

THE TRANSFORMATION OF THE STRUCTURE OF INDUSTRY IN UKRAINE (2001-2013)

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Kornus A. The Transformation of the Structure of Industry in Ukraine (2001–2013). The aim of article is to outline the transformation of industry's structure of Ukraine's regions that took place during the 2001–2013, as well as define the types and peculiarities of modern industrial structure in regions of the state. Despite of enough scrutiny of a problem as a whole, nevertheless, cannot talk about of solving of all problem questions related to the regional imbalances of industrial development and structural strains in this industry sector. That is why the author considers it necessary to express their views on the trends of the transformation of the structure of the industrial sector of Ukraine's economy, in particular its geographical features. In the industrial structure during 2001–2013, there were negative changes. The dominance of low-tech industries (manufacture of basic metals and fabricated metal products, but except of machinery and equipment) were increased, more over, these industries are characteristic for industrial society and do not require of highly skilled specialists. In most regions dominated food industry, there were regions with predominance of extractive industries (extraction of crude petroleum and natural gas, mining of coal and metal ores). In general in the state in the structure of industrial output, like in 2001, the largest percentage had of the production and distribution of electricity, gas, steam, conditioned air and water supply, whose share rose to 25.3%, the share of metallurgy decreased to 15.4%, but on the second place in total volume of industrial products sold came the food industry – 19.3%. The share of mechanical engineering decreased to 8.2% and percentage of chemical industry – has increased to 12.7%.

Корнус А.А. Трансфармація структури промисловасці України ў 2001–2013 гг. Мэта артыкула – вывучэнне трансфармацыі структуры промисловасці ва Украіне (2001–2013), вызначэнне тыпаў і асаблівасцяў сучаснай промисловай структуры ў рэгіёнах. Нягледзячы на дастатковую вывучанасць праблемы ў цэлым, тым не менш, нельга казаць аб вырашэнні ўсіх праблемных пытанняў, якія звязаны з рэгіянальнай несбалансаванасцю промисловага развіцця і структурнымі дэфармацыямі ў гэтай галіне. Менавіта таму аўтар лічыць неабходным выказаць сваё меркаванне пра тэндэнцыі трансфармацыі структуры промисловага сектара эканомікі Украіны, у прыватнасці аб географічных асаблівасцях. У структуры промисловай вытворчасці (2001–2013) адбываліся негатыўныя змены. Дамінаванне нізкатэхналагічных галін (вытворчасць металаў і гатовых металічных вырабаў, акрамя машын і абсталявання) павялічвалася, больш таго, гэтыя галіны характэрныя для індустрыяльнага грамадства і не патрабуюць высокакваліфікаваных спецыялістаў. У большасці рэгіёнаў пераважалі харчовая промисловасць, былі рэгіёны з перавагай здабыўной промисловасці (здабыча нафты, газу, вугалю, руд металаў). У цэлым, ў 2013 г. у структуры промисловай вытворчасці, як і ў 2001 г., самая вялікая доля ў агульным кошыце прадукцыі належала вытворчасці і размеркаванні электраэнергарэсурсаў, газу, пара, кандыцыянаванага паветра і водазабеспячэнне (доля вырасла да 25,3%), доля металургіі скарацілася да 15,4%, а на 2 месца ў агульным аб'ёме промисловай прадукцыі выйшла харчовая промисловасць – 19,3%. Доля машынабудавання знізілася да 8,2%, а хімічнай промисловасці – павялічылася да 12,7%.

Корнус А.А. Трансформация структуры промышленности Украины в 2001–2013 гг. Цель статьи – изучение трансформации структуры промышленности в Украине (2001–

2013), определение типов и особенностей современной промышленной структуры в регионах. Несмотря на достаточную изученность проблемы в целом, тем не менее, нельзя говорить о решении всех проблемных вопросов, связанных с региональной несбалансированностью промышленного развития и структурными деформациями в этой отрасли. Именно поэтому автор считает необходимым высказать свое мнение о тенденциях трансформации структуры промышленного сектора экономики Украины, в частности географических особенностях. В структуре промышленного производства (2001–2013) происходили негативные изменения. Доминирование низкотехнологичных отраслей (производство основных металлов и готовых металлических изделий, кроме машин и оборудования) увеличивалось, более того, эти отрасли характерны для индустриального общества и не требуют высококвалифицированных специалистов. В большинстве регионов преобладали пищевая промышленность, были регионы с преобладанием добывающей промышленности (добыча сырой нефти и природного газа, угля и руд металлов). В целом, в 2013 г. в структуре промышленного производства, как и в 2001 г., самая большая доля в общей стоимости продукции принадлежала производству и распределению электроэнергии, газа, пара, кондиционированного воздуха и водоснабжение (доля выросла до 25,3%), доля металлургии сократилась до 15,4%, а на 2 место в общем объеме промышленной продукции вышла пищевая промышленность – 19,3%. Доля машиностроения снизилась до 8,2%, а химической промышленности – увеличилась до 12,7%.

Introduction. An understanding of geographical differences the proportions of the different production sectors is essential for the development of society and economy. Industry is a type of economic activity, which forms regions, gives an impetus to the development of other activities, as well as transport, services, affects the formation of the settlement system, the ecological state of the environment. The structural changes occurring in the industry cause the transformation of other economic and social structures of Ukraine's regions. Therefore, the study of structural transformations in the industry of Ukraine, its geographical features, the role of industry in the structure of employment and in the forming the Gross value added of Gross domestic product are very important and actual. The aim of article is to outline the transformation of industry's structure of Ukraine's regions that took place during the 2001-2013, as well as of regional geographical features of deindustrialization of the Ukrainian economy; to define the types and peculiarities of modern industrial structure in regions of the state.

Industry in Ukraine's economy during 1991-2000 and 2001-2013.

On the eve of the USSR collapse its economy had the structure where the largest percentage in the gross value added was belonged industry (58.6%), while on the services sector was accounted for only 14.9%. Since time of independence, Ukraine had the structure of the economy where the industry owned 36.0% of total gross value added of all economic sectors. The first decade of independence (1991-2000) characterized by a rapid drop in industrial production and deindustrialization of economy all its regions. By results of 2000 the index of industrial production was only 57% compared to 1990, although during 1999-2000 was began the growth of this indicator. The only region in Ukraine where able to achieve and even exceed the level of production in 1990 was Zaporizhzhia region (105% to 1990 and 122% compared to 1985), another region – Kyiv came near to this indicator (99%).

However, in 13 regions the index of industrial production in 2000 does not exceed 50% of that of the beginning of independence, especially in the L'viv region it was only 31% as compared to 1990. The percentage of industrial production in the structure of gross value added in the first period of independence of Ukraine (1991-2000) decreased from 36% to 33.9%.

The decline in production was observed in almost all industries. Only manufacture of medical and dental instruments and supplies and manufacture of wearing apparel at the end of 2000 exceeded the level of production of 1990 (181% and 122%). The greatest decrease in the index of production was observed in manufacture of textiles, processing and preserving of meat and production of meat products, manufacture of dairy products, processing and preserving of fish, and crustaceans, the index of industrial production of which does not exceed 1/3 of the index in 1990, as well as in mechanical engineering. Ukraine actually was through of deindustrialization, which is confirmed by the analysis of the dynamics of the sectoral structure of the economy – an increase in the structure of industry the percentage of mining and quarrying and raw materials and metallurgical complex and decrease the proportion of high-tech industries, especially mechanical engineering. For example, for 1990-2000 the share of ferrous metallurgy and manufactured of basic metals in total industrial output has increased from 11% to 27.4%, but a proportion of mechanical engineering decreased from 30.5% to 13.4%.

During the second period of independence of Ukraine (2001-2013) the structural imbalance of the industrial sector of economy of the Ukraine's regions was acquired new traits. The percentage of industry in the total gross value added in 2013 was decreased from 33.9% to 21.5%, despite the fact that according to the new national Classification of Economic Activities (CEA 009:2010), it began to include the electric power generation, transmission and distribution of electricity, and also manufacture of gas; distribution of gaseous fuels through mains, distribution of steam and air conditioned supply, water supply, sewerage and waste management, thereby expanding the scope of the industry.

In the regional aspect the noticeable trend in the development of the industry has become so-called "leveling down" when the industrial regions faster "settles" than those regions where industry was the no leading sector specialization. The same trends are typical for Russia [2], and even earlier were observed in Poland [3].

By structure of gross value added in 2001 in Ukraine, there were 4 hyper-industrial regions (Donets'k, Luhans'k, Dnipropetrovs'k and Zaporizhzhia regions) and one industrial region (Kharkiv region), where the percentage of industry in the structure of the GVA was more 50% or about 30-50%, respectively. However, in 2010 by this criterion most of hyper-industrial regions (except the Luhans'k region) moved into the industrial type, and the Kharkiv region has changed its type from industrial to the service type – one where the share of the services market more because of the weakness of other sectors, especially of the secondary sector, and the structure of service type it appears instead them.

In 2001, the polarization of industry between regions of Ukraine was quite high. The share of most industrialized Donets'k region in the value of production of industry exceeded the share of the Transcarpathian region more than 112 times. Percentage of Donets'k region was accounted for 21.43% of total volume of industrial products sold of Ukraine, while the share of the Transcarpathian region was only 0.19%. In 2013, these differences become less contrasting – the proportion of the Donets'k region decreased to 16.37%, and to the last place among the regions of Ukraine fell Sevastopol and Chernivtsi region with parts of the region in the value of Ukrainian industrial output about 0.3%. The difference between the "bad" and "best" region is less than 55 times, which is another evidence of "leveling down".

The sectoral structure and dynamics of the industry of Ukraine's regions.

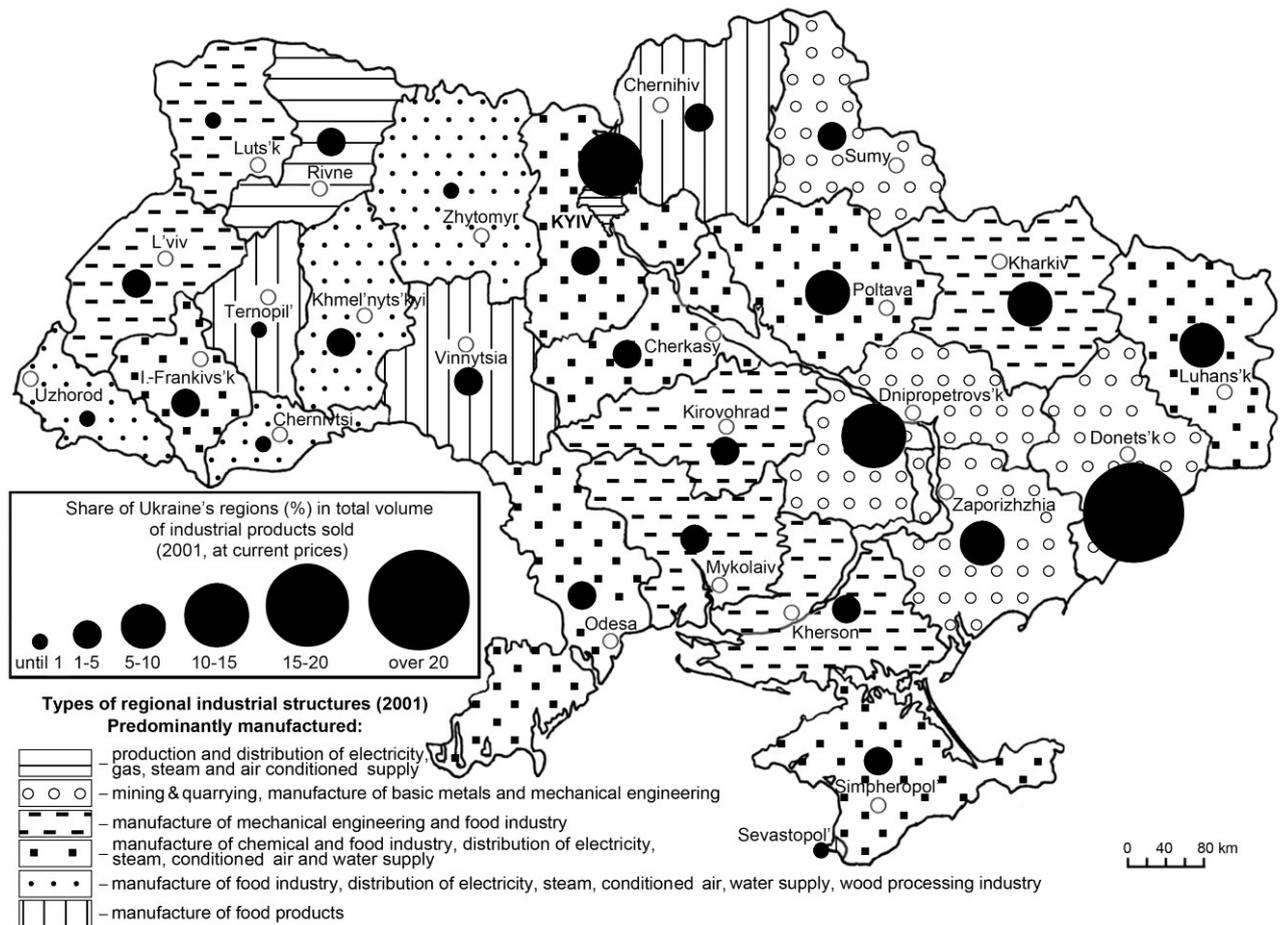


Fig. 1. Types of industrial structures of Ukraine's regions (2001)

The analysis of sectoral structure of the industry of Ukraine's regions allows to group them into 6 types (Fig. 1). In 2001, in the industrial structure of the most part (16) regions of Ukraine dominated the food processing industry, whose percentage in the value of production are sometimes higher than 50%, as in the Ternopil' (51.2%) and Vinnitsa region (58%). In four regions (Ivano-Frankivs'k, and Rivne regions, cities of Kyiv and Sevastopol') in the structure of the industry was dominated by the supply of electricity, water, gas, steam and conditioned air. In three regions (Dnipropetrovs'k, Donets'k and Zaporizhzhia region) dominated metallurgy, two

(Mykolaiv and Sumy regions) – mechanical engineering, and in two (Luhans'k and Poltava region) – the chemical industry. In general, in the structure of industrial output of Ukraine the largest share was in the production and distribution of electricity, gas, steam, air conditioned and water supply (24.8%), a large proportion has metallurgy (18%) and food processing industry (16%). The percentage of mechanical engineering was 10.2% and the chemical industry – 10.6%.

Since 1999, industrial growth continues and in 2006 the growth index of industrial production reached 100.8% over 1990, with a subsequent increase to 111.1% in 2007, which came to replace the new industrial decline. Despite the growth of the industry in 1999-2007 its percentage in the economic complex of regions of Ukraine has been steadily declining, both in the number of employees in it, and in the share of industry in the formation of total gross value added of 36% in 1990 to 31.4% in 2000 and to 22.7% in 2013. In the early 1990s, the industry of Ukraine "by inertia" continued to produce high-tech products, complex engineering systems, radio-electronic devices and so on. The labor market was still highly demanded, a highly professional and scientifically oriented human capital. But gradually the situation has radically changed. Intellectually capacious sectors of the domestic economy are almost completely degraded. The demand on the labor market mainly shifted to the service sector, where are practically useless sophisticated high-tech knowledge for create new production and needed only knowledge of the subject industry, certain skills and experience.

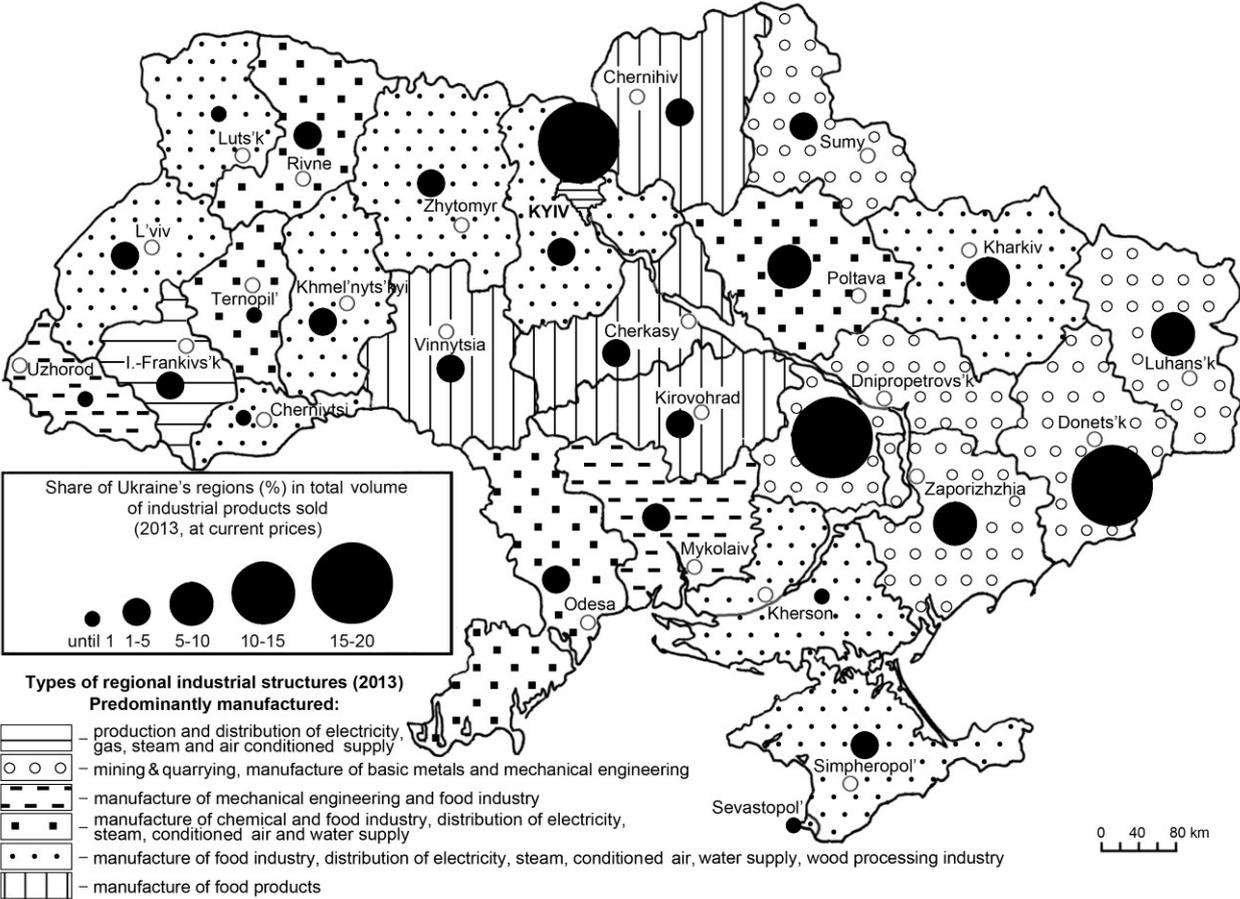


Fig. 2. Types of industrial structures of Ukraine's regions (2013)

In 2013, among the regions of Ukraine are allocated the same types of industrial structures, as in 2011. However, the ratio of the types and their composition changed (Fig. 2). In the structure of the industry almost half (13) regions of Ukraine on cost of production was dominated the food processing industry, at that in Vinnitsa, Kirovograd and Chernihiv regions, its percentage reached 50-60%. In six regions (Chernivtsi, Kyiv, Ivano-Frankivs'k and Rivne regions, cities of Kyiv and Sevastopol'), because of the weakness of other industries dominated by the production and distribution of electricity, gas, steam, conditioned air and water supply. In Dnipropetrovs'k, Donetsk, Luhans'k and Zaporizhzhia regions are dominated by manufacturing of basic metals, in the Transcarpathian region the largest share in the cost of total volume of industrial products sold somewhat surprising had mechanical engineering (45%), in Poltava – the chemical industry (26.8%), and in Sumy region – the highest share (25.7%) had the mining and quarrying. The share of the largest industrial regions in the total value of industrial production of Ukraine declined (Donetsk region – from 21.43% to 16.37%, Luhans'k region – from 6.64% to 5.39%, Zaporizhzhia region – from 7.36% to 5.82%, etc.), but percentage of non-industrial regions in total volume of industrial products sold of country was increased.

In general in the state in the structure of industrial output, like in 2001, the largest percentage had of the production and distribution of electricity, gas, steam, conditioned air and water supply, whose share rose to 25.3%, the share of metallurgy decreased to 15.4%, but on the second place in total volume of industrial products sold came the food processing industry – 19.3%. The share of mechanical engineering decreased to 8.2% and percentage of chemical industry – has increased to 12.7%. Thus, during the time of independence in Ukraine instead of improving the restructuring and modernization of the country's economy has been degradation of its existing structure and production assets. Share of production of high-tech products in Ukraine and its exports over the last 10 years has decreased from 5.5 to 3.5%.

Conclusions. In the industrial structure of Ukraine during 2001-2013 there were changes that did not gone to advantage. The dominance of low-tech industries (manufacture of basic metals and fabricated metal products, except machinery and equipment) were increased, more over, these industries are characteristic for industrial society and do not require of highly skilled specialists. In most regions was dominated the food processing industry, there were regions with predominance of extractive industries (extraction of crude petroleum and natural gas, mining of coal and metal ores).

Reducing the share of industry in the Ukrainian economy is sometimes considering as the first steps in the development of post-industrial society. However, with this point of view can hardly agree, because faster growth of the service sector in the advanced countries is not due to reduction of production sector, but on its basis. The rapid growth of non-productive sphere (sphere of services) in Ukraine is actually happening to the detriment for the real sector of the economy, that causing deindustrialization of it.

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Kornus A. The Transformation of the Structure of Industry in Ukraine (2001–2013) // Магілєўскі мерыдыян. – 2016. – Том 16. – Вып. 1-2 (33-34). – С. 54-58.