

Structural Policy in the Context of International Competition Aggravation*

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ABSTRACT. This article researches the essence and peculiarities of the structural policy, performs classification of its models and determines possibilities of their use in the context of increasing international competition. It discovers the main components of the economic structure and trends of the state policy regarding their modernization. Measures on improvement of state regulation instruments are offered, factors of influence upon improvement of the Ukrainian economy structure are analyzed and priority goals are systematized which require urgent implementation in the terms of competitive struggle aggravation at the global markets. The article also researches the matter of importance of performing a complex of state functional and selective measures in the form of matrix policy for the purpose of protecting national interests of the country in the context of global challenges.

KEYWORDS. Structural policy, economy structure, neo-industrialization, structural changes, matrix policy, economic protectionism, international competition.

Introduction

Interest towards the theory of structural policy in the scientific environment increased greatly in the last third of the XX century, after rapid economic development of Japan, South Korea, Singapore and Taiwan which performed active public administration aimed at support of resolute renewal of branches and sectors of national economy based on 5–6 technological organization forms. On the opinion of the majority of scientists, progressive structural improvements are the main factors for fighting crises and a condition of stable economic development. Thereby, state measures regarding formation of an efficient structure of national economy which meets the requirements of mod-

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ern globalization of world economic organization become more and more important. Another important role in this matter is given to accuracy of determining the level of selectivity of structural policy as well as choice of an optimal structure and priority spheres of activity to ensure long-term economic development.

The structural policy instruments acquire strategic weight in the conditions of international competition increase, when the difference in the economic interests forces governments of the majority of the countries to stand for ideals of economic patriotism and resort to open or concealed protectionism. In global competition for product markets, such non-price factors as quality of products, conformity to certain standards and sanitary requirements, legislative restrictions etc. are used more and more often. An example of such protectionism is the introduction by the USA of the right which allows denial of purchase of a share in the American companies to some foreign residents on a legislative level (based on national security needs). Another example is enhancement of public regulation of the financial market of Australia. After purchase of 1% of assets in each of three Australian banks by a Chinese public investment company, the minister of finance of Australia, Wayne Swan, stated that «if foreign investments do not meet the national interests of Australia, they will be either blocked or imposed with additional requirements»². The European Union also often resorts to non-price protectionism. An example of this can be Regulation No. 1907/2006 on registration, assessment, permit and restriction of chemical substances (REACH) which entered into force on June 1, 2008, according to which the European Chemicals Agency composes lists of substances allowed for import in the EU³.

Analysis of latest research and publications. The matters of substantiation and peculiarities of implementation of structural policy was the centre of great attention from Nobel Prize winners S. Kuznets, L. Kantorovych, V. Leontyev; among our national scientists, these problems were researched by Yu. Bazhal, Yu. Kindzerskii⁴, V. Bodrov⁵, V. Vyshnevskii⁶, A. Amosha⁷ etc.

² I. Ponomarev. Financial horror / Igor Popnomarev [Electronic resource] // National Banking Journal / Analytics and comments: [Electronic resource]. – 31.03.2008. – Access mode: <http://www.nbj.ru/pubs/banki-i-mir/2008/03/31/archive-publ-14058/index.html> [In Russian].

³ Regulation (EC) No 1907/2006 of the European Parliament and of the Council: [Electronic resource] – Access mode: <http://www.eur-lex.europa.eu> – Title from screen. – English, Russian.

⁴ Yu. V. Kindzerskii. Industry of Ukraine: strategy and policy of structural and technological modernization: monograph / Yu. V. Kindzerskii, National Academy of Sciences of Ukraine, Research Institute “Institute of Economy and Forecasts of the National Academy of Sciences of Ukraine”. – K., 2013. – 536 p [In Ukrainian].

Distinguishing previously unresolved parts of general problem. Despite the numerous scientific works on the structural policy theory, there is still a wide sphere for research in Ukraine. There are differences in terminology, no single understanding of the structural policy object, and numberless «blank spaces» and inaccuracies in the modern reinterpretation of structural problems.

Formulation of purposes of the article. The purpose of this article is to research the essence, generalize conceptual aspects and analyze models of structural policy in the conditions of international competition increase, substantiation of expedience of the complex of state functional and selective measures in the processes of formation of an effective national economy structure, analysis of the matrix policy model and possibilities of its practical application.

International Competition and Structural Problems of the Economic Development of Ukraine

The course of global financial and economic crisis, strained search for efficient ways to overcome its consequences and development of new global economic organization make the matters of modernization of national economy quite urgent. The modern global economy is transitional from its accustomed state of an aggregation of national economies and their interrelations to a principally new general planetary economic phenomenon. At the same time, quite the opposite trends occur, including fragmentation of global economic space and its disintegration into powerful macroregional economic associations competing against each other.

Orientation of investment flows along with resources, technologies and finished products is more and more often determined by regulators of global nature which lead to tectonic shifts in the inter-country and inter-civilization competition. According to the global capital flow we get differentiation of the rates and quality of economic development of both individual countries and large planetary macroregions coinciding territori-

⁵ V. G. Bodrov. Innovative and investment model of stable national economy development: training and methodological materials / V. G. Bodrov, V. O. Gusev, — K. : NADU, 2009. — 60 p. [In Ukrainian].

⁶ V. P. Vyshnevskii. Industrial policy and administration of industry development in the terms of system imbalance: conceptual basics: monograph. / V. P. Vyshnevskii, A. I. Amosha, L. A. Zbarazskaya et al.; edited by V. P. Vyshnevskii and L. A. Zbarazskaya / National Academy of Sciences of Ukraine, Institute of Industrial Economy. — Donetsk, 2013. — 180 p. [In Russian].

⁷ A. I. Amosha. Neo-industrialization and new industrial policy of Ukraine / A. I. Amosha, V. P. Vyshnevskii, L. A. Zbarazskaya // Economy of industry: Institute of Industrial Economy of the National Academy of Sciences of Ukraine. — Donetsk — 2012. — No. 1—2 [In Russian].

ally with the areas of global civilization. This results to economic processes filled with civilization, social and humanitarian content and the economy of civilizations is formed as a single and along with this diversified and fragmented polysystemic organism, the regularities of appearance and development of which are yet to be perceived⁸.

In such circumstances, the comprehensively substantiated choice of strategy and policy of economic development could be a powerful resource of national economy modernization, bringing it out to a qualitatively new level of innovative and social competitiveness. And vice versa, the strategic mistake of political elite in determining the trend and priorities, first of all, structural changes in the economy according to the needs of domestic and global markets could push the country outside the main trends of social progress of the XXI century. It becomes normal that not the internal domestic life but its symbiosis with global economic regulators determine rise or fall of the economy, as well as the range of poverty or welfare of the state⁹.

The global financial and economic crisis highlighted the acute problems and contradictions of the Ukrainian community and its economic system development. For a long time, these problems have been the subject of discussion among politicians, government officials, scientific society, the public, but still remained unresolved. Today not the logic arguments but the real life with heavy consequences of the global economic recession combined with the deep social and political crisis in Ukraine of 2013–2014 convince the global community of the hopelessness of raw materials development in the national economy, parasitizing on transitional advantages of the economy, absence of a number of necessary preconditions to transfer the industrial sphere to an innovative path of growth and the seriousness of unresolved problems in social policy and establishment of the state.

During the period after system transformational crisis of the end of 80–90-ies of the past century, Ukraine, due to objective and subjective reasons, has not reached the status which, considering the level and quality of life, could be acknowledged as

⁸ Economy of civilizations in global context: monograph / Edited by A. Porokhovskii, V. N. Tarasevych. Moscow: TEIS, 2011. – 768 p. — p.358 [In Russian].

⁹ V. G. Bodrov. Strategic priorities of economic and institutional transformations in the context of Euro-Atlantic choice of Ukraine / V. G. Bodrov // European vector of economic development: collection of scientific works ediged by doctor of economic sciences, professor A. S. Zada, doctor of economic sciences, professor V. M. Tarasevych. — Dnipropetrovsk: DUEP Publishing House, 2005. – 276 p. — p. 59 [In Ukrainian].

normal for a modern developed country with a large economic, scientific and technical potential and the culture of industrial development. During the years of independence Ukraine formed an incomplete social and economic system which is discerned by internal contradiction and dissimilarity. The decisive accents in the economic life of the society have been tangibly shifted: the priorities of social development in the resolution of common national tasks are often replaced with the interests of financial and industrial groups or individual corporate structures. National economic disproportions, namely, between the real (productive) sector and service spheres (financial and bank services) have been clearly identified and keep getting more and more profound; between internal national, export-oriented and import-oriented production; inside the industrial sector – between highly technological, scientific and technical products which are of great demand at the global markets and obsolete products of low-technological organizations which is required in quite limited amounts only at the domestic market; between industrial and agricultural national manufacturing, expressed in disparity of prices for the finished products.

Superposition of the global financial crisis in Ukraine with the phase of sharpened internal political confrontation only caused rapid growth of present structural disproportions of the national economy, bringing out the incapability of export-oriented model of economic growth established in the previous years. The specified model of growth with the dominating low-technological export turned out to be quite vulnerable to the global crisis outburst and sudden changes of global market structure. In the terms of decrease of foreign demand, the adaptive reaction of economy in the form of hryvnia devaluation turned out to be inefficient, and the negative effect of export reduction became dominating in the negative effect upon the general economic dynamics. The effect of the external factor generated implementation of internal imbalances of the domestic banking system which kept accumulating in the latest years.

Another important statement concerns imperfection and, in most cases, the absence of mechanisms able to ensure stable self-development of the society and economy like in other developed countries, with minimal servicing and regulation by state institutions. Hence the exceptional meaning of quality of the state structural policy both in the terms of deep financial and economic depression and the process of overcoming its negative social consequences and further modernization of economy and post-crisis society.

Paradigm Peculiarities of the Modern Structural Policy Theory

The theory of structural policy as an important trend of economic science started developing rapidly after the Second World War, based on the ideas of J. M. Keynes. The followers of this outstanding economist acknowledged the right of the state to not only stimulate the general total demand by means of increasing budgetary expenses, but also the selection of priority branches and types of activities to which limited investment resources should be forwarded. In the post-war period active structural policy was implemented in the majority of the countries and aimed at restoration of war-damaged economy. But the greatest success was noted in Japan, South Korea and some other countries. The success of this type of economic policy formed the phenomenon of «Japanese and South-Korean miracle».

The term «structural policy» came to Ukraine from western economic sources and remained in the domestic economic literature of the 1980-ies, when the problems of structural rebuilding of the Soviet-type economy became very acute, along with overcoming its genetic branch, sector and territorial disproportions. At first, it was mistakenly associated with the analogue «industrial policy» which meant support of the real sector of the economy first of all. Even now the domestic economic science has no single interpretation of essence and content of the structural policy. While for some scientists the structural policy characterizes a complex of state-driven measures to overcome structural crises in the institutional, technological and branch cross-sections, others associate it only with the state support of the industrial sector and even regional policy. Also, there are several paradigms regarding the structural policy role:

1. Neoclassic is based on perfection of the market, at which the main rational decisions are made, and flexible prices allow maintaining the balance. The well-known liberal motto «the best structural policy is its absence» characterizes the position of this approach the best.

2. «Pro-market» supports functional measures performed by the state, but treats the principle of selectivity with distrust due to state failures.

3. Structuralistic acknowledges efficiency of both functional and selective state intrusion, considering the officials capable of successful implementation of structural policy.

The main aim of the structural policy is to achieve stable economic growth by means of structural rebuilding of national production, increase of its productivity and competitiveness. Its characteristic signs are that it can use other types of economic policy as instruments to achieve its goals, for instance, investment, innovative and financial policies etc. The structural policy is also cyclical and requires constant adjustments, as the present structural shifts change the economic environment and terms of business (see Figure 1).

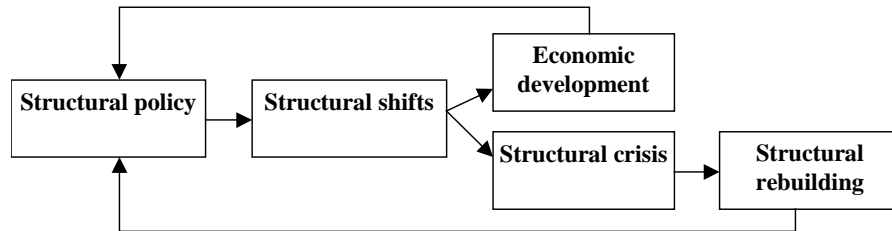


Fig. 1. Interdependence of structural policy and structural shifts

Source: O. A. Melnychenko. Specifics of structural shifts and structural policy / O. A. Melnychenko, V. M. Mykolyuk // Relevant problems of public administration: collection of scientific works. – H.: Publishing House of Kharkiv Regional Institution of Public Administration «Magistr», 2012. – No. 2 (42). – 484 p. [In Ukrainian].

The need to implement structural policy is dictated by the presence of the so-called market failures or incapability of the market to resolve structural imbalances of the national economy effectively. Also, active state protection is required by newly-formed highly technological branches, as unfavourable start-up conditions make them non-competitive at the global market. In the mentioned cases all social expenditures caused by market regulation without state intervention are mostly higher. The reason is the generally known market failures, including: 1) weak or non-existing markets; 2) asymmetrical information; 3) market monopolization; 4) externalities.

Experience of Structural Policy in South Korea and Japan

The example of a successful resolution of market failures with the help of structural regulation instruments is the experience of the South Korea in the 1970-ies. During that time the country practically had no long-term capital markets, which caused the need in establishing state savings and postal banks and extension of long-term crediting by means of establishing development banks. After approval of the program for develop-

ment of heavy and chemical industries, the financial sector of these countries was subjected to state regulation, the task of which was financing of top priority branches. The country introduced direct public control of the banking sphere, established state savings and postal and investment banks. Private Banks were instructed to credit strategic projects on privileged basis (as a rule, with negative real interest rates). In general, on the opinion of J.H. Yua, crediting, privileged and trade instruments enabled direction of about 80 % of all the investments of the country into the branches of heavy and chemical industries¹⁰. These are the branches which drove the economy of the South Korea and put it on the way of long-term growth, stimulated development of highly technological and science-based branches of the economy and conditioned appearance of «South Korea economic miracle».

Another example of a successful use of structural policy is the experience of Japan in 1950-80-ies. The main instruments of this policy which was a precondition of «Japanese economic miracle» were indirect subsidies by means of privileged loans, as well as mechanisms of accelerated amortization (Table 1).

While performing analysis of the given Table, it is notable that subsidies in the mining industry alone reached 15 % of the amount of capital investments, and in other branches this index did not exceed 5 %. We can understand the logic of this country's government when we remember low provision of Japan with own resources, so by stimulating the development of mining sector it attempted to reduce its dependency on imported raw materials. Another peculiarity is that the average amount of state subsidies into industry was relatively low (5–10 %), which allows drawing a hasty conclusion about their minor importance. Still, considering significant interconnection of large business in Japan and its power, we could come to the conclusion that the state tried to show large business the priority of exactly those branches with the help of such subsidies, directing them to invest their funds into those branches. Starting from the 1970-ies, the state provided more and more subsidies for development of computers and robots production as well as scientific research. Besides soft loans and mechanism of accelerated amortization, these highly technological branches obtained leasing advantages to purchase investment equipment as well as direct subsidies which exceeded the amount of tax benefits almost twice.

¹⁰ S. A. Ermolaev. Structural policy of the state in the mechanism of economic growth: training material / S. A. Ermolaev, S. G. Kapkanschikov. – Ulianovsk: UIGTU, 2005. – 72 p. [In Russian].

Table 1 Correlation of capital subsidies to investments in branches (in %)

Branch	1968			1976			1984		
	Soft loans	Accelerated amortization	Total	Soft loans	Accelerated amortization	Total	Soft loans	Accelerated amortization	Total
Mining industry	9.38	1.36	10.74	13.28	1.48	14.76	3.83	1.29	5.12
Textile industry	0.66	1.60	2.26	2.59	0.88	3.47	0.22	0.51	0.73
Ferrous metals	0.50	0.87	1.37	1.39	0.58	1.97	1.52	0.96	2.48
Non-ferrous metals	0.48	0.46	0.94	8.40	0.34	8.74	0.62	0.35	0.97
Production of transport equipment	2.95	0.79	3.74	3.76	0.71	4.47	0.56	0.20	0.76

Source: S. A. Ermolaev. Structural policy of the state in the mechanism of economic growth: training material / S. A. Ermolaev, S. G. Kapkanschikov. – *Ulyanovsk: UIGTU, 2005.* – 72 p., p. 52. [In Russian].

There is an opinion that the structural policy of both Japan and the South Korea was mistakenly aimed (at least in the beginning) at development of resource and energy branches, such as metallurgy and mining industry. But, as metallurgy is the basis for the development of machine building, processing industry and its highly technological sectors, it is understandable that the governments of these countries formed the base for a long-term economic growth of their economies.

Types of Structural Policy

As is generally known, the main precondition for a stable economic development is the absence of any structural disproportions. Today, one of the most popular methods to detect such disproportions is a complex analysis of economy by means of splitting it into the following structures: 1) reproductive structure (excessive share of branches of investment purposes in the economy structure shows low efficiency of branches in this part); 2) branch structure (for resource-based economy the domination of fuel and raw material enterprises is characteristic, for military economy – enterprises of military industrial complex etc.); 3) regional structure; 4) foreign economic structure; 5) technological structure (correlation between branches of various technological structures). It is generally known that long-term economic cycles are related to change of technologies and industry modernization.

Based on this, to ensure stable economic growth, the government has to stimulate development of branches of the newest (5th and 6th) technological structures¹¹. This is the task which the market, due to its failures, cannot always resolve effectively.

Each proportion separately cannot be the object of research and regulation, that's why only their complex analysis allows drawing a conclusion about the presence or absence of structural disproportions and the need to perform structural reforms. Still, this is not the signal to perform full-scale state regulation. Only in case the market cannot eliminate these deficiencies independently (due to market failures), state regulation is expedient. Also, it is important to prevent the structural policy from resulting in worse consequences.

In the modern economic science, it is common to divide the structural policy into several types (see Figure 2). Selective policy (vertical or strict) stipulates direct state redistribution of country resources in favour of certain branches and types of activity. There are several degrees of selectivity: from support of a whole sector of economy, for instance, processing industry, it's certain branches or individual enterprises (national champions). With the increase of selectivity, the efficiency of the introduced policy also grows, but at the same time the risks of making mistakes in selection of priority branches grow as well. The degree of selectivity also depends on complexity of the industrial base of the country and economic abilities level of the officials.

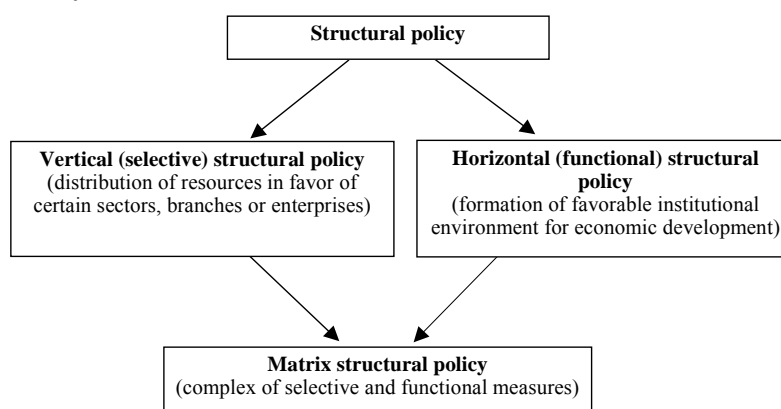


Fig. 2. Types of structural policy

Source: developed by the authors.

¹¹ S. A. Ermolaev. Structural policy of the state in the mechanism of economic growth: training material / S.A. Ermolaev, S. G. Kapkanschikov. – Ulianovsk: UIGTU, 2005. – 72 p. [In Russian]

Along with this, the position of a great number of economists which found support of the International Monetary Fund, the World Bank and other international organizations is that selective intervention leads to even larger structural disproportions. They provide the following arguments, calling them «failures of the state»: 1) existence of uneven «game rules» for various economic entities, which facilitates corruption development; 2) absence of material interest in the efficiency of state investments demonstrated by officials; 3) possibility of mistakes in the choice of priority branches, which leads to essential social expenses; 4) presence of modern transnational corporations does not allow an individual country to implement successful selective policy; 5) imperfection of information.

As to the latest state failure of the above-mentioned ones, we could cite a statement of well-known Turkish economist Dani Rodrik: state officials are often «worse informed about dislocation and nature of market failures than the private sector. The government may even not know what it doesn't know»¹². Although, on our opinion, this argument is not so clear because the asymmetry of information usually depends on the size of the entity and their number at the market, and for the state (being the largest economic agent) the level of asymmetry of information has to be less.

Industrially developed countries actively use another type of structural policy – functional (horizontal or soft) which means stimulation of economic activity through establishing favourable business climate. This type does not stipulate special treatment for individual branches and is aimed at establishment of institutions which ensure favourable institutional and economic environment for the development of national economy, workforce, entrepreneurial initiative and innovations. The reason of such position is that various institutional factors (political instability, high corruption level, violation of contracts and excessive price regulation) hinder economic development to a great extent. At the same time, state failures could be avoided as its activity in the economy is limited.

As it is known, development of each country goes through the following stages: industrialization, export-oriented growth, accelerated development and developed market. At each of them, it is expedient to apply a different type of structural policy. While selective policy dominates at the first two stages, the lat-

¹² Rodrik D. Industrial policy for the twenty-first century. – Centre for Economic Policy Research, 2004, CEPR Discussion Papers, № 4767.

ter are regulated by functional policy¹³. Thus, the more economically developed the country is, the softer structural policy it implements.

Matrix Structural Policy

Today, the so-called Matrix Structural Policy has become very popular, simultaneously using the instruments of selective and functional intervention. Its main task is formation of innovative model of national economy development and industrialization on the basis of leading technologies¹⁴.

Horizontal matrix structural policy contains the list of functional measures for the purposes of formation of an institutional environment favourable for business development (normative, legal, administrative, taxation etc.), as well as development of industrial and innovative infrastructure. The formation of favourable institutional environment means formation of modern institutions which would meet the peculiarities of national mentality of a certain country and encourage its citizens to acquire knowledge and skills necessary to build a neo-industrial (informational) society. The development of industrial and innovative infrastructure stipulates measures on formation of new industrial, economic and infrastructure complexes which conform to the contemporary requirements, inclusion of domestic manufacturers in the global chains of added value establishment, formation of regional industrial clusters, development of national innovative system and environmentally friendly production technologies¹⁵.

The objects of administration for the vertical matrix policy are branches and types of activity, but, unlike selective policy, the nature of its effect is less aggressive and more oriented at innovations. The main matter of this policy is the choice of priority goals of social and economic development. The problem is

¹³ Yu. V. Kindzerskii. Industry of Ukraine: strategy and policy of structural and technological modernization: monograph / Yu. V. Kindzerskii, National Academy of Sciences of Ukraine, Research Institute "Institute of Economy and Forecasts of the National Academy of Sciences of Ukraine". – K., 2013. – 536 p. [In Ukrainian].

¹⁴ A. I. Amosha. Neo-industrialization and new industrial policy of Ukraine / A. I. Amosha, V. P. Vyshnevskii, L. A. Zbarazskaya // Economy of industry: Institute of Industrial Economy of the National Academy of Sciences of Ukraine. – Donetsk, – 2012. – No. 1–2. [In Russian].

¹⁵ V. P. Vyshnevskii. Industrial policy and administration of industry development in the terms of system imbalance: conceptual basics: monograph. / V. P. Vyshnevskii, A. I. Amosha, L. A. Zbarazskaya et al.; edited by V. P. Vyshnevskii and L. A. Zbarazskaya / National Academy of Sciences of Ukraine, Institute of Industrial Economy. – Donetsk, 2013. – 180 p. [In Russian].

that neither the business (due to market failures) nor the state (due to state failures) is able to form clear orientation points of economic development.

On our opinion, the structural policy of Ukraine has to be determined based on competitive advantages of the country: natural (primary) and acquired (secondary). For example, the natural advantage of Ukraine is the presence of fertile soils – black earth, which makes development of the agricultural complex of Ukraine promising. Ukraine is wealthy with minerals (ore, bituminous coal, manganese, potassium salts etc.) necessary for the development of metallurgy, power industry and chemical industry. Convenient geographical position and the presence of a large number of outstanding historical locations provide good chances for further development of transport and tourism. The acquired advantages of Ukraine include its specialization in manufacturing aviation and rocket and space products, shipbuilding and motor industry products.

Models of Structural Policy and Possibilities of Their Implementation in Ukraine

After selection of the type and priority goals, the task is to determine structural policy models. The following models can be distinguished by orientation at domestic or foreign market: import substitution model, export-oriented model and innovative model (see Figure 3):

1. Import substitution model is based on stimulation of domestic production and relaxation of external competitive pressure by means of applying protectionist measures. Mercantilists were the first to acknowledge the expediency of protectionism as an effective method to ensure economic development of the country: T. Mun («Wealth of England in Foreign Trade») and F. List («National System of Political Economy»). Varieties of this model include policy of orientation of primary or secondary products at the domestic market. Practically, this model is implemented by establishing joint enterprises with foreign companies attracted by production with protection of customs and taxation privileges.

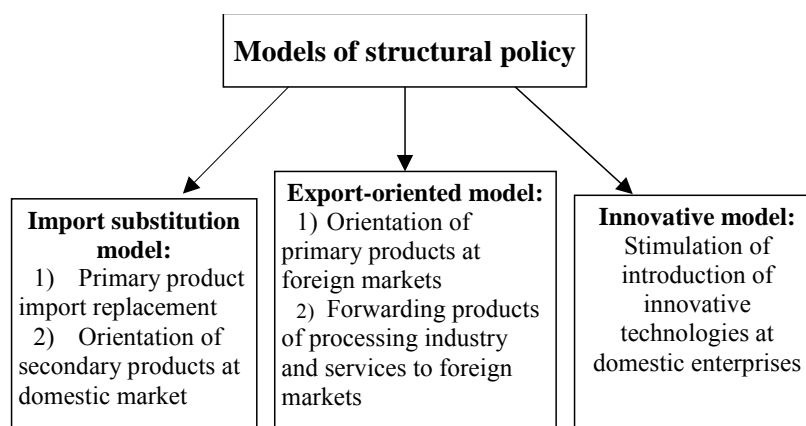


Fig. 3. Models of structural policy

Source: developed by the authors.

First of all, the import replacement model is necessary to support viable and potentially competitive structure-forming branches of economy in the unfavourable market environment. Yet, it shall not prevent improvement of the structure of domestic economy and restrict liquidation of ineffective and non-competitive companies as the protectionist measures on elimination of pressure from foreign manufacturers reduce the stimuli for production of high quality national products. That's why, on our opinion, import substitution shall not be total and concern all branches of domestic economy, and it should also be durable. As V.E. Novytskii stated, the duration of these measures has to be temporary, so that the determined national branches and types of activity could «mature»; at that, the protective barriers have to be weakened with the time to prepare domestic manufacturers for foreign competition¹⁶. Also, implementing this structural policy model, it is inexpedient to replace the whole range of imported goods with domestic analogues. The products which are not profitable in manufacture within the country have to be imported.

Unfortunately, protectionist measures in Ukrainian practice have often been taken unsystematically and without sufficient scientific substantiation. Such inconsistency in the implementation of import substitution policy deprived promising and strategically

¹⁶ V. E. Novytskii, L. P. Galperina. Informational technologies in the global competitive and social context // Perspectives of development of Ukrainian export potential in the context of cooperation with the Mediterranean countries and Central Eastern Europe. Collection of scientific works. — No. 6 of the Scientific State Institute of International Relations of the National Academy of Sciences / Chief editor – doctor of economic sciences V. E. Novytskii. — K., 2007. [In Ukrainian].

important branches of domestic economy of protection and affected the domestic market of the country negatively. A bright example is the hastily acquired membership of Ukraine in WTO. Correspondent member of the National Academy of Agrarian Sciences of Ukraine, economist T. Ostashko stated that due to the strict terms of this organization for agricultural manufacturers of Ukraine, the domestic agricultural and industrial complex lost competitive positions at the domestic market¹⁷. Besides, Ukraine has undertaken about 16 additional sector obligations which were not mandatory and stipulated zero rates for import of a large number of goods (ferrous and non-ferrous metals, fish, medicines, alcohol, products and components for shipbuilding and aviation industries etc.), which created additional difficulties for domestic manufacturers.

Some economists believe the import substitution model is ineffective as it restrains capital and technology import and hinders neutralization of structural disproportions¹⁸. The main deficiencies of this model are: a) low quality of products due to the absence of foreign competition; b) if manufacturing of import substitution products is based on a foreign technical base, this makes the country dependent on foreign equipment and component supplies; c) enterprises of infant branches under the cover of protectionist measures do not wish to mature, and the governments are not always inclined to weaken protective barriers to stimulate their maturity.

Positive sides of this model are that in future these domestic productions could achieve maturity (i.e. their products will become competitive), and they will be able to export them, as it happened in the South Korea and Japan. As the minister of foreign trade of Japan O. Ojimi stated, «import substitution strategy of my country has become a precondition for conquering foreign markets, and the economic growth stimulated development of export branches».¹⁹ So, the application of the import substitution model can give an impulse for the structural remodelling of national economy, which would finally enable transition to export-oriented model of development.

The model of export-oriented structural policy lies in priority development of export branches, mostly by attracting foreign capital to these branches, and openness of national economy; stimulation of development of innovative and investment activities; it is

¹⁷ T. Ostashko. Risks for agriculture from establishment of a free trade zone with the EU // *Economy of Ukraine*. — No. 3. — 2011. — p. 57. [In Ukrainian].

¹⁸ Levine R. Sensitivity Analysis of Cross — Country Growth Regression / Levine R. Renelt D. — *American Economic Review* 82. — 1992. — P. 942 — 963.

¹⁹ Ojimi V. 1970. Japan's industrialization strategy. In OECD, *Japanese Industrial Policy*, Paris: OECD.

the best policy for the countries with naturally low domestic demand. As it is known, export growth has always been an important factor for ensuring economic growth of the country, especially when export-oriented activity is based on the principles of the competitive advantages theory of Michael Porter²⁰. Based on that theory, export orientation of all economic branches is inexpedient, which forces national manufacturers to increase their branch specialization and competitiveness of their products.

The important condition for the export-oriented model development is the availability of unique goods (for instance, rare raw materials), necessary production factors (qualified workforce, technologies, scientific potential etc.). Besides, stimulation of export development can be achieved by high dependency of the economy on import or low rate of domestic market.

Selection of export branches depends on specialization of the country at the international labour market. One of the varieties of the specified model is orientation of primary products at foreign markets, which might be successful in the short-term perspective, but could lead to failure in the long-term one, as the share of raw materials in the commodity structure of global export gradually goes down, which is related to the increase of efficiency of raw materials industrial use. In the long-term perspective, raw material orientation leads to primitivisation of owned production and hindering creation of new knowledge and technologies, as the processing industry is the one that requires them the most. As a result of the above-said, the country irreversibly falls behind the global technological trends and gets into complete technological dependency.

An example of successful policy of raw material export orientation was the support of national cotton manufacturers by the USA government. Thanks to export subsidies and despite multiple prohibitions and penalties of WTO, the USA was the leader as cotton exporter for quite a long time. Even now the American farmers are still in the top three largest cotton manufacturers after China and India²¹.

Another variety is the policy of secondary product orientation at foreign markets. This trend is more efficient as it allows keeping the major part of added value within the country and assists

²⁰ Porter M. E. *Competitive Advantage of Nations* / Simon & Schuster. — New York City, 1998. — 896 p.

²¹ An agreement has been reached regarding some movements at the negotiations in the WTO [Electronic resource] // USEEmbassy.gov / Websites of U.S. Embassies, consulates and diplomatic missions: [Electronic resource] 19.12.2005. — Access mode: <http://iipdigital.usembassy.gov/st/russian/texttrans/2005/12/20051219074353ebyeessedo0.7097589.html#ixzz3G1NnIhoR>. [In Russian].

in resolving the problem of creation of new working places in the processing industry. The task of the state in this case is to support highly technological, science-based and strategic branches aimed at export of their products (see Figure 4).

This method is deficient because other countries tend to establish protectionist barriers for domestic industrial export. While previously the practice was to impose high fees upon imported goods, today, along with the WTO membership, technical barriers are widely used (phytosanitary and ecological requirements, anti-dumping investigations, requirements to packing and labelling etc.), and direct prohibitions are present in the picture as well.

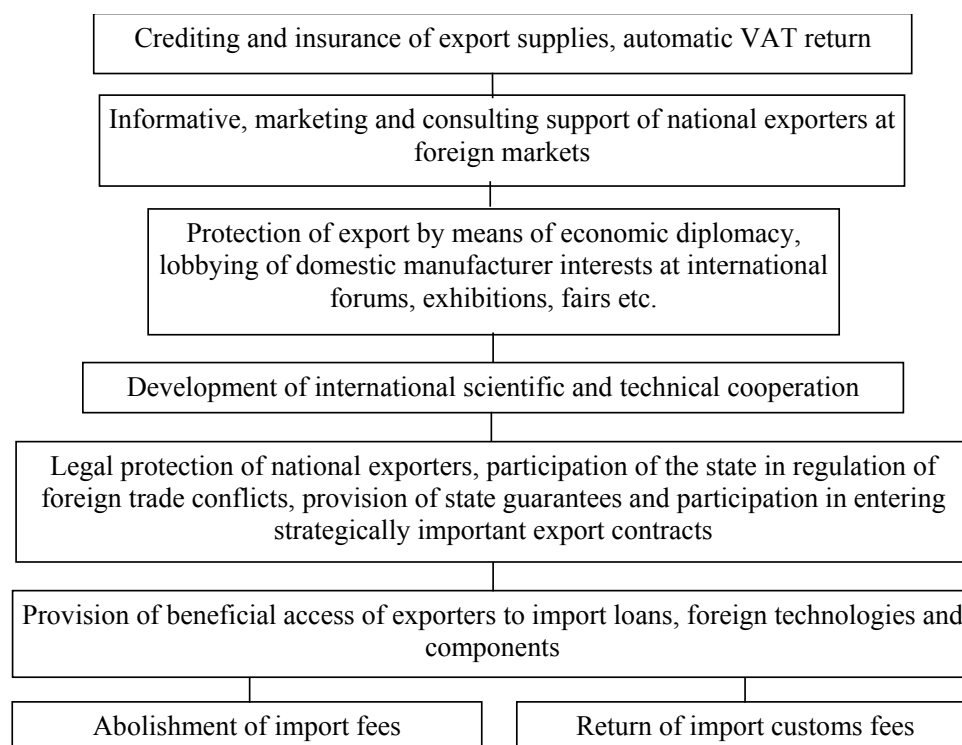


Fig. 4. Mechanisms of state protection of national exporters

Sources: developed by the authors.

Export of highly technological goods, in case components are supplied from other countries, can place the country into a position dependent on such import supplies; it also reduces «the need in owned engineering, technical and scientific workforce that

could be engaged in production of owned highly technological products. As a result of this, our owned scientific, technical and innovative activity falls into decay»²².

The innovative model contains positive features of the previous two models, but none of their deficiencies. The essence of innovative development paradigm is achievement of economic development by means of wide-scale introduction of intellectual products into economic circulation, such as knowledge, technologies, scientific and technical inventions etc., for their commercialization and achievement of social and economic effect²³. It lies in stimulation of introduction of innovative technologies at the domestic enterprises by the state. As development and introduction of innovations is a long process, and the companies desire to receive fast profits, the task of the state is to create such conditions which would allow maintenance of the innovative process till the stage of project readiness of a new product when it is unattractive for the companies in terms of spending their costs on it, as well as establishment of stimuli for the introduction of finished innovative product or technology».



Fig. 5. Priority trends of the structural policy of Ukraine

Source: developed by the authors

²² Yu. V. Kindzerskii. Industry of Ukraine: strategy and policy of structural and technological modernization: monograph / Yu. V. Kindzerskii, National Academy of Sciences of Ukraine, Research Institute "Institute of Economy and Forecasts of the National Academy of Sciences of Ukraine". – K., 2013. — 536 p. [In Ukrainian].

²³ V. G. Bodrov. Innovative and investment model of stable national economy development: training and methodological materials / V. G. Bodrov, V. O. Gusev, V. F. Martynenko. — K. : NADU, 2009. — 60 p. [In Ukrainian].

Thus, the structural policy of Ukraine in the terms of international competition increase has to be based on protection of priority branches of the domestic market (see Figure 5), application of technical barriers, compensational and antidumping fees in larger amount and adequate reaction upon illegal actions of counteragents; stipulate financial subsidies and other types of support for national exporters; facilitate promotion of domestic goods and services at the foreign markets and stimulate increase of scientific presence degree and the level of added value of such products.

Conclusions

To summarize all of the above, we can state that the restriction of state resources does not allow elimination of all market failures at once, that's why, to implement an efficient structural policy, we need a consecutive and systematic approach to be fulfilled by means of complex purpose-oriented strategy of structural policy implementation.

Considering the current status of markets and global competition, for the purposes of development of national economy, the most expedient thing would be to apply a complex of functional and selective measures of low detailing (matrix policy). The main purposes of such policy should be not determination of priority branches or champion companies, but the establishment of the necessary infrastructure and economic environment for the development of new technological branches, development of entrepreneurship and innovations and investments into human workforce. Increase of selectivity level for individual enterprises is justified only in those cases when the state intervention is aimed at modernization of existing or known branches.

On our opinion, the priority trends of the structural policy of Ukraine are stimulation of development of potentially competitive import substitution and export-oriented branches of the national economy, adaptation of protective measures for such branches to the international standards and stimulation of growth of the degree of innovation and competitiveness of domestic products with high added value level. Naturally, these mechanisms have to be based on expanded application of non-price barriers (phytosanitary, environmental etc.), compensational and antidumping fees. The most efficient instrument of state regulation of the national economy structure of Ukraine is the complex of selective and functional measures in the form of matrix structural policy. Therefore, it is expedient to perform further scientific research regarding theoretical and practical aspects of the matrix

structural policy in the terms of integration of Ukraine in the European economic environment.

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