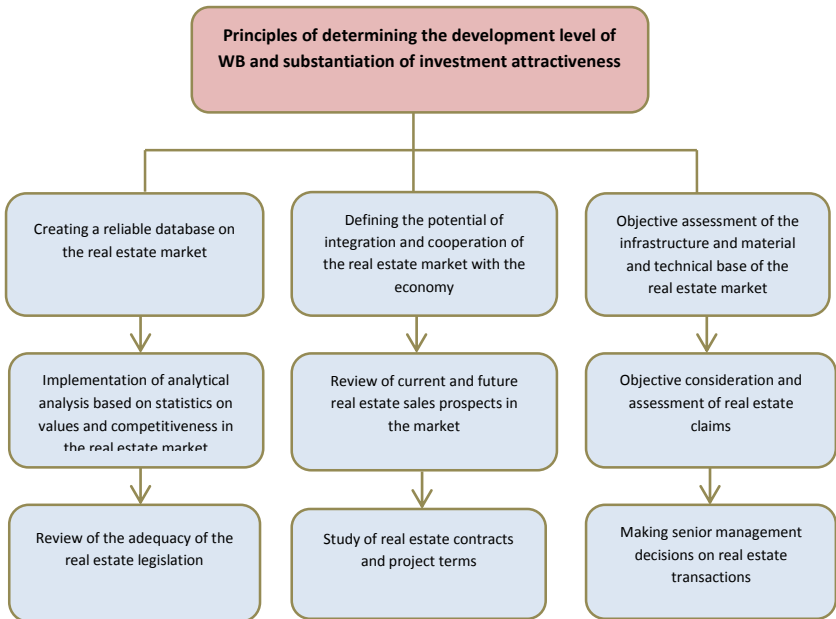


Figure 5. Principles of determining the development level of the real estate market and substantiation of investment attractiveness

It should be noted that the issues of increasing the investment attractiveness of the real estate market and intensifying the market activity are quite relevant; and ensuring the interests of investors, balancing the interests of real estate market participants in general require more flexible economic policies, effective practical mechanisms and tools. We consider it important to accelerate the development of the real estate market in the country, increase the efficiency of the activity of market participants, use of the potential of state property and enterprises on the basis of the principle of maximum profitability, ensure investment attractiveness of the real estate market, improve appraisal activities and apply new mechanisms and principles.

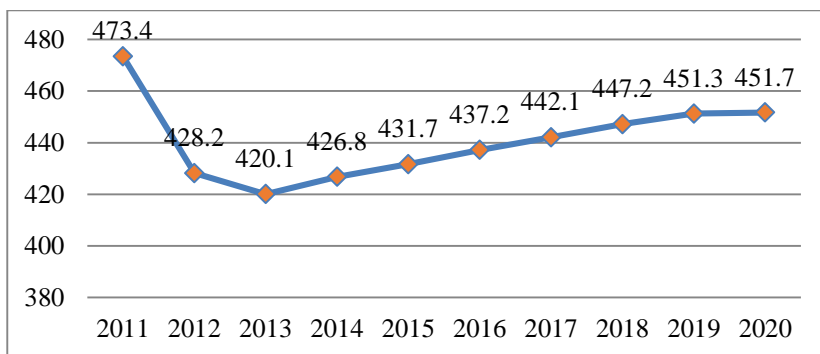
5. Substantiation of ensuring, appraisal and other issues of maximum efficient use of real estate in the organization and management of chemical industry enterprises, Sumgayit “Ethylene-Polyethylene” plant, large state enterprises.

The issues of mobilization of each production fund and real estate for the problems of efficient use of production potential of industrial enterprises, including chemical and petrochemical enterprises, organization of enterprise economy, movement of financial and production resources, their management, regulation of raw material flow, reduction of the cost of using machinery and equipment and increasing the efficiency of their use, improving the financial and economic activity of the enterprise in general are quite relevant.

In the structure of the non-oil industry sector in Azerbaijan, the chemical and petrochemical complex attracts more attention as one of the sectors of the economy with strong potential in terms of real estate. It should be noted that in the future, the materials on the main

economic indicators of the Sugmayit “Ethylene-Polyethylene” plant, the largest enterprise of this complex and on the state of the use of real estate will be presented.

Graph 1 shows the volume of main funds in the chemical industry in Azerbaijan.



Graph 14. Volume of main funds in the chemical industry in Azerbaijan for 2011-2020, mln. manat.

Note: Prepared by the author on the basis of official documents of the State Statistics Committee of the Republic of Azerbaijan.

<http://www.azstat.org>

Table 1 shows the cost and structure of fixed assets at the Sumgayit “Ethylene-Polyethylene” plant. Looking at Table 1, we can see that at the end of 2019, machinery and equipment accounted for 45.7%, devices and transmission devices for 25.4% and buildings for 13.2%. Modern approaches and improvement mechanisms remain an essential need for the maximum efficient use of this huge real estate potential.

Table 1.

Cost and structure of fixed assets at Sumgayit “Ethylene-Polyethylene” plant

Fixed assets	2014		2015		2016		2017		2018		2019	
	min man	%	min man	%	min man	%	min man	%	min man	%	min man	%
Buildings	48631.4	16.5	48639.8	16.4	48122.4	15.0	48067.1	14.8	48052.3	13.5	47981.0	13.2
Devices	59392.4	20.2	59392.4	20.0	57868.0	18.1	57754.0	17.8	57613.0	16.1	56935.0	15.7
Transmission devices	33040.7	11.2	33203.7	11.2	35863.3	11.2	35612.1	11.0	35437.2	9.9	35380.1	9.7
Machine mechanisms	141267.5	48.0	143262.0	48.3	165275.2	51.6	165314.2	51.0	165612.4	46.4	166101.0	45.7
Vehicles	6107.8	2.1	5839.9	2.0	4697.1	1.5	4510.0	1.4	4320.0	1.2	4100.2	1.1
Other types of fixed assets	5569.4	2.0	6490.6	2.1	8494.3	2.6	12942.6	4.0	46065.1	12.9	52702.7	14.5
Total	294009.2	100	296828.4	100	320320.3	100	324200	100	357100	100	363200	100

Note: Prepared according to the data of “Ethylene – Polyethylene” plant.

The data in the table below reflect the value of production, fixed assets and investments in fixed assets in the chemical industry in the Republic of Azerbaijan for the period 2011-2020.

Table 2
The cost of production, fixed assets and investments in fixed assets in the chemical industry in the Republic of Azerbaijan for 2011-2020, in mln. manats

Years	Total cost of work and services for the production of products in the chemical industry (Y)	Volume of fixed assets in the chemical industry (X1)	The volume of investments in fixed assets in the chemical industry (X2)
2011	189	473.4	1.5
2012	180.6	428.2	1.5
2013	200.3	420.1	3.5
2014	247.2	426.8	2.1
2015	353.2	431.7	6.8
2016	374.2	437.2	18.5
2017	513.9	442.1	87.4
2018	528	447.2	230.6
2019	599.6	451.3	172.3
2020	662.8	451.7	142.9

Note: Prepared by the author on the basis of official documents of the State Statistics Committee of the Republic of Azerbaijan.

<http://www.azstat.org>

We can obtain the following results based on table 2 using the Eviews software in order to conduct regression analysis of the dependence between the cost of work and services on the production of products in the chemical industry in the Republic of Azerbaijan and the value of fixed assets and fixed assets for real estate using Table 2.

Table 3

Regression dependence between the cost of work and services for the production of products in the chemical industry in the Republic of Azerbaijan and the value of fixed assets and fixed assets for real estate

Dependent Variable: Y

Method: Least Squares

Date: 12/19/21 Time: 06:25

Sample: 2011 2020

Included observations: 10

Variable	Coefficient	Std. Error	t-Statistic	Prob.
X2	1.767989	0.454627	3.888874	0.0060
X1	0.191138	2.498226	0.076509	0.9412
C	182.6514	1090.967	0.167422	0.8718
R-squared	0.719727	Mean dependent var		384.8800
Adjusted R-squared	0.639650	S.D. dependent var		180.9592
S.E. of regression	108.6284	Akaike info criterion		12.45707
Sum squared resid	82600.86	Schwarz criterion		12.54784
Log likelihood	-59.28534	Hannan-Quinn criter.		12.35749
F-statistic	8.987846	Durbin-Watson stat		1.372706
Prob(F-statistic)	0.011656			

Note: Eviews application was prepared by the author based on the software package.

According to Table 3 obtained from the Eviews software package, the regression equation will be as follows:

Estimation Command:

```
=====
LS Y X2 X1 C
```

Estimation Equation:

```
=====
Y = C(1)*X2 + C(2)*X1 + C(3)
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Substituted Coefficients:

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=====
Y = 1.76798866525*X2 + 0.191137938835*X1 + 182.651379253
```

Note: Prepared by the author on the basis of the EViews software package.

It was determined that there is a high linear dependence between the cost of work and services in the chemical industry in the Republic of Azerbaijan and the value of fixed assets and fixed assets on real estate, expressed by the regression equation $Y =$

$0.191137938835 * X1 + 1.76798866525 * X2 + 182.651379253$. Thus, according to the calculations made according to the Eviews-10 software package, 1% increase in the value of fixed assets in real estate in the chemical industry results in 0.22% increase in the cost of work and services on product production in the chemical industry in the Republic of Azerbaijan, but 1 % increase in the value of fixed assets in the chemical industry results in a 0.31% increase in the cost of work and services on product production in the chemical industry in the Republic of Azerbaijan. There is a correlation between the cost of work and services in the chemical industry in the Republic of Azerbaijan and the cost of fixed assets and fixed assets in real estate, which is above average level according to the Cheddock scale ($R^2 = 0.72$);

In the study, the dependence of the value of fixed assets and fixed assets on real estate in the chemical industry of the Republic of Azerbaijan on the time factor until 2030 was determined and forecasted according to the trend model.

6. Disclosure of the need to develop new bills that will contribute to the development of the real estate market system in our country and the development of regulations to adopt appraisal activities to the international experiance.

It is important to study in depth the issues related to the development of the real estate market and the systemic consideration of these problems, to select more optimal mechanisms, to take more effective measures to increase the efficiency of the real estate market.

The pace of development of the real estate market and appraisal activities in our country lags behind the global economic challenges and is not adequate to them. In the context of global economic challenges, there is a serious need to organize the effective use of the existing potential of the country's real estate market and to improve the existing mechanisms in this regard. The issues of providing the real estate market with flexible and efficient legal mechanisms should be reconsidered. We consider it important to improve and systematize the country's legislation, based on

advanced world experience and effective approaches to the development of the real estate market. In our opinion, “Law on Real Estate Market Activities” should be prepared, as well as the new version of the “Law on Appraisal Activities” should be discussed and adopted, taking into account modern objective realities, as well as strategic tasks and goals arising from global economic challenges. The new bill will address the conditions of real estate and appraisal activities, the results of activities, the degree of liability, the state control mechanisms and requirements for contracts for provided services, as well as the assessment of conformity of appraisers by relevant executive authorities accredited in accordance with the Law of Azerbaijan “On accreditation in the field of conformity assessment”, the determination of functions of the Azerbaijan Chamber of Appraisers formed by appraisers, including, mass appraisal of real estate.

7. Development of directions for the definition and application of responsibilities and rights in this field by analyzing the effective directions of the formation of state control mechanisms in the real estate market.

In a market economy, one of the important conditions is the optimal organization of control functions for the management of the real estate market. Although certain measures have been taken in this regard in our country, as well as there are strategic plans and approaches of the responsible government agencies, it is necessary to identify activity mechanisms in this field and increase efforts to develop more optimal options for state control mechanisms in managing these processes. Figure 6 shows a diagram of the directions for improving the state control mechanisms in the development and management of the Real Estate Market.

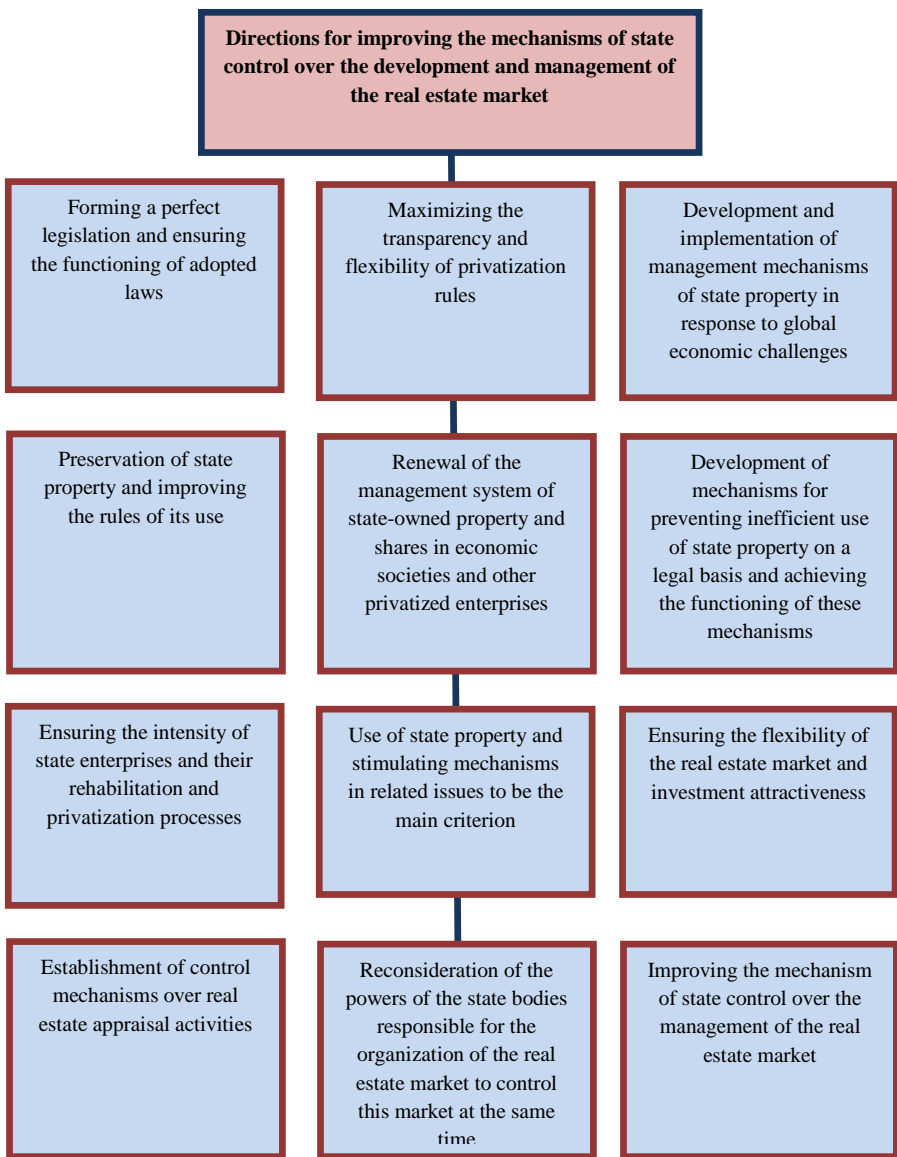


Figure 6. Scheme of directions for improving state control mechanisms in the development and management of the real estate market

Note: Prepared by the author.

In our opinion, the problems of raising the development level of the real estate market in our country and improving the mechanisms of state control over the management of this market in accordance with modern requirements remain largely unresolved. Principled and purposeful approaches to solving problems in this direction should be provided, and the main tasks should be defined as optimally as possible.

From this point of view, measures to develop the real estate market at a high level and to improve the mechanisms of state control over its management in accordance with international experience, to update them to the maximum level should be implemented without delay. Malaysia is one of the countries with advanced experience in this field. Real estate appraisal activities in the real estate market in Malaysia started on June 1, 1957. Currently, the Department of Appraisal and Property Services (JPPH) is a government agency that implements policies, strategies and activities in the field of property appraisal in the country.

The Department (JPPH) focuses on real estate management, carrying out technical and economic researches on property, forming a database on the real estate market, appraisal and organization of property, monitoring the activities of individual appraisers, registering individual appraisers, licensing appraisers in the country, controlling over real estate market agencies. In addition, the development of the real estate industry, conducting financial work, appraisal of property carried out during the investment is carried out by the Department of Appraisal and Property Services. In addition, we would like to note that the National Property Information Center (NAPIC) and the National Appraisal Institute (INSPEN) operate under the department.

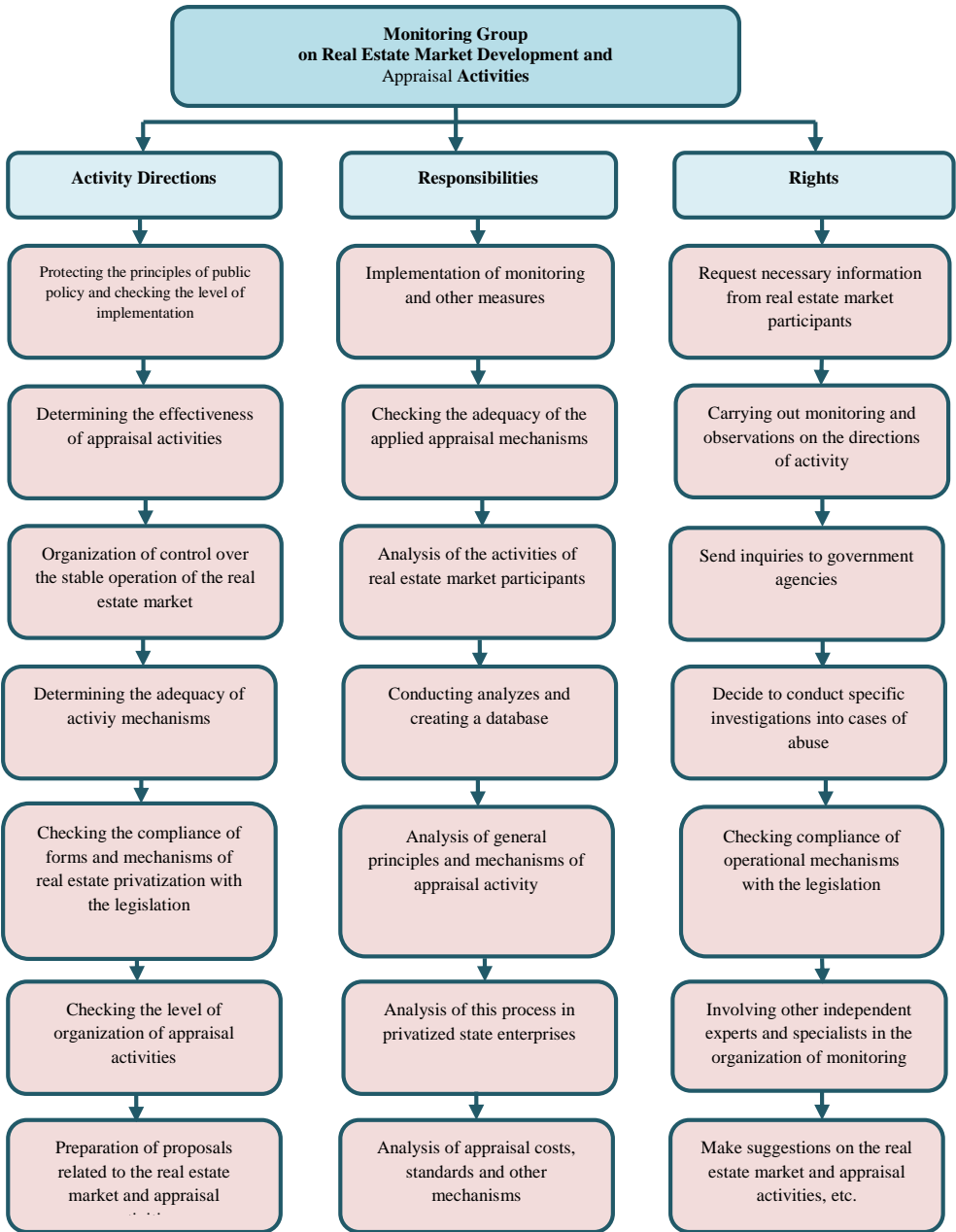


Figure 7. Block diagram of the activity directions, responsibilities and rights of the Monitoring Group for Real Estate Market Development and Appraisal Activities Control.

Note: Prepared by the author on the basis of research materials.

In our opinion, the Monitoring Group for Real Estate Market Development and Appraisal Activities can act as such a body in our country. Figure 7 outlines the activities, responsibilities and rights of the Monitoring Group for Real Estate Market Development and Appraisal Activities.

Establishment of the Monitoring Group for Real Estate Market Development and Appraisal Activities would accelerate the development of the real estate market in the country, create an investment-friendly environment at the level of modern requirements, and organize assessment mechanisms in the interests of market participants.

CONCLUSION

As a result of research conducted in accordance with the logical structure of the research, it became possible to prepare recommendations and make suggestions.

First of all, the study of the theoretical foundations of the formation and development of the real estate market in the context of global economic challenges on the structure of research was conducted. The processes of generation, formation principles and criteria, theoretical approaches related to it, scientific views in this regard have been studied, systematized and the author's position has been formed accordingly. Particular attention was paid to the identification and analysis of methodological features of the formation of the real estate market. International experience in the development of the real estate market has been extensively studied in order to compare scientific opinions and views on the issues under consideration, to analyze the adaptability of real estate market models that are more suitable for our country.

At the same time, the analysis of the development processes of the real estate market in Azerbaijan, the role and appraisal of enterprises in the real estate market were considered in more detail. For this purpose, the essence, course, economic content of the development processes of the real estate market, the problems of the real estate market and the current state of this market in general were analyzed. One of the main problems given in the structure of the work, the essence, organization of appraisal activities and the study of approaches to related processes were also in the focus of attention. In order to study the processes of organization and management of the considered problems at the enterprise level, an analysis and assessment of the use of real estate at the Sumgayit “Ethylene-Polyethylene” plant, one of the largest industrial enterprises in the country, was conducted.

At the same time, the issues of adapting the development of the real estate market and appraisal activities in Azerbaijan to international experience and the current state of the legislation required for the stable and dynamic development of the real estate market and its improvement were considered. In addition, the role of enterprises in the development of the real estate market, the adequacy of existing mechanisms used in the modeling of related processes and their development directions are given. The need to improve the mechanisms of state control over the management of the real estate market was substantiated and ways to solve the main problems related to them were considered. Also, the issues of creating electronic systems and services by digitizing real estate market data and procedures were analyzed. The issue of forming a “Computer-based mass appraisal” system of real estate was considered. In the end, the development directions of the real estate market in our country and increase of efficiency of appraisal activity were given, recommendations on the considered problems were prepared and proposals were put forward. Detailed information about the results is given in the final part of the dissertation.

The main content of the research is reflected in the following published scientific works of the author:

1. R.R. Ablasanov, Appraisal of market value of real estate // Materials of the 56th student scientific-technical conference dedicated to the 90th anniversary of the National Leader of the Azerbaijani people Heydar Aliyev, Baku, 2013, pp. 533-536
2. R.R. Ablasanov, Methods of price regulation // 56th student scientific-technical conference dedicated to the 90th anniversary of the National Leader of the Azerbaijani people Heydar Aliyev, Baku 2013, pp. 540-542
3. R.R. Ablasanov, Price index of consumer goods by economic regions // 56th student scientific and technical conference dedicated to the 90th anniversary of the National Leader of the Azerbaijani people Heydar Aliyev, Baku 2013, pp. 547-549
4. R.R. Ablasanov, Actuality and problems of prices in a market economy // Ministry of Education of the Republic of Azerbaijan, Azerbaijan Technical University, Republican scientific conference on “Technical and economic problems of high technologies in Azerbaijan”, Baku 2013, pp. 342-343
5. R.R. Ablasanov, World real and financial economy // Ministry of Education of the Republic of Azerbaijan, Azerbaijan Technical University, Republican scientific-technical conference of students and young researchers on “Youth and Scientific and Technical Progress” dedicated to the 91st anniversary of the National Leader of the Azerbaijani people Heydar Aliyev. Baku. 2014, pp. 403-405
6. R.R. Ablasanov, World inflation and its global causes // Ministry of Education of the Republic of Azerbaijan, Azerbaijan Technical University, Republican scientific-technical conference of students and young researchers on “Youth and Scientific and Technical Progress”, dedicated to the 91st anniversary of the National Leader of the Azerbaijani people Heydar Aliyev, Baku. 2014, pp. 447-448

7. R.R. Ablasanov, Rapid economic growth and inflationary processes in the economy of Azerbaijan // Ministry of Education of the Republic of Azerbaijan, Azerbaijan Technical University, Republican scientific-technical conference of students and young researchers on “Youth and Scientific and Technical Progress” dedicated to the 91st anniversary of National Leader of the Azerbaijani people Heydar Aliyev , Baku. 2014, pp. 448-449
8. R.R. Ablasanov, International appraisal associations and standards // Ministry of Education of the Republic of Azerbaijan, Azerbaijan Technical University, Republican scientific-technical conference of students and youth researchers on “Youth and new technologies”, Baku, dedicated to the 92nd anniversary of National Leader of the Azerbaijani people Heydar Aliyev, 2015, pp. 401-402
9. R.R. Ablasanov, regulation of appraisal activity in the Republic of Azerbaijan // Ministry of Education of the Republic of Azerbaijan, Azerbaijan Technical University, Republican conference on “Expansion of innovation activities in the non-oil sector of Azerbaijan” dedicated to the 80th birthday of the laureate of the State Prize Prominent economist scientist, Dr.in econom. Prof. Shamil Aliabbas oglu Samadzade, Baku 2016, pp. 373-374
10. R.R. Ablasanov, Əmlakın idarə edilməsi və qiymətləndirilməsində Finlandiya təcrübəsi // Azərbaycan Kooperasiya Universiteti, Kooperasiya elmi-praktiki jurnal,UOT 658.011.46; N.1(40) Bakı 2016, səhifə 189-194
Finnish experience in property management and appraisal // Azerbaijan Cooperation University, “Kooperasiya elmi-praktiki jurnal”, UOT 658.011.46; N.1 (40) Baku 2016, pp 189-194
11. R.R. Ablasanov, Processes of Formation and Development of the Real Estate Market in Azerbaijan // USA, Philadelphia. technology and science. 03/30/2018, Year: 2018, Issue: 03, Volume: 59. International scientific journal ISJ Theoretical & Applied Science, Impact Factor JIF: 1.500; IF SIS (Texas, USA): 0.912; IF-ICV=6.630. pp. 257-262
Soi: <http://s-o-i.org/1.1/TAS-03-59-44>

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12. R.R. Ablasanov, PROCESSES FOR FORMING AND DEVELOPMENT OF THE REAL ESTATE MARKET OF AZERBAIJAN // USA, Philadelphia. Technology and science. 30.05.2018, Year: 2018 Issue: 05 V:61. International scientific journal ISJ, Theoretical & Applied Science, Impact Factor JIF: 1.500; IF SIS (Texas, USA) : 0.912; IF-ICV=6.630. Soi: <http://s-o-i.org/1.1/TAS-05-61-68>.
Doi: <https://dx.doi.org/10.15863/TAS.2018.05.61.68>., P. 400-404
13. R.R. Ablasanov, MODERN APPROACHES TO EVALUATION ACTIVITY IN THE REAL ESTATE MARKET // USA, Philadelphia. Technology and science. 30.05.2018, Year: 2018 Issue: 05 V:61. International scientific journal ISJ Theoretical & Applied Science, Impact Factor JIF: 1.500; IF SIS (Texas, USA) : 0.912; IF-ICV=6.630. P.405-411. Soi: <http://s-o-i.org/1.1/TAS-05-61-69>.
Doi: <https://dx.doi.org/10.15863/TAS.2018.05.61.69>.
14. R.R. Ablasanov, Problems of real estate appraisal and efficient use in enterprises // Journal of “Elmi eserler” of the Institute of Economics of ANAS № 2; Baku 2018, pp. 12-18
15. Organization and theoretical bases of real estate market, Ministry of Education of the Republic of Azerbaijan, AUAC, Yasamal district organization of YAP, Scientific-practical conference “Economic problems of implementation of economic reforms in Azerbaijan”, Baku 2018
16. Theoretical issues of the real estate market and approaches to appraisal activities, AUDIT №2, Baku 2018

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