

# Contemporary economic development challenges of the industry in Luhansk region

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**Abstract.** The modern Ukrainian economy is characterized by significant transformational processes that are accompanied by a transition from heavy industry to the agro-industrial sector. In recent years, traditional key domestic industries with high added value in production have substantially lost their positions in the domestic and foreign markets. Especially acute the crisis phenomena are observed in the areas that are involved or are bordered by the area of the armed conflict. Before the beginning of hostilities in the East of Ukraine, Luhansk region was among the five most powerful industrial and economic regions of Ukraine. Now the region has turned from industrial to agrarian. Therefore, the matter of analysing the impact of post-conflict transformation processes in Ukraine on the region's economic development and identifying the reasons that hinder transformation in the areas of post-conflict transformation is relevant. The article assesses the impact of military actions in the east of Ukraine on the economic performance of the industry in the region. The modern problems of Luhansk region industrial enterprises development are determined. According to the results of the macro-environment factors PEST analysis of the industrial enterprises in the region the main measures to overcome the crisis phenomena in the region's economy are determined.

The modern economy of Ukraine is characterized by significant transformation processes that are accompanied by a transition from heavy industry to IT and agro-industrial complex (agriculture, food industry, equipment manufacturing, etc.) [1]. Over the past five years, traditional key domestic industries with high added value in production have substantially lost their positions in the domestic and foreign markets, in particular, engineering, chemical industry. The military actions in the east of the country and "opening up" of the European Union market have played a key role in transforming the Ukrainian economy. Especially acute crisis phenomena are observed in the territories involved or bordering the zone of military conflict. This article studies the influence of the post-conflict transformation

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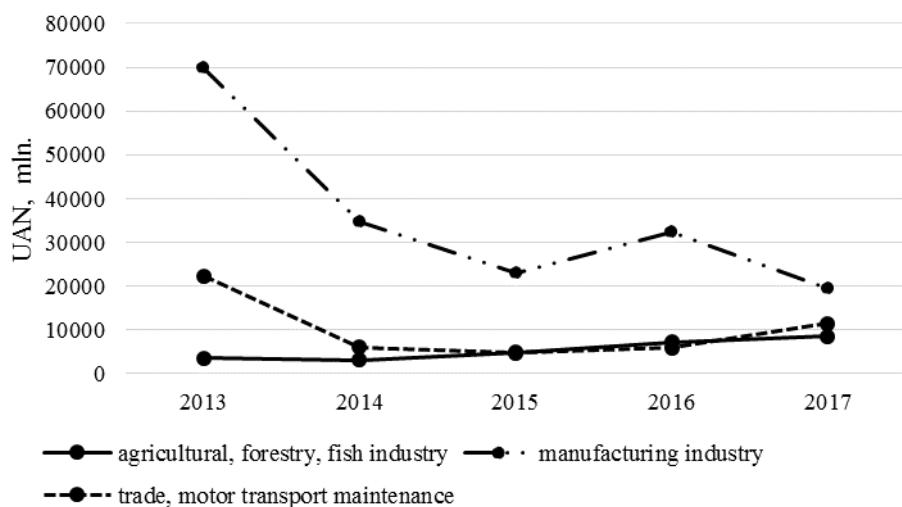
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processes on the economic performance of the Luhansk region industry, the definition of the main challenges of the regional economic development and ways to overcome them.

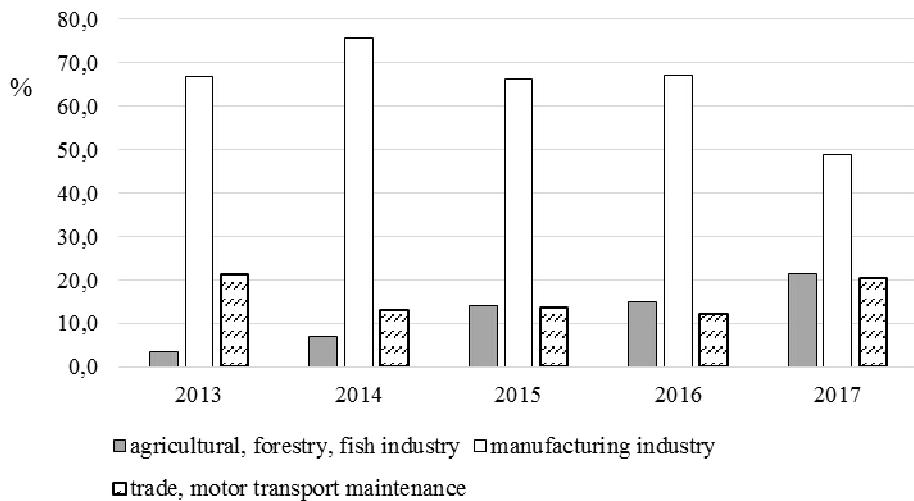
Prior to the start of the anti-terrorist operation in 2014, Luhansk region had a significant economic potential and was one of the five most powerful industrial and economic regions in Ukraine. Since the beginning of the military conflict, more than 2 thousand social infrastructure facilities, housing stock, life support systems have been destroyed; transport, energy and industrial infrastructures have been damaged in the region. The economic crisis of the region is confirmed by the regional statistics. The level of the volume indices of gross regional product in Luhansk region in 2014-2015, 2017 was the lowest among all regions of Ukraine. It decreased from 92.2% in 2013 to 47.7% in 2015, in 2017 it was 83.8%. The gross regional product per person indicator in 2014-2017 took the last place, despite the fact that in 2013 Luhansk region surpassed half of the regions of Ukraine in this indicator. For the analyzed period, the industrial production index decreased by 66.0% [2].

The extent of the impact of taxation on the development of the regional economy, the individual sectors of economic activity, territories or groups of economic actors allows us to estimate the level of tax burden. According to one approach, it is calculated as a relation of the total tax collections to the total gross regional product. In terms of tax burden, Luhansk region was ranked 4th in 2013, 5th in 2014 and 2015, 3rd in 2016, 12th in 2017 (calculations made according to [2]). A high level of tax burden on the economy of the region can be stated. This indicates the inefficiency of the system of redistribution and use of budgetary resources, forms and preserves the extensive type cycle of regional development, which adversely affects the competitiveness of the national economy as a whole and deepening the developmental imbalances.

During 2013-2017, in terms of the volume of products (services) sold in the region, industrial, commercial and agricultural enterprises as well as forestry and hunting enterprises occupy leading positions. The highest indicators are shown by the industrial enterprises, although until 2017 their sales volume decreased significantly due to the loss of a significant number of enterprises or a decrease in business volumes (Fig. 1, 2).



**Fig. 1.** Commerce dynamics of business entities of Luhansk region by the main types of economic activity [2]



**Fig. 2.** Business Entities Commerce Volume in Luhansk Region Structured by the Main Types of Economic Activity [2]

The costs of the industry operating activities in the region during 2014-2017 exceed the sales volumes of enterprises (Table 1). The most critical situation is observed in 2015, 2017. In general, for the period under review, operating expenses and sales of the Luhansk region industrial enterprises products decreased by 40.8% and 43.9%, respectively. The increase in the fixed costs share (rent, utility bills, the share of labour costs, etc.) in their total with the increase in prices and tariffs (39.1% on average from 2014 to 2017) led to increasing unprofitability in the operating activities of industrial enterprises from 22.9% in 2014 to 35.1% in 2017.

**Table 1.** The Dynamics of the Luhansk Region Industrial Enterprises Economic Indicators [2]\*

Indicator	2014	2015	2016	2017
Sales Volume, UAH mln.	34681.8	22922.0	32441.5	19469.2
Operating Expenses, UAH mln.	59455.7	58484.1	49445.8	39023.2
Price Index for Hot Water, Heating, %	100.0	167.3	170.9	150.3
Electricity Price Index, %	111.3	166.7	160.0	128.1
Water Supply Price Index, %	100.0	168.7	151.4	116.2
Operating Profitability, %	-22.9	-24.2	-16.8	-35.1

\*Data are given without taking into account the performance of banks and budget institutions. Excluding part of the temporarily occupied territory in Lugansk region.

After Luhansk region has lost the leading position in the key sectors of the regional economy - the chemical and mining industries, the mechanical engineering sector takes the first place in terms of financial performance; as well as manufacture of wood products, paper and printing activities (Table 2).

According to Table 2 we can draw the following conclusions. The activity of the mechanical engineering enterprises in the region, unlike the indicators of the industry in total, is profitable. A slight drop in operating profitability can be traced in 2015 - to 1.0%.

**Table 2.** Economic Indicators Dynamics of the Industrial Enterprises Financial Performance in Luhansk Region [2, 3]

Indicator	2014	2015	2016	2017
Share of Profitable Enterprises by Types of Industrial Activity in Total, %				
<b>Industry:</b>				
Average in Ukraine	63.3	72.9	72.8	71.6
Average in Luhansk Region	51.5	65.2	68.0	67.3
<b>Engineering:</b>				
Average in Ukraine	64.7	74.1	77.2	77.4
Average in Luhansk Region	59.5	61.9	72.1	77.3
Operational Cost Effectiveness, %				
<b>Industry:</b>				
Average in Ukraine	1.6	0.9	4.2	6.6
Average in Luhansk Region	-22.9	-24.2	-16.8	-35.1
<b>Engineering:</b>				
Average in Ukraine	-2.4	3.4	8.0	13.1
Average in Luhansk Region	3.1	1.0	14.2	8.6

In the second half of 2015, industrial production in Ukraine and the region gradually began to grow, which increased the operating profitability of the industry enterprises to 8.0% and 14.2% in 2016, respectively. However, the next increase in prices for inventories, tariffs for services, the minimum wage of workers increase in 2016-2017 led to a drop in the level of profitability of the enterprises of the mechanical engineering industry of the region to 8.6%. This is less than the average level of profitability in the industry by 4.5%. But the share of profitable enterprises increased from 59.5% in 2014 to 77.3% in 2017. Preservation of the overall profitability of the engineering industry in the region in 2015 was ensured by the activities of enterprises producing electrical equipment (operating margin of 104.5%). But in subsequent years, a decrease in the efficiency of this type of industrial activity to 9.1% was observed. The most stable in terms of operating profitability is the production of computers, electronic and optical products – 42-47%. This type of industrial activity is a leader in the engineering industry of Luhansk region in terms of profitable enterprises - in 2016-2017 it was 100%.

In order to study the macro environment factors of the industrial enterprises functioning in the region, the authors used PEST analysis. Its results allowed to identify the following groups of the major problems of economic development of industry [4-9]:

1) Political: continued joint forces operation in the country, campaigning for 2019, high level of privatization, excessive politicization of economic cooperation, mistrust of business to the authorities and its bodies, implementation of the Association Agreement with the EU, lack of a state program to support separate industries in the region, admission of Russian competing enterprises products to the Ukrainian market, etc.

2) Economic: high inflation, devaluation of the hryvnia, instability and high exchange rates, commercial banks' high lending rates, low effective demand of the domestic market, unallocated losses of previous years business partners in related industries, limited own working capital, no real external investors, uncontrolled rise in prices for goods and services of natural monopolies (raw materials, energy), insufficient investment in industry, lack of government programs financing for the long-term development of industry for the next 5 years, increased competition in the domestic market from foreign producers, the dependence of the domestic enterprises on the supply of imported inventories, low profitability of production, loss of sales markets, reduction of exports, lack of alternative sales markets for primary products etc.

3) Social: increase in the outflow of specialists with work experience, reduce in the quality of specialist training, decrease of the working population, migration of the working

population, reducing the attractiveness of the labour in the industry, a significant gap between wages and employee needs, low prestige of labour in the manufacturing sector, shortage of labour occupations, etc.

4) Technological: a high level of material and energy intensity of the final products, a high level of depreciation of the fixed assets, an insignificant level of innovation, a mismatch between the innovative potential of the manufacturer and its customers-consumers, a slight level of production modernization, etc.

Thus, the impact study of the military operations in the east of Ukraine on the economic performance of the industry in Luhansk region, the identification of the main problems of the economic development of the region allows us to identify the following measures to overcome them [4-9]:

1) Political: public authorities support for the development of the State Program for the implementation of the EU technical standards and regulations, its funding; protection of the domestic producers from imported products, analogues of which are produced in Ukraine, by increasing the import duty rate; the state demand strategic planning for the infrastructure modernization; the free economic zones and territories of priority development update; simplification of the process and procedures for obtaining permits for the implementation of innovative investment projects in the industry; strengthening of the control and responsibility for the failure of the state governmental authorities to fulfill their obligations, enshrined in legislation, government programs, and etc.; business cooperation with legal institutions to protect the interests of the national manufacturer, etc.

2) Economic: timely adjustments of the business strategies in accordance with the market situations; production diversification; search for alternative suppliers, markets; establishment of the representative offices of the enterprises abroad; expanding the range of products; cost reduction by using information technology; expanding the range of the components of the own production; expansion of the cooperation with foreign partners; self-insurance at the expense of established reserves for future expenses and payments; land market liberalization; continue working on the energy independence.

3) Personnel: the preservation of highly qualified personnel by improving working conditions and its remuneration; the creation of local centres of the best practices and professional competence, and so on.

4) Technological: development of the high-tech products, creation of the new technology with exceptional capabilities; implementation of the best practices, methods and processes of economical production, investment in new technologies and modernization of production, etc.

The obtained research results constitute theoretical and practical basis for further development of the scientific base and improvement of the regional management theoretical and methodological foundations to ensure sustainable development in the territories of the post-conflict transformation on the basis of the formation of a comprehensive organizational and economic provision of the regional management system.

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