

MODERN UKRAINIAN INDUSTRY DEVELOPMENT TRENDS

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Abstract

There is an export-orientated adaptive development industry model in Ukraine nowadays. It is inefficient in modern conditions, as the economy grows too attached to global conjuncture and there are no ways to oppose negative external influences. Trends deployment of financial and debt crisis in Europe have a negative impact on the world market and caused a decrease in demand for Ukraine's main export products. Structural and technological modernization industrial complex and transition to higher technological system should become one of the prior directions the economic policy in Ukraine.

Key words: *industry, factors of economic growth, fixed investment, technological ways, catch-up modernization strategy.*

1. INTRODUCTION

Industry is an important element that forms the structure of the national economy plays a significant role in all economic activities of raw materials is the driving force in the formation of scientific and technical progress and ensuring expanded reproduction in general. Functioning of the economy is largely dependent on the performance of industry. Economic trends 2001-2011 years show that the share of industry in key indicators of economic development is high. So in 2011 the share of industry in output – 47,2%, in gross value added – 30,8%, 38,6% - the number of employees and 90% of exports. For comparison, the share of industrial production in developed countries ranges from 17,8% (Denmark) to 41,4% (Japan). The share of industry in creating value added is 20% (U.S.) to 38,1% (China) (Peltek, 2010).

Analysis of Industry of Ukraine at this stage can determine problems that affect its development. These issues should be attributed internal problems of the industry, the problem of interaction with other sectors of the economy and with world markets.

2. DESCRIPTION OF INDUSTRY

The industrial complex of Ukraine has an extensive territorial, organizational, socio-economic, technological structures. Growth rate, level of development and industrial structure are indicators of quantitative and qualitative characteristics estimation of the national economy and living standards functioning. Post-crisis development of the industry has a positive trend (Table 1) (Statistical Yearbook

of Ukraine for 2011, 2012, p. 106). Profitability increased by 2,6 times compared to 2009, so as the volume of sales. However, the negative trend is reducing the average number of employees in the industry.

In 2011 industrial production in Ukraine continued to increase after the crisis, but the growth rate slowed to 24,8% compared to 32% in 2010 (Figure 1). 2011 positive trend provided mainly export-oriented industries.

Table 1. Basic indicators of development Ukrainian industry

	2004	2005	2006	2007	2008	2009	2010	2011
Volume of industrial output, mln. UAH	400757,1	468562,6	551729	717076,7	917035,5	806550,6	1065108,2	1329266,3
Operating profitability of industrial enterprises, %	4,7	5,5	5,8	5,8	4,9	1,8	3,6	4,8
The share of unprofitable enterprises, %	38	37	35	33	39	40	41	38
The average number of employees in industry, ths.	3941,2	3913,3	3851,9	3690	3527,1	3185,1	3064,1	3014,5

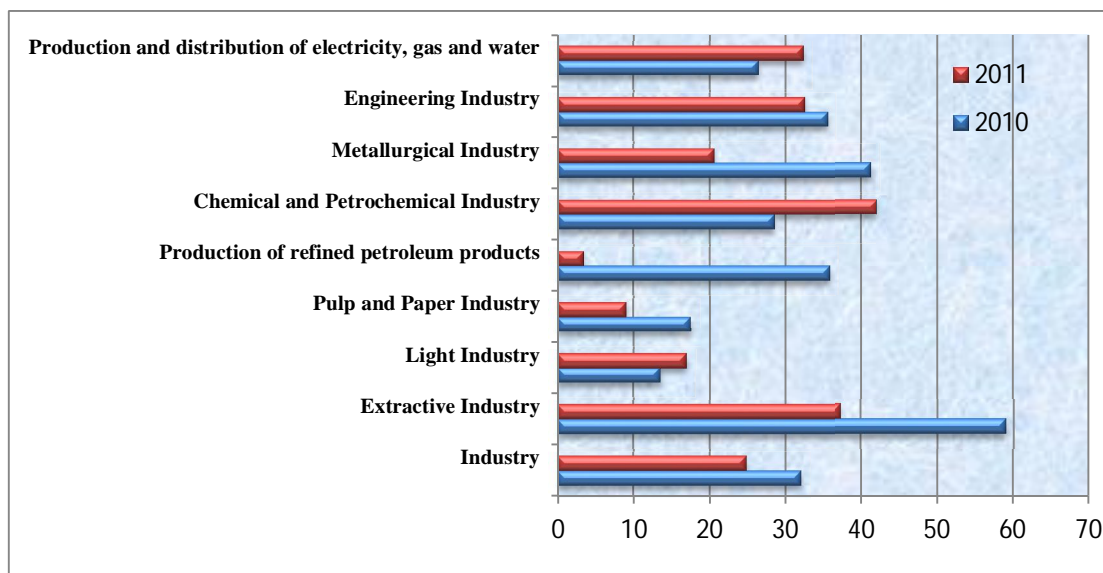


Figure 1. The share of industries in total

The highest growth was recorded in engineering (32,5%), due to the increase of vehicles and equipment (32,4%), including automobile manufacturing (31,5%) and railway rolling stock (38,0%) and in the chemical and petrochemical industry (42,1%), metallurgy (20,6%). However, compared to 2010 the growth slowed, primarily due to the modest growth in external demand. In particular, the construction and engineering industry in Europe (the main consumers of steel products) as a result of rise in borrowing on expectations the emergence of the financial crisis in the European Union gradually rolled business activity. Stimulating factor in the industry growth in Ukraine was the internal market, the development of which was determined by high investment demand.

In industries, which in 2010 showed the lowest growth rates recorded a negative trend in 2011: the food industry fell by 0,7%, pulp and paper production - up to 9% compared to 17,5% in 2010. Significant decline in 2011 occurred in the coke production and refined petroleum products due to reduced production of refined petroleum products by 32,7%.

High-tech industry sector slowed production growth in 2011. Production growth of electrical, electronic and optical equipment was 15,0% compared to an increase of 24,2% in 2010, medical equipment and measuring equipment – 5,1% (vs. 25,8%). Decreased electric motors, generators and transformers growth at 23,1%, compared with growth of 21,0% in 2010 In the pharmaceutical industry there was an increase of 2,5% (compared to growth of 34,8% in 2010).

Industrial production growth was ensured mainly by manual check of available raw materials and inputs based on outdated technology.

The main factors of economic growth in 2011 include:

I. Favorable external conditions stimulated the production growth and Ukrainian industrial products export. The growth in world steel prices (index of global steel made in December 2010 184,5 points in December 2011 – 195,0 points) created favorable conditions for Ukrainian producers of steel products for food resources (global price index for food resources FAO in 2010 totaled 185 points, and in 2011 - 228 points) - increased demand for fertilizer, helping to increase the chemical and petrochemical industry production.

Economic growth at the expense of export-oriented industries in the low diversification of products and markets pose a threat to the post-crisis economic recovery in Ukraine. In particular, there is significant risk of financial and debt problems of Eurozone countries, which could narrow the demand from the EU for Ukrainian exports.

II. Activation of investment processes in the economy, leading to improved financial performance of the industry (number of firms who received earnings in the total number of industrial enterprises in January-November 2010 amounted to 55,0% in January-November 2011 – 58,6%). Investment recovery has allowed to increase the efficiency of public and private investment resources, contributed to the production development and the gradual release of industrial crisis.

The most capable of investing structures are vertical and horizontal corporations. Corporatization of state enterprises in Ukraine was carried out as a stage of privatization. Some territorial-production and production-technological complexes, cooperation between enterprises, etc. were destroyed, narrowed the possibilities accumulating investments because of errors in the privatization.

Shredding structures in the process of privatization has led to what is provided by the law among organizational form on 01.01.11, the limited liability companies and private companies together accounted for 74,4%, joint stock companies – 5,3%. However, only large companies provide the greatest amount of capital investment, the concentration of scientific, technical and production potential,

allowing them to take more drastic and risky measures to upgrade production, expanding the range of industrial products and improve its consumer qualities.

Real corporatization may contribute to the concentration of capital in different sizes and implementing large-scale investment projects, the establishment of cooperative industrial relations in the sector and inter-territorial cooperation. One way to achieve these objectives should be joining businesses in clusters.

The above challenges post-crisis industry development mainly due to the significant uncertainty of industrial policy priorities, lack of important recovery projects of industrial development and implementation mechanisms that will play disparity sectorial structure of the pre-crisis period, underutilization of capacity of specific industries, reducing the foreign relations effectiveness and affects competitiveness and investment attractiveness of the industry in general.

Industrial policy as a part of the overall government policy should form a strategy for the industrial complex of Ukraine and its individual components, setting some type of economic system. The strategic framework of industrial policy in the State Programme of Industrial Development 2003-2011 biennium (Programme) aimed at creating a competitive industrial complex capable of globalization and increasing the national economy openness to solve the main tasks of socio-economic development and strengthening of Ukraine as high state. However, the objectives of the Programme are not met in full, and the potential of its key provisions was exhausted. A state program of industrial development is needed in the medium term, where the directions of state support would be determined in the general government balance, sectorial, enterprise and regional interests and resources.

Uncertainty about the priorities of industrial policy evidenced by the lack of appropriate legal and regulatory framework: the key is not designed for industrial development law "On Industry of Ukraine", which would define the term "industrial undertaking" and the criteria for classification of enterprises in industrial and priorities of industrial development, regulate a clear distinction authority to develop and implement national industrial policy, contributing to strengthening its effectiveness.

Today it is obvious that to secure positive trend in the industry and accelerate its structural transformation requires a set of organizational and economic measures that have consistently implemented in the areas of industrial policy as an investment, innovation, forming an effective structure of the economy, reform of ownership relations.

Investment processes in industry are characterized by the following trends:

1. Over long periods investment industry's not observed rate, established the state program of industrial development in the 2003 - 2011 biennium (predicted annual growth rate of investment in the industry at 12-13%). High rates of investment managed to retain only during the 2003-2007 (except for 2005, when the investment industry grew by 4,1%). There was a significant reduction measures in 2008-2010, due to the negative impact on activity of investors global economic crisis. In 2011, the growth of investment in fixed assets (IFA) in the industry over the same period in 2010 was 29,9%, indicating that overcoming crisis trends in investing industrial production (Figure 2). However, the previous years' low base, even as growth IFA is insufficient for technological modernization and restructuring in the industry (Sukhorukov at al., 2005).

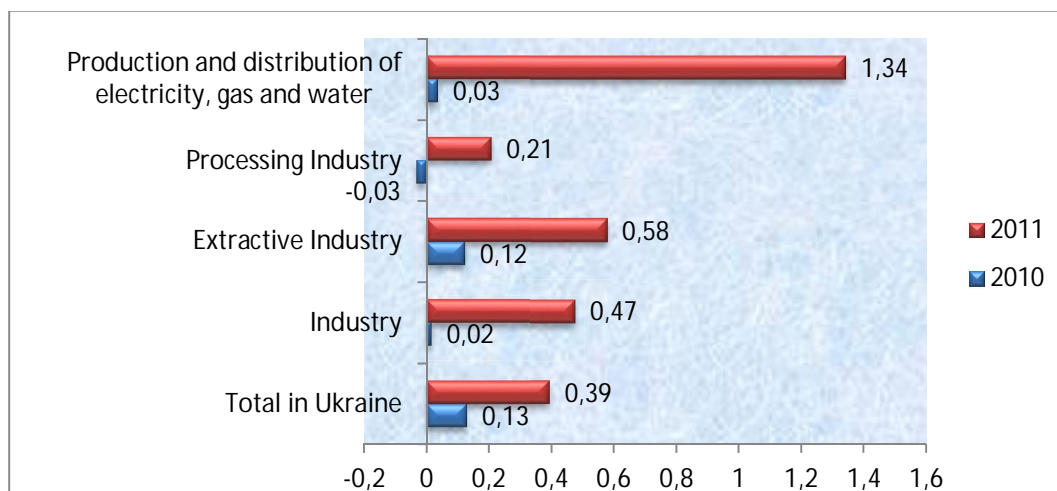


Figure 2. Growth rate of investment in fixed capital industry

Lack of growth in the industry due to the IFA, including inconsistency industrial, investment, tax and fiscal policy uncertainty sources of investment measures provided foreign government programs and more. These problems adversely affect the investment climate in the state, as indicates deterioration of Ukraine's position in the World Bank "Doing Business - 2012", in which Ukraine was ranked 152 out of 183 countries, down 7 positions compared to the rating of the previous year (145th out of 183 countries).

2. There are no reliable guarantees for the protection of foreign investment and the rights of investment activity subjects. The law does not regulate the issue of remedies foreign investors. The Law of Ukraine "On investment activity" from 18.09.1991, № 1560-XII are not defined terms, sources of compensation and reimbursement of losses to foreign investors, government agencies that are responsible for the compensation of damages, and procedures for termination of investment activity.

The low level of foreign investment is the industry's, share for 2005-2011 FDI inflows into the industry in total FDI inflows decreased from 48,8% to 31,4%. Low level of intellectual property rights protection has led to the fact that FDI has not become a source of technology transfer in Ukraine.

Policy of encouraging foreign investors in Ukraine should take into account trends in the global capital markets. There were changes in the regional distribution of world FDI flows in 2010 that characterized the growing role of developing countries, and transitive economies in attracting FDI into the background of reducing the share of developed countries. In 2011 the volume of FDI inflows to developed countries declined by 6,9% compared to 2009, FDI flows to developing countries increased by 9,7%, investment in the CIS countries increased by 5%. In addition, during 2011 there was reported a change in methods of investment FDI. The main way to implement FDI was reinvestment of revenues, decreased the proportion of equity investments. This proves that the recovery and stabilization of FDI in the country it is necessary to stable and favorable business environment, strengthening the positive dynamics of post-crisis recovery and the transition to economic growth (Global Investment Trend Monitor, 2011).

To attract FDI governments of many countries have taken measures to liberalize foreign investors and the investment climate. Not making concrete steps to improve the investment attractiveness of the industry, Ukraine may be on the side of the investment process

3. There are no developed mechanisms to encourage the investment flow in priority projects, which leads to their distribution sector imbalances and causes imbalances in the development of certain industrial activities. Investing industry works to maximize profits in the shortest time, which prevents long-term development and inhibits the restructuring industry.

In 2006-2010 the share of FDI in the steel sector in total FDI in the industry accounted for an average of 45,8%, in 2011 - 40.5%. The high share of FDI has also been in the food industry that in 2006-2010 the average was 17,6% (Zhalilo et al, 2012). Thus, the majority of FDI in industry is concentrated in sectors that do not have some kind of high-tech and knowledge-intensive industries, indicating a failure of FDI to Ukraine as a catalyst in the development of high-tech industry and foreign investors aiming for a quick profit. The effectiveness of the investment policy depends on adherence to certain principles (Figure 3).

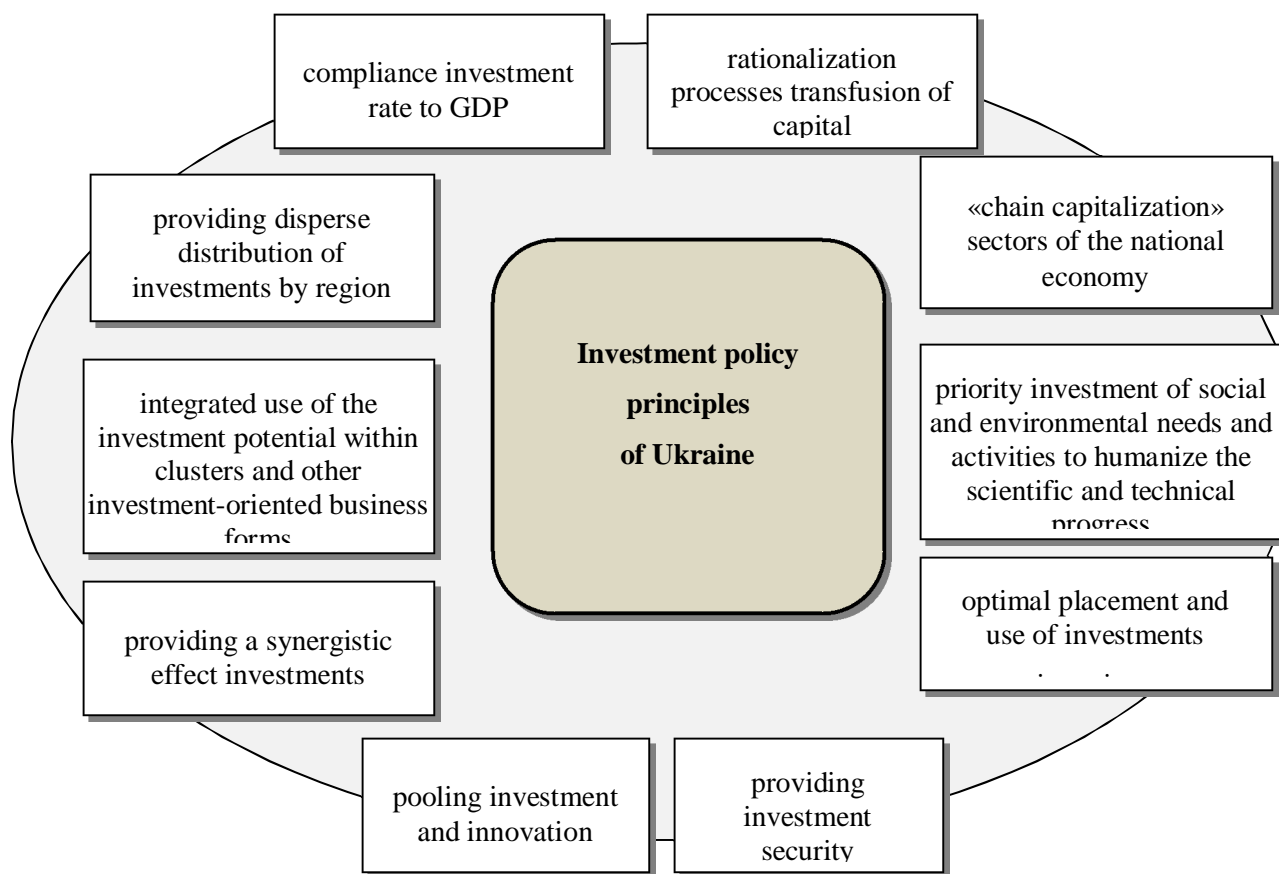


Figure 3. Investment policy principles of Ukraine

III. Growth in consumer demand caused by the household income increase (in 2011 income increased by 19,2% against 2010) and rapidly restore households lending (per 2011 maturities provided to households increased by 34,2%).

IV. Restoration of construction, amounting to January-December 2011 increased by 11,1%, mainly due to significant construction of Euro-2012. However, a large number of buildings are in conservation: at the beginning of 2011 has been suspended or closed down 1066 the construction of industrial buildings, warehouses and industrial buildings complex (413 with remote Payback period). The problems of construction is uncertain situations with orders on construction works, construction slowing create backlogs in the future, the lack of Ukrainian construction companies mobile base that would allow them to carry out large-scale orders outside the country and maneuver during the crisis.

3. RISKS AND DEVELOPMENT THREATS OF INDUSTRY

Despite the positive trend in the growth rate of industry, there are certain dangers.

The risks and threats that are caused by internal factors include:

1. Slow improvement of reproductive proportions in the industry that affects the industrial production growth opportunity and its efficiency is not conducive to improving the proportions of the creation of gross value added (GVA) by sector of industry. Thus, changes in gross value added by sector of industry that occurred during the 2003-2011 biennium, show faster growth of mining share in creating GVA, with 14,9% in 2003 rose up in 2010 to 23,9% and in 2011 accounted for 26,3%, while the share of manufacturing industry decreased from 68,2% in 2003 to 62,7% in 2010 and 2011 was 59,3%. The share of electricity, gas and water also underwent reduction of 16,9% in 2003 to 13,4% in 2010, and in 2011 was 14,4%.

2. The Economy of Ukraine fixing depends on external conditions together with low adaptation to new challenges and social needs, which causes deepening trade imbalances, increases sensitivity to price fluctuations and crises in world markets, deepen economic structural deformation, consolidating Ukraine for a supplier of raw materials and semi endanger macroeconomic stability of the country as a whole.

Almost half exports from Ukraine consists of low-tech and raw materials in the structure of merchandise exports in January - November 2011, the share of ferrous metals accounted for 27,2%, mineral products – 15,1%, chemical products – 7,8%.

3. Low proportion of high-tech industries with production of deep processing and end-use. The high-tech industries share, which contains chemical and petrochemical industry and engineering, in total sales for the 2004-2011 biennium remains low: in 2004 it was at 4,1%, in 2010 – 3,4%, in 2011 – 3,2%.

On figure 4 we see that the structure of manufactured industrial products prevailing share 3rd technological way. That is industry with low added value, which consumes much of electricity. It can be noted that the industry prevails Ukraine 3rd technological way in conjunction with the 4th and 5th elements. According to research Kleiman Y.A. (Kleiman, 2008) while playing several technological structure of the economy there are some disproportions, such as reduced efficiency of industrial production slowdown and worsening economic growth. Please note that the 3rd technological paradigm is being stagnant, 4th - in the phase of maturity, and the 5th - in the growth phase. This situation is associated with low innovative activity of industrial enterprises competitive in underdeveloped, lack of working capital to fixed assets.

4. Inadequate use of opportunities domestically produced high-tech products to meet local market needs. Ukraine meets the demand for high-tech products mainly through imports, the share of this segment in the structure of total imports to Ukraine in 2003-2011 he averaged 4,9%. In 2003-2008 importing high-

tech products increased from 981,6 million U.S. dollars to 3,656 billion U.S. dollars, average annual growth rate was 29%. Imports of high-tech goods in Ukraine in 2011 was 3427 million U.S. dollars and was greater than that of 2010 by 19,3%.

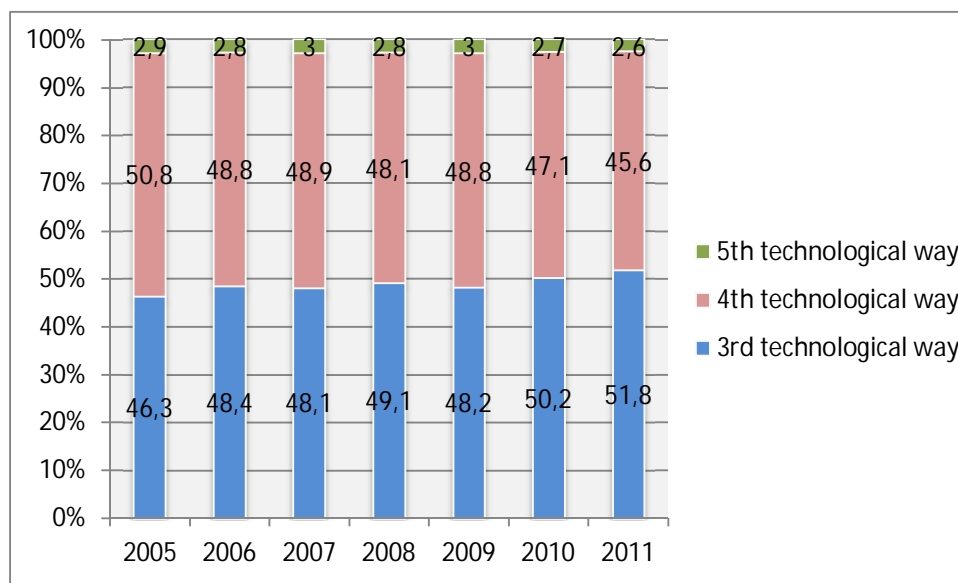


Figure 4. The structure of industrial production by technological ways in 2005-2011 years

Post-crisis economic recovery in Ukraine is largely associated with the development of the internal market reorientation of export-oriented enterprises to meet domestic needs, the development of industries that are not involved in international trade. Potential import contains transport, agricultural engineering, aviation industry, as evidenced by the growth in 2011 versus the same period in 2010 exports of aircraft by 2,4 times, railway locomotives - by 65,1%, vehicles, other than railway - by 19,9%, electrical machinery - by 26,7%, optical devices - by 11,9%.

5. Lack of diverse organizational forms of production cannot establish interdepartmental cooperation as the basis of a closed cycle of industry, intra-links for the full realization of productive capacity of industries, markets prevents expansion of industrial output, reducing the capacity of regional and sectorial development industry.

Threats and risks to the industry development in Ukraine caused by external factors include the following:

1. World oil prices. The oil price rise due to political instability in the Middle East and the associated potential problems with its supply is considered as a basic condition for the global economy this year. The April forecasts of the global assessment of the IMF (WEO), for which the average annual price of oil has stabilized at the level of 108 dollars per barrel, is 20% higher than estimates made by the end of last year. Similarly to higher forecasts Bloomberg and JP Morgan. Under these conditions, we should expect higher prices for oil this year at 135%.

The increase in world oil prices while maintaining the trend of recent years (2008-2011) to an increase in oil imports creates the conditions for a number of negative macroeconomic effects for Ukraine.

Among them - the inflation acceleration, deteriorating balance of payments, reducing the profitability of individual sectors, the decrease in company's equity that they could send for investment purposes. Increase in international prices of oil will cause the increase the domestic market and a proportional increase in prices of petroleum products. In the absence of effective regulation of prices of petroleum products in certain areas, particularly in the transport, agriculture, food industry and construction, which are the most dependent on fuel prices will increase the cost of production. The share of oil products is 28% in structure costs of transport enterprises, 8% - in agriculture, 5% - trade (Statistical Yearbook of Ukraine for 2011, 2012). Increasing the cost of the value added in these activities will decrease, which may lead to a reduction of wages, revenue or curtailment of investment activity in these enterprises.

In order to maintain profitability, companies with a significant share of oil and petroleum products will be forced to raise selling prices. As a result of linkages that may lead to the following consequences:

- the existing technological structure of production in order to maintain the level of profitability of agricultural enterprises are forced to raise prices by 1% rise in price of petroleum products at 5%;
- the food industry share of petroleum products is about 1% of agricultural production - 13% of services trade - 27%, transport - 3%. Fuel prices rise will increase the agricultural products price by 2,7 percentage points, the price of transport services by 6.1 percentage points, and increased trading margin by 1.8 percentage points which, in turn, through the inter-relationships affect the prices of food products;
- a significant proportion of the cost structure and production of construction enterprises petroleum products (about 11% and 7%, respectively), as well as transport services, determines the sensitivity of construction costs to the prices of petroleum products. Price increases in construction will increase the price index of investment in fixed assets, which in turn adversely affects the implementation of investment plans for domestic enterprises;
- acceleration of inflation due to rising agricultural production (by 2,7 pp) and food (by 1,9 pp), whose share in the consumer price index (CPI) is about 53%, and other components of the CPI, the price of which is directly or through cross-connections depends on crude oil prices.

Cumulative contribution to rising oil prices by 35% in Ukraine's GDP growth in 2011, which is formed by raising consumer prices, producer prices, prices of construction works and reduced profitability in transport, agriculture, construction, etc., will be about -1,4 pp. According to IMF estimates of the loss of such a rise in oil prices in 2011 are estimated as lower GDP growth by 0,8 percentage points – 1,8 percentage points

2. World prices for steel products. Japan after the earthquake will require significant investment and affect the dynamics of demand in global commodity markets, particularly in metallurgy. At the same time the global market in the short term, expected some decrease in supply of steel products. Primarily, this is due to the destruction of some production facilities at steel mills in Japan, which is the second largest steel producer in the world, and with possible interruptions in energy supply due to the destruction of facilities from the production and distribution of electricity.

Although there are some estimates on slowing the rise in prices for steel products through accelerated growth in domestic consumption relative to the rate of investment in fixed assets in China, according to a survey of experts, the increase in steel prices in 2011, the average estimated at 32,2%, including an estimated MEPS - 27% (Special Steel Association, 2012).

Trends in producer prices in the extraction of non-energy minerals and coke, which emerged at the beginning of this year (April to December last year - by 31% and 18%, respectively) also indicate a possible further increase in producer prices in industry (Statistical Yearbook of Ukraine for 2011, 2012).

Under these conditions and trends should examine a scenario in which steel prices during 2011 increased by 27%, which corresponds to the estimated MEPS.

This increase in prices, creates the conditions for a number of positive macroeconomic effects for Ukraine. Among them - improving the balance of payments and the formation of potential for growth and value added industry. This, in turn, creates the conditions for increased tax revenues, wages and profitability of the industry, the accumulation of funds for investment purposes.

However, we should expect some negative effects that arise as a result of linkages. Rising international prices for metallurgical industry will result in an increase of the internal market. As a result, in some areas, particularly in engineering and construction, which are the largest consumers of steel will increase the cost of production.

Under such conditions or businesses will be forced to raise selling prices, or added value will decrease, which may lead to a reduction of wages, revenue or curtailment of investment activity in these enterprises. Price increases in the mechanical engineering and construction will increase the price index of investment in fixed capital. This will slow down the implementation of investment plans on domestic enterprises.

Consequently, industry trends suggest starting the transition to the stage of growth and recovery of industrial capacity. However, a complex problem is the lack of competitiveness of the industry, recognized as one of the major threats to national security.

4. PROSPECTS OF INDUSTRY DEVELOPMENT

The development of both the economy and individual economic activities should be subject to the general plan for achieving the goal. Catch-up modernization model, which has been successfully proven in a number of developing countries should be used for traditional industries. This diversification and orientation of the internal market and address the internal problems will avoid some shortcomings of this model, in particular as regards their export monospecialized and underdeveloped domestic consumption. Catch-up modernization strategy is the most appropriate option for the development of Ukraine's economy is now, it is easily predictable results, will serve as the guideline has received achievements of other more developed countries (Polterovich, 2008).

The basis of catch-up modernization strategy should put a balanced approach flexible protectionism and import substitution. Both components should be closely linked. Protectionist policies should be applied to sectors and activities of industry, expansion of import-oriented production for the domestic consumer market. This will, on the one hand, protect the domestic market from uncontrolled (during dumping and illegal) imports, showing significant competitive pressure on domestic subjects, thereby narrowing their resource base for long-term investment, and on the other - will significantly expand capacity market for domestic production by reducing its import component.

Among the policy measures of protectionism that should be applied to these sectors should be noted:

- tariff protection within the limits prescribed under the WTO (Agreement on protective measures, 2000, pp. 4-24);
- customs protection by improving customs procedures, identification and evaluation of products, eliminating legal loopholes and illegal channels of smuggling;

- technical protection by raising the requirements specification of imported goods for their conformity with international standards of quality and safety of raising domestic sanitary standards to limit the capacity of the materials making up the imported goods, substances harmful to human health and the environment; full or partial compensation of the state "price of entry" into the market actors, including the organization of import-substituting production organization related industries for locking technological cycles, acquiring foreign licenses and technology, the cost of training and skills development in their own R & D entities marketing support of the development of centers of industrial design, technology transfer, etc.;

- promoting import-substituting production facilities tax and credit policies;

- implementation of state orders for certain socially important medical supplies that hitherto imported or produced in insufficient quantities (Kindzersky, 2010).

5. CONCLUSION

In conclusion, we note that the most pressing problems of Ukrainian industry characteristics are:

1. Structural and technological backwardness, leading to loss of production, high material and energy consumption;
2. Progressive technological simplification, consequently focus on manufacturing products made from foreign parts;
3. Unclosed technological cycle of production, low depth of processing intermediates and a small chain of new value added within the country;
4. Resource and export oriented production, which leads to the dependence of the economy from fluctuations in world markets;
5. Organizational shortcomings and the low level of capitalization of production;
6. High potential for the domestic market penetration of foreign multinationals with the subordination of national interests of foreign countries;
7. High depreciation of fixed productive capital and innovation and investment unattractive and insulation sector compared to other sectors of the national economy.

The presence of this population needs determines the need for transition to investment and innovation model of economic development of the country and the consideration of the investment policy in the industry. An important direction is to encourage investment, improvement of legislation on investment, and development of public investment, the development of the investment market, the development of public-private partnerships and improving organizational forms of management in public enterprises.

Implementation of these areas will increase the flow of investment products that promote modernization of industrial and technological base of enterprises, improve the profitability of production processes and ensuring the growth of industrial production.

State investment policy in the industry will solve the following problem: GDP growth, increasing economic competitiveness, social and cultural development, regional development and environmental protection.

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