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## **PROBLEMS AND PROSPECTS OF INNOVATION DEVELOPMENT IN ECONOMY OF OLD-INDUSTRIAL CENTERS (ON EXAMPLE OF DONETSK REGION)**

Ukraine is on the industrial stage of development, with a low level of progressivity of material production. The transition to post-industrial society based on advanced development is a complex process of interaction between traditional and new economies. Western civilization, reaching a high level of capital accumulation, simply shifts the industrial sector from North to South and from West to East. Ukraine still has no prerequisites non-industrial sector because of the immaturity of other sectors. Thus, the development of innovative industry that produces liquid products, along with new economy that emerges will be based innovation model country.

Problem analysis and the development of cities in Ukraine devoted few publications. Major cities in Ukraine is five times more than the regions. However, scientists regionalists justify their conclusions mainly on the analysis of regions, not cities. This is explained very simply. The basic accounting unit in Ukraine is a region. All statistics are published mainly in areas that allows researchers to conduct comparative analysis only in that direction. Statistical agencies do not consider necessary to rely on the most important cities of regional indicator – gross value added, and based on it – gross regional product. However, the city is more stable unit than the area.

Analysis of recent research and publications. Innovative solutions to the problems of the subject of many works of local scientists: I. Aleksandrov, M. Herasymchuk, V. Geyets, V. Hobta, N. Chumachenko, which is the solution of many problems. However, innovation continues to deteriorate. The purpose of this article is to identify and find ways to solve the most significant problems of innovation: regional, tax incentives.

In 1990, light industry was dominating industry in Donetsk, its share of 22.9%, followed by engineering (20.4%), the third – metallurgy (12.9%). In 2011, the situation changed radically. Light industry occupies in industrial output less than 1%, and became the leading iron and steel, whose share increased to 25.3% in 2011 significantly increased in 2011, the share of food industry 13,2% (in 1990 – 9.5%), the share of engineering decreased to 6.9% in 2011.

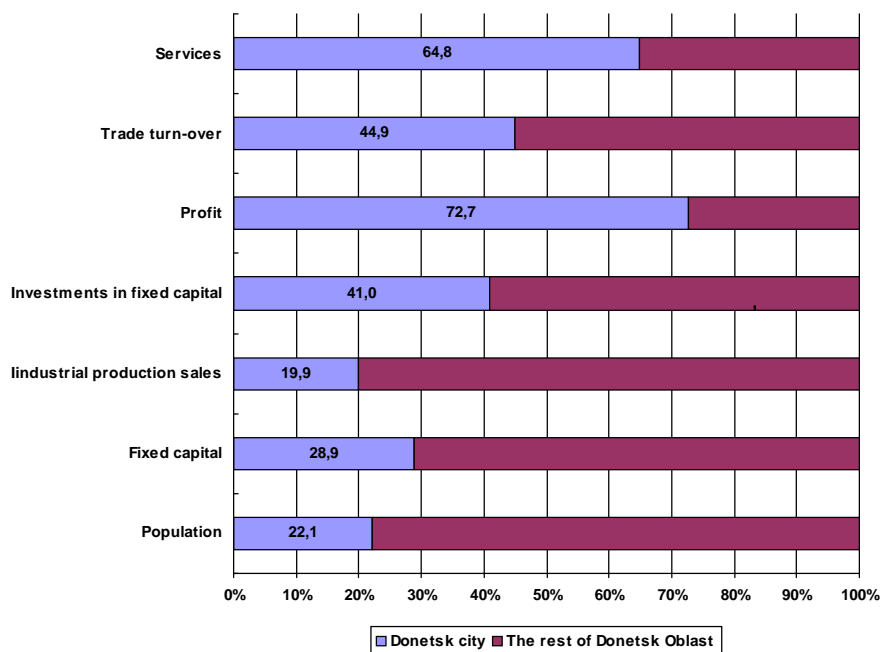
In 1990, the share of mining industry in the total industrial production of Donetsk was 10.8% and in 2011 it increased to 20.8%. But this does not mean that coal production has increased, in contrast, coal-mining was decreased almost in twice, just a few times decreased share of other economic activities.

It has changed and the structure of the economy of the city. Thus, if in 1990, industry accounted for 72.1%, construction – 21.4%, agriculture – 0.3%, services – 6.2%, in 2011 industrial production – 45.66%, construction – 5.72%, agriculture – 0.54%, services – 48.08%.

The analysis shows that in 2000 – 2005, compared with 1990 in the industrial structure of the city has undergone profound changes: in times the share of light industry was decreased, decreased the proportion of the chemical industry, machine building, the share of industry and metal processing, food industry. Donetsk the city of developed light industry and machinery turned into the city of steel. The number of workers employed in industry for 2000 – 2005 has grown by 10.5 thousand people. The majority of the working population was employed in the mining industry in the production and distribution of electricity, gas, water and in mechanical engineering. It should be noted that the number of employees of mining industry for the period decreased by 12.45%. The increased number of employees in the following activities: production and distribution of electricity, gas, water – 38.39%, food industry – at 23.66%, metallurgy and metal processing – at 17.45%, manufacturing of machines and equipment – 15.01%.

The value of gross fixed investment characterizing features of each type of economic activity. The largest share of gross investment in fixed assets of investment across industries in the food industry – 35.42% and 35.22% respectively in 2000, 2011, metallurgy and metal processing – 34.08% in 2000 and 19.27% in 2011, the mining industry – 18.81% in 2000, 18.44% in 2011. Gross value added in total economy of the city has increased over the period 2000 – 2011 was 10.5 times, including in the mining industry in 8,1 times the production and distribution of electricity, gas and water in 6.7 times. Volume of production (works, services) for the same period increased in 2.47 times, indicating progressive phenomenon in the city's economy. However, for many types of economic activity value of GVA is clearly insufficient, as evidenced by low compared with developed countries wages and unprofitable fifth of the city's enterprises.

**Rationale and results of forecasting.** Many economic activities (mining, metallurgy and metal processing, manufacture of coke, refined products,



**Fig. Share of Oblast centre (Donetsk) in all-Oblast indicators in 2011**

chemicals, etc.). Whose share is 50% of the volume of production is environmentally harmful, low-and partially unprofitable. These circumstances underlying the forecast options for development of heavy industries.

Prediction of coal mining in general and in the context of the types and in use (coking, energy), based on the prevailing situation objectively with the development of mining assets made in two versions of each of the mines until 2026. In each version of considered key indicators of industrial activity coal enterprises: power, mining and coal reserves, investments, productivity, cost of one ton of coal and others.

We stopped on the pessimistic mining industry in Donetsk, where its share in the industry decreased from 15.8% to 3.5%. Coal output in 2025 compared with 2005, reduced by more than half, and the number of people employed in this sector will be one third of the number of employees in 2006. Formulation of output per 1 employee increased from 20.2 thousand to 30.6 thousand.

Steel has become one of the predominant industries in the region, first came after the crisis. But industry for the city and the region creates big problems. Among them a high load on the environment, increased consumption of energy associated with both their high unit costs in the production of metals, and the use of outdated technologies in the field, high consumption of raw materials production and the associated increased demand transportation services; adverse conditions most of the workers employed in the industry, and several others.

Actions to improve the environment should be directed either to close hazardous industries or the introduction of technologies that lead to the reduction of harmful emissions and recycling of waste. Criteria for decision making may be the importance of the enterprise for the region and the presence or prospect of cleaner production, replacing it.

The success of socio-economic development largely depends on the concept of metallurgical enterprises. They provide tax revenues and employment much of the population, and provide a stable demand for coal, have an impact on the work of other companies, primarily engineering and construction companies. Metals - the main export commodity of the region.

In the forecast period, employment in the industry by introducing new technologies will decline.

For modernization of metallurgical production to date, to replace 1 USD value of old assets need at least 6 USD own money in the metallurgical industry retooling clearly lacks. The limited financial resources do not allow for retooling in the industry rapidly.

In recent years, the share of the Donetsk region in total expenditures on innovative activity was at least a quarter of total spending in Ukraine for this purpose. It can be concluded that the Donetsk region strives to enhance its competitive advantage.

Conclusions and conditions of development options that recommended:

1. The presence of a strong production capacity, liquid industrial products can assert that the city development strategy must be industrially oriented. Industrial development will create momentum revival other branches of material production and non-production areas. The better they will work, so will be more significant contributions to the city budget, increased consumer demand and thus will be able to solve many social problems that have accumulated in the cities.

2. The current environmental situation in the city is a major limiting factor that determines the specific industrial development of the region. Therefore, the most important goal of industrial development should be to reduce the anthropogenic impact on the environment and

create conditions for the reproduction of environmental resources. This will be achieved by using economically reasonable and technically made resource and environmentally friendly, low-waste technology; commissioning of highly efficient water treatment.

When making decisions on the development and distribution of productive forces in the cities must comply with the following principles:

rejection of new construction and expansion of existing facilities of environmentally hazardous industries; maintain or slightly increase existing environmentally hazardous industries is only possible if increased spending on environmental measures. Growth costs of restoring ecological potential to outpace the growth of industrial production;

growth of existing cleaner production to outpace growth in industrial production;

construction, extension, reconstruction of industrial enterprises are only possible on a new technological basis, ensuring environmental safety;

in the structure of industrial production the share of environmentally hazardous industries must continually decrease.

3. The current attack on environmentally harmful production in the next five years is almost impossible (the production out of the crisis and form the basis for the revival of other sectors). However, need further gradual „greening” of the tax system by expanding the tax base and tightening environmental legislation. Environmental payments should remain in the local budget.

Need to develop ordinances cities where secure special ecological status of the city, the relationship with the companies on this issue and register it with the Ministry of Justice of Ukraine. Possible adoption of the law of Ukraine.

4. Selection of priority economic activities should take into account a balanced (complex) development of the city. Besides the pollution should focus on in the mutual supply of products, the level of qualification that release, sex and age structure of the population, etc. World foreign experience shows that the dynamic development reached regions formed as industrial clusters, combining interdependent organizations (industrial companies, research centers, infrastructure organizations etc.). Therefore, it is necessary to clustering of industrial enterprises in the city. Companies that were not included in the industrial, scientific and technical clusters and pollute the environment should not be considered a priority.

5. To solve many social problems that have accumulated over the years, it is necessary to change the system of forming the city budget. Solutions: requires redistribution of revenues between the center and sometimes in favor of the latter.

6. Creating with state export business groups and consortia.

At the same time as the main export industries is seen not raw, and manufacturing industries. In the first place, with real Ukrainian situation is the primary raw material processing industry (including metallurgy, chemical industry, machine building and metalworking).

These industries are mostly competitive on the world market, export breakthrough here requires minimal internal organizational work and financial investment, and depends mainly on the achievements of foreign agreements that resolved WTO.

7. Consider renovation operation priority development areas as innovation and investment growth points.

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### **Хаджинов І. В., Медведкин Т. С. Проблеми і перспективи інноваційного розвитку економіки старопромислових центрів (на прикладі Донецької області)**

Стаття розкриває ситуацію в великих промислових містах України. На засадах проведеного аналізу визначено певне коло ризиків й проблем, а також були запропоновані рекомендації щодо їх розв’язання.

*Ключові слова:* великі промислові центри, інноваційний розвиток, старопромисловий регіон, промисловість.

### **Хаджинов И. В., Медведкин Т. С. Проблемы и перспективы инновационного развития экономики старопромышленных центров (на примере Донецкой области)**

Статья раскрывает ситуацию в больших промышленных городах Украины. В результате проведенного анализа определен определенный круг рисков и проблем, а также были предложены рекомендации относительно их сокращения и решения.

*Ключевые слова:* крупные промышленные центры, инновационное развитие, старопромышленный регион, промышленность.

### **Khadzhynov I. V., Medvedkin T. S., Problems and Prospects of Innovation Development in Economy of Old-industrial Centers (on Example of Donetsk Region)**

The article reveals the situation in the major industrial cities of Ukraine. The analysis identified a specific range of risks and challenges, as well as recommendations on the proposed reductions and solutions of them.

*Key words:* large industrial centers, innovative development, old-industrial region, industry.

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