INFLUENCE OF ENVIRONMENTAL FACTORS ON FINANCIAL PROVISION OF INVESTMENT ACTIVITY OF BUSINESS ENTITIES

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1. Introduction

One of the problems of the functioning of business entities is the lack of resources, so the demand for investment is much higher than their supply. Based on the limited resources, investment is an attractive source of financial support for the operation of business entities. Investment activity is beneficial for a foreign investor, in particular, with low interest rates and low prices in the construction market, and attracts foreign investors. But a number of factors, including environmental ones, affect the economic growth of business entities. Environmental factors characterize the interrelation and mutual influence of industrial and financial activities of business entities and the environment. The solution to this problem mainly depends on the sources of financial support for investment activities of business entities in the region, will serve as a basis for justifying the priority areas of their operation.

2. The object of research and its technological audit

The object of research is financial support for investment activities of business entities. An important problem in the process of investment activity of business entities is financial security, which should be aimed at identifying priority areas for the economic development of the region. Sources of financial support for investment activities of business entities depend on the economic conditions in which they operate and environmental factors affecting the results of production activities. Effective investment activities of business entities are impossible without the proper composition and structure of sources of financial security, taking into account specific regional operating conditions, where environmental factors are of significant importance.

3. The aim and objectives of research

The aim of research is studying the influence of environmental factors on the financial provision of investment activities of business entities in the Lviv region (Ukraine).

To achieve this aim, the following tasks are outlined:
1. To identify the priority objectives of investment development of business entities in the investigated region.
2. To investigate the pace of change in capital investments by sources of financing and identify priority areas for investment in the Lviv region.
3. To investigate the environmental component of the investment attractiveness of business entities in the region.
4. To substantiate the main criteria for financial support of investment activities of business entities.

4. Research of existing solutions of the problem

The problem of investment activity of enterprises is investigated by many scientists, in particular:
- the risks of investment activity are considered in [1];
- investment processes in the activities of enterprises are investigated in [2–4].

The theoretical and practical foundations of financial support for investment projects for the development of regions have been studied by the authors of [5, 6]. The works of the authors [7–11] are aimed at researching the theoretical foundations and developing recommendations on the formation of a system of financial support for the economic growth of regions, as well as determining the structure of the sources of financial support for investment development.

5. Methods of research

To achieve this goal and determine the research tasks, general scientific methods are used: comparison, analysis and synthesis, induction and deduction, systematization, logical generalization, SWOT analysis.

6. Research results

Investment development of business entities of the Lviv region is aimed at solving the priority tasks of the Development Strategy of the Lviv region until 2020 [12].
The main priority objectives of investment development of business entities in the investigated region include: – generation of investment requests and attraction of potential investors; – development of infrastructure for supporting investment activities of business entities; – promotion of investment potential of business entities and the region as a whole; – creation of political and economic conditions to ensure the activation of investment activities of business entities, as well as the necessary management decisions, financial mechanisms of additional motivation for potential investors, in priority areas of investment development. The volume of foreign investment in the economy of Ukraine in 2015 amounted to 4337.14 million USD, in particular, is 20.4 % less than in 2012. And 5.5 % less compared to 2014, i.e., there is a tendency to reduce the volume of foreign investment in the economy of Ukraine as a whole. The greatest amount of foreign investments are received in Kyiv, Dnipropetrovsk, Donetsk, Kyiv, Kharkiv, Odesa, Poltava regions. Lviv region ranks 7th position among the regions of Ukraine in terms of foreign investment in various spheres of the economy. Such regions as Chernivtsi and Ternopil are in the last period of the investigated period. Kirovograd and Chernihiv regions joined the outsiders in this indicator. According to the Lviv region, the volume of foreign investment for 2014–2015 decreases, in particular, compared with 2013, respectively, in 2014, by 19.5 %, and in 2015 – by 26.8 %. This is noticeable for the economy of the region, in particular, for priority areas. The volume of direct foreign investment in the Ukrainian economy had a stable upward trend during 2010–2014. In 2014, the volume of attracting foreign investment increased by 42.5 % compared with 2010. During the investigated period, foreign investors were most active in 2014 (Cyprus, Germany, Netherlands).

For today the greatest volumes of direct foreign investments have arrived from the EU countries. At the same time, the volume of foreign investments from such countries as USA, Hungary, Poland, Italy decreased. The key investor in the Lviv region is Poland. According to the dynamics of capital investments by sources of financing, it should be noted that growth can be traced by the following sources: – funds from local budgets (from 3.4 in 2010 to 7.1 in 2016); – own funds of enterprises and organizations (from 60.8 in 2010 to 69.4 in 2016); – funds of foreign investors (from 2.1 in 2010 to 2.9 in 2016); – household funds for individual housing construction (from 8.6 in 2010 to 12.0 in 2015).

Other sources of funding show a decrease in funding, in particular, from the state budget (from 5.8 in 2010 to 2.3 by 2016), bank loans and other loans (from 12.3 in 2010 up to 7.1 by 2016).

In more detail, the dynamics of capital investments and their structure by sources of financing in Ukraine for the period from 2010 to 2016 let’s analyze with the help of Table 1. According to domestic sources of financing, the greatest share in 2010–2016 comes at the own expense of business entities (60.8 % in 2010, 71.5 % in 2014, 69.4 % in 2016). So the own funds of business entities are the main, key source of financing for investment activities.

Volumes of capital investments in the Lviv region for investigated period have increased significantly, from 8830.2 million UAH in 2010 up to 13386.5 million UAH in 2015, which indicates a high level of investment support for business entities of the Lviv region. During this period, the volume of capital investments increased per person, from 3491.9 UAH/person for 2010 up to 5317.1 UAH/person for 2015. On the sources of financing, the leading positions are taken by the enterprises’ own funds. If the state budget funds in 2010 they occupied the second place among the sources of financing, then in 2015, their specific weight decreased to 3.3 %. But up to 13.4 % the specific weight of such source of financing as the means of the population for individual housing construction has increased. During the monitoring period, the local budget increased in the structure of investment support, underscoring the positive results of the administrative and territorial reform. The population’s funds also increased for the construction of their own apartments from 2.5 million UAH in 2010 up to 10.9 million UAH in 2015. This can be explained by the growth of incomes of the population for the period from 54838 million UAH in 2010 up to 96133 million UAH in 2015 [14].

In the Lviv region, among the investment directions, the following types of economic activity had priority: construction; industry; wholesale and retail trade; repair of motor vehicles; postal and courier activities; transactions with real estate. But the least attractive were education and art, sports, entertainment and recreation.

### Table 1

| Sources of financing                        | 2010   | 2012   | 2014   | 2015   | 2016   | Growth rate, % (2016 to 2010) |
|--------------------------------------------|--------|--------|--------|--------|--------|-------------------------------|
| Total                                       | 189060.6 | 263727.7 | 204061.7 | 251115.3 | 326163.7 | 172.5                         |
| including due to: state budget funds        | 10952.2 | 16530.9 | 15112.0 | 6114.5 | 7468.9 | 68.2                          |
| local budgets funds                         | 6367.7 | 8307.7 | 5276.8 | 12423.2 | 23225.1 | 364.7                         |
| own funds of enterprises and organizations  | 114963.6 | 156149.3 | 145883.7 | 160057.9 | 228398.9 | 196.9                         |
| bank loans and other loans                  | 23336.2 | 42526.9 | 17992.3 | 28299.5 | 23429.5 | 99.6                          |
| funds of foreign investors                  | 4067.7 | –      | 5536.6 | 7854.8 | 9416.7 | 231.5                         |
| funds of the population for the construction of their own apartments | 4654.2 | –      | –      | –      | –      | –                             |
| funds of the population for individual housing construction | 16178.0 | 21975.1 | 21365.6 | 30283.2 | 29117.9 | 180.0                         |
| other sources of funding                    | 8543.3 | 18237.8 | 6495.5 | 6941.2 | 7286.7 | 85.3                          |

**Note:** *–* calculated based on the source [15].

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Business entities of these types of economic activities are strengthened their positions in the investment attractiveness: activities in the field of administrative and support services; temporary accommodation and catering; agriculture, forestry and fisheries.

In general, according to the Lviv region, the number of business entities decreased by 1715 units. That is, annually by 286 units. For all types of enterprises, the number of employees has decreased, which is associated with low wage growth rates. The growth in the volume of sold products was influenced both by the growth in investment support and the growth in prices for products.

Regional problems are of great importance for the economic development of business entities. Therefore, it can be argued that the main such indicator is the gross regional product per capita, which characterizes the standard of living of the population and the competitiveness of business entities. As a result of economic activities of business entities, the gross regional product characterizes the level of economic growth in the region, is also the main indicator for assessing the investment attractiveness of the region. According to official statistics in Lviv region, there is a stable tendency of growth of gross regional product, both in general and per person.

The subjects of entrepreneurship of Lviv region is the leader in attracting foreign investments. The most attractive for foreign and Ukrainian investors are food and light industries, energy, and the construction of solar and wind power stations, agriculture, tourism, restaurant and hotel business. These sectors of the economy are attractive for domestic investors, in particular, the «Eco-Optima» firm. The main projects are the development and implementation of renewable clean energy sources, the creation of generating capacities using wind, solar, water, biomass energy. This Ukrainian investor built wind farms «Staryi Sambir-1», «Staryi Sambir-2», Sambir solar power plant (the volume of investments – 6 million EUR).

Among foreign investors, one can name the Polish firm IKEA, which works in the woodworking sector of the economy. In Poland, it has 16 enterprises and its own wind power plant, which provides all the facilities of IKEA with electricity. It is also a powerful investor for Ukrainian business entities.

A powerful foreign investor in the territory of the Lviv region is the Japanese firm «Fujikura», which in early 2016 opened two plants in the Lviv region and plans to open another one. It was not easy to bring the company to the Ukrainian market, the war in the east of Ukraine carried certain warnings about the reliability of doing business in Ukraine. Japanese factory «Fujikura» for the production of electrical equipment for cars in Lviv employed 550 people, and in the near future plans to employ 5000. Today, the factory «Fujikura» provides jobs to local people and pays taxes to the budget. The average monthly salary of employees is an average of 7 thousand UAH.

The second powerful foreign investor in the territory of the Lviv region is the German company «Leoni», which is one of the world’s leading manufacturers of cable networks and cable technologies. The company offers a unique range of products, technologies and services for almost all areas of cable technology, constantly expanding it thanks to new environmental developments. The company emphasizes environmental responsibility at all stages of production. By 2016 profit before taxation in the company «Leoni» is 78.1 million euros, net profit – 10.5 million euros, and the number of employees reaches about 80 thousand people.

Today, Lviv region is a region with high investment attractiveness for the investor. In 2014, region took the first place in the rating of the investment attractiveness of the regions of Ukraine, formed by the Institute of Economic Research and Policy Consulting. Lviv region takes a leading position precisely behind «soft factors»: business climate, openness of power, rules and procedures [15].

The financial sector of the economy, in particular, the banking and insurance sectors, is quite attractive for investment. Among banking institutions, during 2015 the largest volumes of foreign investments were attracted: PJSC «Kredobank», PJSC «Vieste Bank», PJSC «Idea Bank». The banking sector attracts investors from Poland and Austria. According to insurance companies, the significant volumes of foreign investments were attracted by the PJSC «Grave Ukraine Insurance Company».

In connection with the change in priorities in investment, starting in 2010, the interest of foreign partners in the agricultural sector of the region has diminished. Among the agricultural enterprises of the region, the largest amount of foreign capital is concentrated in LLC «Galichina-Zapad» in Stryshchina, LLC «Agro LV Limited» and LLC «AgromarkYukey» in Kamenka-Bugsky district, LLC «Bio-Invest» in Drogobych, LLC «Galicia Griner» in the Bug District. The average wage level at these agro-enterprises is three times higher than the average for other agricultural enterprises of the region. This is due to greater labor productivity and efficiency of agricultural activities at enterprises owned by foreign investors [12].

In addition to the agrarian sector of the economy, energy is also attractive for investment. The largest volume of investments was invested in PJSC «DTek «Zakhidenergo».

The food industry is investment attractive. The main investor countries are Poland, Switzerland, Cyprus. Among the enterprises that produce the food industry with the largest volumes of attracted foreign direct investment are PJSC «Lviv confectionary company «Svitoch», PJSC «Concern Hlebprom», OJSC «Lviv city dairy factory», PJSC «Morshyn mineral water plant «Oscar». Investing their funds in the production of food products in the region, foreign investors are oriented mainly to a significant amount of the domestic market.

Investigating the investment development of business entities in the region, one can’t ignore the ecological component of the investment attractiveness of business entities in the region. World experience shows that the effectiveness of economic growth of business entities depends on the effectiveness of attracting and using the region’s natural and resource potential, namely:
- land resources;
- forest resources;
- water resources;
- waste management.

These four components form the ecological component of the investment attractiveness of the region as a whole. At the state level, it is necessary to create conditions for development of business entities in the region on the basis of the so-called «green» and «blue» economies. As the basic guidelines for solving environmental problems, the
provision of the Association Agreement between Ukraine and the EU should be used, according to which cooperation in the environmental sphere is regulated by special directives and regulations.

As of January 1, 2016, the land fund of the Lviv region amounted to 2.183.1 thousand hectares, including agricultural lands – 59.1 %, forests – 31.8 %, built-up lands – 5.3 %, lands under water – 2.0 %, other lands – 1.8 %. Land resources are used, protected and reproduced with stable quantitative and qualitative indicators, starting from 2010 [14]. That is, the ecological balance of reproduction of the natural structure of the landscape is traced. It can be argued that the recreational potential of the region is stable. Accordingly, foreign direct investment in agriculture and recreation is growing. This is confirmed by the investment projects of the «Strategy for the development of the Lviv region until 2020». According to the growth of acreage of agricultural crops, it should be noted the growth of rapeseeds from 43.9 thousand hectares in 2010 to 52.8 thousand hectares in 2015. This short-term use of agricultural areas, consistent with intensive use of soil and generally adversely affects the structure of land.

The state of forest potential, unsettled forest management, state registration of forests and state forest cadaster negatively affect the state of environmental protection in the Lviv region. A forest is a significant resource for strengthening the recreational potential of the region. In the region, there is a danger of reducing forest resources.

An assessment of the state of the environment in the Lviv region indicates that the components of the ecosystem experience a negative anthropogenic impact, and among the environmental problems of the region requiring solutions, the most important are pollution:

- the atmosphere emissions of industrial enterprises and vehicles;
- water pollution by municipal and industrial wastewater;
- flooding of territories and karst manifestations in mining zones;
- extremely archaic waste management and improper disposal;
- violation of ecological balance in significant areas as a result of previous activities of mining and chemical industry enterprises in Lviv region, etc. [12].

Regional problems of environmental protection are also associated with a shortage of water resources for production needs, as well as drinking needs of the population. The barrier to the formation of living and working conditions of the population is the poor quality of water supply. Most river basins can be considered as polluted and very polluted. Production activity, in particular, agricultural, negatively affects the condition of small rivers, which are the main sources of water supply to the population.

The problem of the present for the region (the Lviv region, namely, the city of Lviv) is the treatment of waste. The existing practice of handling solid domestic waste in rural settlements is imperfect, its fragmentation and heterogeneity do not allow to ensure sufficient control over the sanitary state of the region. In the region it is very low, and in rural areas the work of separate collection, sorting and extraction of valuable resource components of domestic waste is not organized at all. Therefore, among the main directions of the introduction of European standards in the management of waste:

- preparation and implementation of waste management plans and waste prevention programs in accordance with the requirements of EU Directive No. 2008/98/EU;
- development and implementation of plans for cleaning existing waste disposal sites (Directive No. 1999/31/EU); introduction of the newest technologies and equipment for the collection, sorting, transportation, processing and disposal of solid domestic waste, incl. specific and dangerous;
- construction of landfills for the storage of waste, which meet the established standards; closing and reclamtion of existing landfills;
- construction of waste sorting and garbage processing complexes;
- promoting the use of waste as secondary raw materials;
- carrying out the certification of storage sites for chemical plant protection products and development and implementation of programs for utilization of accumulated agrochemicals;
- prevention of the emergence of new unauthorized landfills for solid domestic waste;
- implementation and operation of a waste management monitoring system, information support for their processing and disposal, creation of a single data bank [12].

Summarizing the foregoing, let's formulate the main criteria for financial support for investment activities of business entities. To positive it is necessary to relate:

- growth of volumes of capital investments on the basic sources (means of local budgets and own means of the enterprises and the organizations);
- growth of volumes of direct foreign investments in the priority spheres of economy;
- growth in the volume of individual housing construction at the expense of the population;
- stabilization of the state of environmental protection as the main factor for attracting foreign direct investment;
- growth of investment attractiveness of the region.

So, with the criteria that adversely affects the financial provision of investment activities of business entities of the region, let’s refer:

- decrease in the share of bank loans and other loans in the structure of sources of financing of capital investments;
- presence of disproportions in the investment support of business entities in the administrative districts of the Lviv region.

Economic growth in recent years in the Lviv region indicates an intensification of investment activity. Based on the results of the analysis, it can be argued that among the main sources of financial support for investment activities of business entities should be:

- funds of the State Fund for Regional Development;
- funds of state target programs and budgetary programs of central executive bodies directed to the development of the relevant sphere in the regions;
- subventions, other transfers from the state budget to local budgets;
- means of local budgets;
- funds of international technical assistance, international financial organizations;
- own funds of business entities;
- direct foreign investments.
7. SWOT analysis of research results

Strengths. The strengths of research include:
- state and regional target programs in the field of investment activities;
- advantageous frontier position;
- attractive investment environment;
- high proportion of environmentally friendly resources;
- own resource potential of business entities;
- wide range of regional international environmental programs;
- stable environmental situation is the main factor in attracting foreign direct investment in the region’s economy.

Weaknesses. The weaknesses include:
- weak material and technical base of business entities;
- peripheral position in Ukraine;
- low living standards of the population;
- gradual depletion of the resource potential;
- insufficiency of capital investments in the preservation of the environment;
- shortage of circulating assets;
- low level of ecological culture.

Opportunities. In addition, research opens the opportunities:
- identify priority areas for the development of business entities;
- justify the most effective sources of financial support for investment activities of business entities;
- identify the factors influencing the growth of the region’s investment attractiveness;
- systematically evaluate the interrelation and mutual influence of environmental factors on the financial provision of investment activities of business entities.

Threats. Threats for activation of investment activity and attraction of investments include:
- unstable political situation in the country;
- imperfection of the current legal framework for investment activities, inconsistency of regulatory and legal acts;
- financial instability of business entities;
- high interest rates on loans for business entities;
- insufficient state support of entrepreneurial activity.

8. Conclusions

1. It is proved that for economic growth of business entities it is necessary at the macro level to ensure the stability of legislation on investment activity and state support for activating investment activities. This, in turn, requires a review of the influence of existing investment mechanisms on the investment process, creating economic conditions that meet the current socio-economic and political goals of the region’s development.

2. Based on the results of the analysis of current trends in financial support for investment activities of business entities, it can be asserted that the economic growth of the region is possible provided investment processes develop. But financial security does not meet the modern needs of business entities. The most important sources of financing investment activities at the regional level are funds of local budgets, foreign investments and household funds. For business entities, the main source of financing is the Bank’s own funds and loans. This means that the main mechanism for financing the investment activities of business entities is self-financing.

3. World practice shows that the effectiveness of economic growth of business entities depends on the effectiveness of attracting and using the region’s natural and resource potential: land, forestry, water resources and waste management. These structural components form an ecological component of the investment attractiveness of the region and thereby increase the influence of environmental factors on the financial provision of investment activities at the regional and local levels.

4. The main sources of financial support for investment activities of business entities are substantiated, namely:
- increase in the volume of capital investments by main sources (funds of local budgets and own funds of business entities);
- growth of volumes of direct foreign investments in priority spheres of economy;
- stabilization of the state of environmental protection as the main factor in attracting investments and increasing the investment attractiveness of the region.
The results obtained in the work can be used to study the formation of sources of financial support for investment activities and to study the influence of environmental factors on the formation of the investment attractiveness of the region.

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INVESTIGATION OF SOCIAL DETERMINANT OF SUSTAINABLE AGRARIAN DEVELOPMENT

1. Introduction

Today, the issue of sustainable development in general and the agrarian sector in particular, is thorny in Ukraine. Among the main determinants of sustainable development, the social one is important, together with the economic and ecological ones it forms the system of sustainable development. Thus, the Strategy for the Development of the Agrarian Sector for the period up to 2020 [1] states that the principles of development of the agrarian sector in the field of organization of agricultural production are the balance of its development by economic, social and environmental criteria. At the same time, the aim of the Strategy is to create organizational and economic conditions for the effective development of the agrarian sector by ensuring the unity of the economic, social, and environmental interests of the society in order to ensure the stable provision of high quality, safe and affordable domestic agricultural products and agricultural raw materials to the industry. One of the strategic goals of the development of the agrarian sector identified in the Strategy is to promote the development of rural settlements and the formation of a middle class in rural areas by ensuring employment of the rural population and raising incomes [1]. This proves the importance of the social component of the agrarian sector of the economy of Ukraine. At the same time, the first principle of development of agrarian sector in the field of organization of agricultural production is the balanced development of its economic, social and environmental criteria, which confirms the focus on sustainable development.

In order to improve and effectively increase the level of social determinants of sustainable agrarian development in Ukraine, we consider it expedient to carry out a more detailed analysis.

2. The object of research and its technological audit

The object of the investigation is a set of indicators that reflect the social component of the development of the agrarian sector of the national economy on the basis of sustainability.