

TRANSFORMATION OF THE ECONOMY STRUCTURE – IT IS MAIN POINT IN UKRAINE'S DEVELOPMENT

Various concepts the country's activities during the war, the country's development on the path to the EU, the country's development in the post-war period, post-war reconstruction, etc., have been debate in Ukraine.

However, it is important to pay attention that any reforms, firstly, must be relate to the structure of the economy in the country. This will increase their productivity and success. This paradigm and logic must be maintained in Ukrainian practice also. Before the start of reforms, it is worth determining the key question - what structure of the economy must be in Ukraine now and in the future, which sectors/industries are must fixed as strategic for the long term.

Obviously, knowledge-intensive industry/manufacturing, sectors of science and technologies and other sectors like as this must have more priority in Ukrainian economy than raw materials sectors, the sphere of services. Unfortunately, a statistical assessment of the structure of the Ukrainian economy over the past decades shows mostly negative trends in this way.

The dynamics and structure creation of gross value added by type of economic activity in Ukraine in 2010-2022 shows about such (Table 1):

– wholesale and retail trade were leading sector in the Ukrainian economy last ten years and had share in the economics structure from 16.24% in 2010 to 13.95% in 2022;

– professional, scientific and technical activity had one of the smallest levels in the economics structure, on about 2-3%: from 2.86% in 2010 to 2.15% in 2022;

– manufacturing was the second in the rating, but its share in the structure decreased from 14.95% in 2010 to 8.61% in 2022;

– the index of industrial production in Ukraine had been declined in recent years also (Fig. 1):

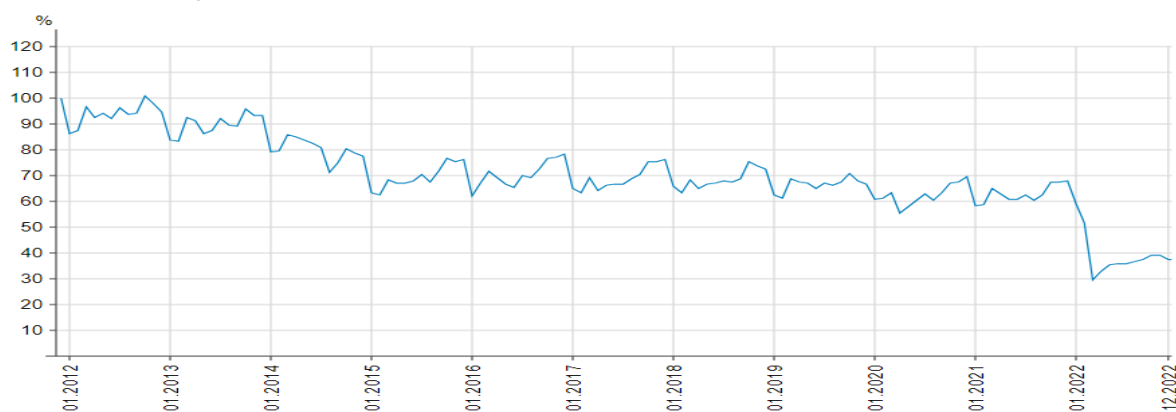


Figure 1. Changes index of the industrial production in Ukraine, 2012-2022 [2]

Table 1. Structure of gross value added by type of economic activity in Ukraine, 2010-2022, %% [1]

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Agriculture, forestry and fishing	8,42	9,49	9,05	10,03	11,65	14,19	13,82	12,06	11,96	10,42	10,84	12,57	9,71
Mining and quarrying	6,65	7,56	6,73	6,33	5,72	5,63	6,51	7,03	7,10	6,49	5,32	7,5	4,97
Manufacturing	14,95	13,78	14,34	12,86	14,03	14,01	14,41	14,19	13,61	12,54	11,76	11,96	8,61
Electricity, gas, steam and air conditioning supply	3,17	3,56	3,59	3,3	3,24	3,16	3,65	3,42	3,71	3,65	3,29	3,86	4,97
Water supply; sewerage, waste management and remediation activities	0,81	0,65	0,55	0,51	0,52	0,47	0,42	0,39	0,38	0,42	0,45	0,41	0,35
Construction	3,71	3,53	3,22	2,87	2,67	2,3	2,35	2,56	2,69	3,14	3,29	3,21	1,5
Wholesale and retail trade; repair of motor vehicles and motorcycles	16,24	17,22	16,55	16,52	16,3	16,22	15,72	16,26	15,63	15,37	16,22	15,84	13,95
Transportation and storage	8,7	9,19	8,15	8,14	7,3	7,99	7,75	7,58	7,53	7,74	7,24	6,3	4,9
Accommodation and food service activities	0,94	0,91	0,83	0,79	0,72	0,71	0,77	0,74	0,83	1,03	0,85	1,05	0,65
Information and communication	3,46	3,42	3,58	3,77	3,81	4,3	4,41	4,38	4,6	5,34	5,77	5,46	4,47
Financial and insurance activities	6,42	5,19	5,03	5,16	5,11	4,00	3,23	3,31	3,28	3,37	3,64	3,46	3,38
Real estate activities	6,05	6,15	6,88	7,42	7,17	7,28	7,22	6,82	6,83	7,06	7,42	6,72	5,1
Professional, scientific and technical activities	2,86	2,71	3,46	3,72	3,41	3,3	3,38	3,44	3,76	4,14	3,78	3,36	2,15
Administrative and support service activities	1,24	1,27	1,33	1,38	1,31	1,28	1,46	1,41	1,61	1,82	1,65	1,45	1,16
Public administration; compulsory social security	5,22	4,76	4,93	5,31	5,69	5,63	6,08	6,51	7,05	7,79	8,45	7,18	24,58
Education	5,6	5,29	5,92	6,07	5,5	4,9	4,4	5,29	5,26	5,05	5,13	5,02	4,82
Human health and social work activities	4,04	3,73	4,06	3,76	3,34	3,05	2,91	3,03	2,56	2,79	3,13	2,88	3,25
Arts, entertainment and recreation	0,64	0,64	0,8	0,99	0,89	0,73	0,67	0,69	0,68	0,7	0,67	0,68	0,56
Other service activities	0,9	0,94	1,01	1,07	1,00	0,85	0,84	0,89	0,96	1,14	0,99	1,00	0,92

In the **structure of capital investments by types of economic activity of Ukrainian industry** it can be seen that science-intensive manufacture (*manufacture of computer, electronic and optical products; manufacture of electrical equipment; manufacture of machinery and equipment n.e.c.*) had the smallest share in the total volume of investments, and the dynamics of this share were decreasing. However, mining and quarrying (raw materials) occupied the largest share and the dynamics of this share was stable or growing (Table 2).

Also negative trends it can be seen at the **structure of turnover of industrial enterprises by type of economic activity** in Ukraine.

Table 2. Structure of capital investments by types of economic activity of industry in Ukraine, 2010-2022, % [3]

Industry	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
<i>Mining and quarrying</i>	27,55	28,07	24,34	22,16	23,2	21,07	19,15	24,81	27,01	26,96	27,88	25,24	20,14
<i>Manufacturing</i>	54,44	53,55	46,15	45,83	49,25	52,73	52,84	51,56	50,46	41,65	46,75	46,63	47,94
Manufacture of food products, beverages and tobacco products	15,37	15,32	14,5	15,31	15,64	15,46	18,08	13,21	15,11	12,54	15,99	11,59	13,86
Manufacture of textiles, apparel, leather and related products	0,87	0,69	0,41	0,49	0,72	1,13	1,52	1,31	0,92	0,59	0,67	0,81	1,09
Manufacture of wood and paper products, and printing	2,5	4,57	2,47	2,49	2,33	4,6	4,21	4,77	3,77	3,93	3,43	7,72	8,41
Manufacture of coke and refined petroleum products	2,56	2,04	1,35	0,69	0,62	0,66	0,64	0,68	0,75	0,72	1,1	1,4	0,32
Manufacture of chemicals and chemical products	4,41	3,52	3,75	2,72	2,52	1,92	1,45	2,08	1,4	0,98	1,38	1,21	1,48
Manufacture of basic pharmaceutical products and pharmaceutical preparations	1,02	1,02	0,9	1,1	1,64	1,85	1,36	1,31	1,22	0,95	1,61	1,36	1,72
Manufacture of rubber and plastics products, and other non-metallic mineral products	6,86	5,39	4,14	4,34	4,63	4,36	5,31	7,29	6,57	4,28	5,11	4,5	4,47
Manufacture of basic metals and fabricated metal products, except machinery and equipment	12,09	12,43	10,07	11,15	13,72	14,23	12,45	12,44	13,19	12,23	11,08	11,23	8,05
Manufacture of computer, electronic and optical products	0,42	0,52	0,55	0,2	0,26	0,48	0,46	0,53	0,48	0,26	0,34	0,35	0,48
Manufacture of electrical equipment	1,2	0,8	0,74	1,03	0,7	0,67	1,19	1,04	0,95	0,69	0,8	0,97	1,01
Manufacture of machinery and equipment n.e.c.	2,86	2,75	3,04	2,19	2,34	2,22	1,97	2,3	2,03	1,25	1,76	1,62	1,82
Manufacture of transport equipment	3,03	3,08	3,07	3,2	3,05	3,8	2,88	3,34	2,79	2,11	2,2	2,01	2,81
Other manufacturing, and repair and installation of machinery and equipment	1,26	1,44	1,18	0,93	1,08	1,37	1,32	1,27	1,28	1,11	1,29	1,86	2,42
<i>Electricity, gas, steam and air conditioning supply</i>	16,76	17,12	27,71	30,04	26,55	24,35	26,1	21,65	20,9	29,75	23,34	26,07	28,36
<i>Water supply; sewerage, waste management and remediation activities</i>	1,25	1,26	1,8	1,97	1,00	1,85	1,91	1,98	1,63	1,65	2,02	2,06	3,56

For the period 2010-2022 (Table 3):

– manufacture of basic metals and manufacture of food products had the leading parts at the structure of turnover of industrial enterprises. The share of metallurgical production in the volume of sold products ranged from 19.1% in 2010 to 14.5% in 2021. The share manufacture of food products was on level 18% throughout this period;

– such activities as the manufacture of computer, electronic and optical products; the manufacture of electrical equipment; the manufacture of machinery and equipment had a low level at the structure of turnover of industrial enterprises for last ten years. The volume of turnover of industrial products in the manufacture of computer, electronic and optical products ranged from 0.7% in 2010 to 0.5% in

2022; in the electrical equipment manufacture – from 1.5% in 2010 to 0.9% in 2022; in the manufacture of machinery and equipment – from 2.9% in 2010 to 1.5% in 2022.

Table 3. Structure of turnover of industrial enterprises by type of economic activity in Ukraine, 2010–2022, % [4]

Industry	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
<i>Mining and quarrying</i>	10.0	11.0	10.5	11.5	10.8	10.8	11.1	12.3	12.8	13.3	11.2	12.8	11.1
<i>Manufacturing</i>	67.4	65.3	63.7	61.8	63.3	64.1	60.8	62.0	61.9	60.6	58.0	55.9	48.0
manufacture of food products, beverages and tobacco products	18.0	16.6	18.0	19.2	21.2	22.4	21.4	20.9	19.4	20.4	21.0	18.0	18.7
manufacture of textiles, apparel, leather and related products	0.8	0.7	0.7	0.7	0.8	1.0	0.9	1.0	1.0	1.0	1.0	0.9	1.1
manufacture of wood and paper products, and printing	2.6	2.4	2.5	2.7	3.1	3.4	3.4	3.2	3.4	3.3	3.1	3.0	3.3
manufacture of coke, and refined petroleum products	7.2	6.0	4.6	3.7	3.3	3.4	3.2	3.9	3.8	2.8	2.2	2.6	1.5
manufacture of chemicals and chemical products	3.1	4.0	4.1	3.7	3.5	3.8	2.8	2.5	2.6	2.7	2.5	2.6	2.0
manufacture of pharmaceuticals, medicinal chemical and botanical products	0.7	0.7	0.8	0.9	1.0	1.1	1.2	1.1	1.1	1.2	1.3	1.1	1.1
manufacture of rubber and plastics products, and other non-metallic mineral products	4.4	4.2	4.3	4.4	4.5	4.8	5.0	5.1	5.3	5.4	6.1	5.8	4.3
manufacture of basic metals and fabricated metal products, except machinery and equipment	19.1	18.5	16.3	15.7	16.6	15.7	14.8	15.7	16.2	14.0	12.3	14.5	8.8
machine-building	9.3	10.1	10.3	8.6	7.1	6.5	6.1	6.4	6.9	7.2	6.1	5.2	5.2
manufacture of computer, electronic and optical products	0.7	0.9	0.6	0.6	0.6	0.5	0.6	0.5	0.6	0.6	0.5	0.4	0.5
manufacture of electrical equipment	1.5	1.3	1.6	1.6	1.5	1.3	1.2	1.2	1.4	1.4	1.1	1.0	0.9
manufacture of machinery and equipment n.e.c.	2.9	2.9	2.8	2.6	2.3	2.4	2.3	2.3	2.3	2.4	2.2	2.0	1.5
manufacture of transport equipment	4.2	5.0	5.3	3.8	2.7	2.3	2.0	2.4	2.6	2.8	2.3	1.8	2.3
other manufacturing, and repair and installation of machinery and equipment	2.2	2.1	2.1	2.2	2.2	2.0	2.0	2.2	2.2	2.6	2.4	2.2	2.0
<i>Electricity, gas, steam and air-conditioning supply</i>	20.8	22.2	24.4	25.2	24.6	23.9	26.9	24.6	24.2	24.8	29.5	30.2	39.7
<i>Water supply, sewerage, waste management and remediation</i>	1.8	1.5	1.4	1.5	1.3	1.2	1.2	1.1	1.1	1.3	1.3	1.1	1.2

The **dynamics and structure of employed population by economic activities in Ukraine** in 2012-2021, % shows about such (Table 4):

- employed population for last ten years was concentrated the most in the wholesale and retail trade, – its had share from 21.6% in 2010 to 23.1% in 2021;
- industry was the third in the rating of employed population, but its share decreased, from 16.8 % in 2010 to 14.8 % in 2021;
- employed population at the professional, scientific and technical activities had one of the smallest levels, –about 2-3%: from 2.62% in 2010 to 2.7% in 2021.

Table 4. Structure of employed population by economic activities in Ukraine, 2012-2021, % [5]

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Agriculture, forestry and fishing	17,18	17,5	17,1	17,4	17,6	17,7	18,0	18,2	17,1	17,2
Industry	16,8	16,4	16,0	15,7	15,3	15,1	14,8	14,8	14,8	14,8
Construction	4,34	4,4	4,1	3,9	4,0	4,0	4,1	4,2	4,2	4,4
Wholesale and retail trade; repair of motor vehicles and motorcycles	21,6	22,1	21,9	21,4	21,6	21,8	22,3	22,9	22,9	23,1
Transportation and storage	5,98	6,0	6,2	6,1	6,1	6,1	6,1	6,0	6,1	6,2
Accommodation and food service activities	1,7	1,7	1,7	1,7	1,7	1,7	1,7	1,8	1,8	1,8
Information and communication	1,55	1,6	1,6	1,7	1,7	1,7	1,7	1,7	1,8	1,9
Financial and insurance activities	1,64	1,6	1,6	1,5	1,4	1,3	1,3	1,3	1,3	1,3
Real estate activities	1,67	1,6	1,6	1,6	1,6	1,6	1,6	1,6	1,6	1,6
Professional, scientific and technical activities	2,62	2,6	2,5	2,6	2,6	2,6	2,7	2,5	2,6	2,7
Administrative and support service activities	1,79	1,8	1,8	1,8	1,9	1,8	1,9	1,9	1,9	2,0
Public administration and defence, compulsory social	5,21	5,0	5,3	5,9	6,0	6,1	5,7	5,3	5,7	5,6
Education	8,48	8,3	8,8	9,1	8,9	8,8	8,7	8,4	8,8	8,0
Human health and social work activities	6,13	6,1	6,4	6,3	6,3	6,3	6,1	5,9	5,9	5,9
Arts, entertainment and recreation	1,17	1,2	1,2	1,3	1,2	1,2	1,2	1,2	1,2	1,1
Other types of economic activity	2,15	2,2	2,1	2,1	2,1	2,1	2,2	2,2	2,3	2,3

In conclusion, we can fix about such. In general, we can fixed about such. Last decades, the scientific and technical sectors of industry, according to most characteristics, occupied the smallest share in the structure of the Ukrainian economy. However, the sectors of wholesale and retail trade, the agricultural sector and the raw material sectors of industry had actively developed in Ukraine. Announced reforms must change the above-mentioned trends/characteristics and will focusing the Ukrainian economy on the developing of industry, of science and technology, etc.

In this context firstly must be fixed the priority sectors/industries for the development and measures for the development of selected priority sectors on the long term. Such measures could include prestige and importance in society priority sectors/industries, material, and technical base for their, infrastructure, human and financial resources, regulatory incentives etc.

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