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## МЕЖДУНАРОДНЫЙ ОПЫТ ИМПОРТОЗАМЕЩЕНИЯ В СТРАНАХ ДОГОНЯЮЩЕЙ ИНДУСТРИАЛИЗАЦИИ

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### Аннотация.

В настоящее время экономика развитых стран претерпевает структурные преобразования из-за развертывания промышленного комплекса на новой технологической основе. Задача экономической науки – критически понять изменение этой тенденции. Неэффективные институты и международные финансовые и технологические ограничения снижают эффект стимулирования импортозамещения правительством; сдерживают развитие его воспроизводственных основ, которые призваны заложить основу позитивного тренда в макроэкономической динамике. Высокая энтропия современной рыночной экономики требует адекватного ответа со стороны экономической теории, которая должна выработать положения модернизации и развертывания новых отраслей, реализующих авангардные направления внутреннего спроса на инновационные блага, снижающих риски потери международной конкурентоспособности возрастут во много раз. Поэтому потребность в развитии процессов импортозамещения, объединяющих ресурсную обеспеченность российской экономики, ее интеллектуальный потенциал и значительный внутренний рынок, определяется императивом инновационного развития неоиндустриального типа. В статье представлен анализ международного опыта импортозамещения в странах догоняющей индустриализации, а также сделаны выводы о его роли в модернизации и антикризисном регулировании экономики.

### Информация о статье

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## INTERNATIONAL EXPERIENCE OF IMPORT SUBSTITUTION IN THE COUNTRIES OF CATCHING-UP INDUSTRIALIZATION

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### Abstract.

At present, the economies of developed countries are undergoing structural transformation due to the deployment of industrial complex on a new technological basis. The task of economic science is to critically understand the modification of this trend. Inefficient institutions and international financial and technological restrictions reduce the effect of stimulating import substitution by the government; prevent the development of its reproductive mechanisms, which can achieve a positive trend in economic dynamics. In the context of the high entropy of market processes, it has become clear that without modernization and deployment of new industries that implement avant-garde directions of domestic demand for innovative benefits, the risks of losing the international competitiveness increase in many times. Therefore, the demand for import substitution, which integrates the resource security of the economy, its scientific potential and the large domestic market, is determined by the imperative of innovative development. The article presents an analysis of the international experience of import substitution in countries of catching-up industrialization, and makes the conclusions about its modernization and anti-recession role.

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import substitution, economic growth, catching-up development, recession, modernization.

## 1 Introduction / Введение

At the global level of economic relations, the United Nations Conference on Trade and Development (UNCTAD) in 2016 noted a global demand for the development of domestic production for the internal market by the "emerging industrial countries" of Europe, South-East Asia, Latin America and Africa. It is dictated by the increase of their non-financial corporations' debt from \$9 trillion to \$25 trillion in 2008-2015 (from 57% to 104% of their total GDP) as a consequence of the deficit in their trade balances [1]. The re-establishment of the manufacturing industry for saturating the domestic market with competitive benefits is relevant for both the countries of developed market economies and economies in transition. For the first type, this means restoring industrial structures in the territory of their country after several decades of moving material production abroad. For economies in transition, import substitution requires accelerated innovative industrial development, and in a number of industries, the re-creation of manufacturing industries lost during reforms and the overcoming of their technological degradation. At the same time, in many economies of catching-up industrialization, the large domestic market for the means of production and the benefits of final consumption is largely saturated by imports, which have taken key positions both in consumer preferences and in technological chains.

## 2 Materials and Methods / Материалы и методология

The analysis of the experience of import substitution processes' study made in economic literature has revealed a number of approaches to it.

The first approach considers the phenomenon of import substitution in the context of increasing the market advantages of national economy in the world trading system. The German economist of the nineteenth-century Franz Liszt concluded that free trade had a mixed influence on the division of labor in economy. As a result of it the industries specializing in the domestic market began to experience a problem with declining competitiveness [2].

This conclusion was made by Franz Liszt on the results of the analysis of mutual trade between the United States and the United Kingdom in the 19th century, which was the basis of his idea of "industrial education of the nation". It implies synchronizing protectionism in foreign trade with public investment to support important industries for international competitiveness. Similar views of Raul Prebisch [3] (Argentina, the 20th century) on the ratio of exports to imports formed the basis of the theory of "peripheral capitalism". According to this theory in countries that mainly import finished products and export raw materials there is a "reproduction of deprivation". It affects not only the structure of economy, but also demographic processes, the environmental situation, the political system.

Later, the English economist Hans Singer argued that the balance between final consumption and commodity prices in future 10-15 years is not in favor of the countries which economies are specialized in extraction, primary processing and export of natural resources [4]. The economic system of these countries is described by H. Zinger as "peripheral capitalism," which lags behind technologically advanced economies in the level of development over time.

The Singer-and-Prebisch hypothesis suggests that in the perspective of 15-30 years within the framework of the so-called "raw material super-cycle," prices of primary processed or extracted resources steadily show a tendency to decline relative to prices of finished products.

To support the Singer-and-Prebisch hypothesis, the International Monetary Fund (IMF) published in 2013 a comparative study of commodity and finished product markets for 460 years (since 1650), which proved the superiority of any industrialized manufacturing economy over the extractive and agrarian one (even taking into account the commodity booms of the last decades – 1970 and 2000s) [5]. Paul Linderdt used the concept of "import substitution growth" to explain the increase of GDP of a number of countries in the process of developing industries oriented to the domestic market during deterioration of foreign trade conditions [6].

A number of authors, based on the conclusions of the Singer-and-Prebisch hypothesis, view import substitution as a result of smoothing market problems for manufacturing sectors of national economy, uncompetitive in the world market and therefore stagnating without the government support.

P.B. Clark, D.E. Logue, R.J. Sweeney proposed a "model of perfect substitutes," and R.R. Rhomburg, M. Goldstein, M.S. Khan, L.H. Officer – a "model of imperfect substitutes" that describe import substitution opportunities in competitive markets [7-9].

The "model of perfect substitutes" means "switching" by consumers from imported goods to domestic ones without significant costs for them, as the competitiveness of national producers is often

higher than expected in practice. The reasons for this are the establishment of a global pricing system (initially on international commodity exchanges, today in online stores and online trades), the reduction of costs for the physical movement of goods between countries and continents, and the reduction of customs barriers in WTO member countries. In fact, there is a gradual erasing of the facets between prices in different countries, and a consumer is oriented to the factors of non-price competition (speed of purchase and delivery, availability of service, prestige of consumption, etc.). Consequently, for the development of import substitution, the price advantage of domestic producers over foreign producers is mandatory in this model.

The model of imperfect substitutes implies limiting price competition between imported and domestic goods, which explains the fact that even at lower prices foreign products are unable to replace the results of domestic production. The reasons for this are asymmetry of information exchange between international and national markets, the sale of many industrial goods abroad through distribution networks (bypassing international exchanges), rapid adaptation of national companies to consumer requirements. Rhomberg and Khan drew attention to the simultaneous growth of domestic production and imports of goods in some cases and their simultaneous decline in others, as well as to the fact that the same goods can both be exported from and imported into the country from abroad. In other words, in the model of imperfect substitutes for successful import substitution, the price gain of domestic producers is desirable, but not mandatory, and it can be compensated by higher quality, service, convenience of consumption, etc.

We believe that the model of perfect substitutes has limited applicability in our study, due to the relatively high cost of producing the deep processing products in developing countries compared to importing them. This was the result of insufficient investment attractiveness of domestic production of the goods of final consumer demand, technological degradation of the manufacturing sector, ageing of fixed assets and non-competitiveness of many types of products. As a result, producers, both consumer products and means of production, lose to foreign companies precisely in price competition, which significantly increases the costs of non-importing and transition to domestic goods.

At the same time, the model of imperfect substitutes also has its limitations. Its authors focus on the short-term effect of import substitution – "switching" consumers to domestic products. This requires first winning price competition from foreign firms, for example, as a result of increased productivity, lower unit costs, and increased product innovation. However, the same goals can be achieved through protectionism by imposing restraining duties and quotas, as well as by subsidizing the launch of free production facilities that previously produced uncompetitive products.

However, it is possible to initiate structural changes with such "rapid" import substitution only if there are groups of enterprises in the economy that are close to the foreign technological level and belong to the general technological system (for manufacturing industries to the fifth technological layer). Therefore, the difficulties of import substitution as part of the structural transformation of the economy are related to the deep reproduction problems, such as the decline in investment and non-innovative development of industry, the ageing of fixed assets of the manufacturing sector, as well as the lack of necessary import substitution policy institutions.

In the second approach to the analysis of import substitution and its place in industrial policy, the attention of scientists is focused on the government protectionism of the most competitive domestic production, as well as on the transfer of technologies from the defense industry complex, as a source of innovative breakthrough in industry.

The significant role of the state as a subject of investment relations and a regulator of the labor market in industry was considered by the economists of Neokeynesian school such as H. Chenery, M. Bruno, A. Straut [10, 11]. They considered theoretical concepts applied in developed market economies, in which the state is an effective regulator of labour and capital markets. Hence their understanding of import substitution is based on referring it to the elements of industrial policy aimed not so much at increasing the competitiveness of domestic products (countries such as the United States, France, the United Kingdom are already technological leaders), but at a positive effect in tax revenues, employment, income.

We note the proximity of this understanding of import substitution to the goals and objectives of neo-industrial import substitution research. At the same time, Neokeynesian provisions on investment regulation and investment multiplier do not contain a theory of deep structural transformation, restoration of broken production chains and catching-up modernization of industries to the level of modern

layers Therefore, targets in the form of growth of industrial production, creation of conditions for development of modern employment through import substitution, are poorly applicable to the economy of catching-up industrialization. In it the technological lag in the manufacturing industry has exceeded 30 years (i.e. two industrial cycles) and production of many types of domestic means of production (metal cutting equipment, mini-plants for the production of modern polymers, robotic assembly production) was either almost completely lost or was not established during the reform years.

The analysis of works of several authors on international direct investment, including in post-socialist countries, has identified three main ways of developing investment and productive relations between national and multinational corporations:

- "import" model, meaning the establishment of enterprises by large international companies in different countries for final assembly, packaging and sale on the domestic market of a product more composed of components produced abroad. Ties between domestic and international companies are currently developing on this way (which is especially typical for the automobile manufacturing, instrument-making, electronic industry, drug production), which implies the import of two thirds of the components (at cost). As a result, the production of domestic means of production and modern materials – the main technological condition of economy neo-industrialization – does not receive innovative development and necessary investments, which constrains the reduction of costs and growth of competitiveness of equipment producers;

- "production import substitution" model characterizing foreign investment of international companies in the development of most technological chains in a number of industries which products are manufactured for local consumers. This model is typical for industries that, before the arrival of foreign investors, lagged behind international competitiveness requirements and did not have a significant production scale. In the economy in transition, such foreign investment takes place in food, light industry, household chemistry production, with a localization level of up to 85%. However, the technological level of these industries is still lagging behind the world, and demand for their products is maintained largely artificially, thanks to protectionist policies;

- "global cooperative" model which involves industrial enterprises of the country into the system of international cooperation and investment. The inflow of foreign investment ensures the production of obsolete products in the country, and import substitution affects only the part of products that are uncompetitive in the world market.

Thus, the analysis of import substitution in the scientific economic literature made it possible to draw the following conclusions.

We give a clarified definition of import substitution as a re-creation in the economy the production of benefits with an international competitiveness level for the domestic market in the process of regulated change of public reproduction structure, basing on the connection of domestic demand potential and stimulation of industry innovative development.

The inseparability of import substitution from the process of structural transformation of economy means the implementation of its following functions:

- market – revival of business activity, creation of jobs in manufacturing and high-tech industries, in which low competitiveness has led to import substitution of their products;
- structural – the use of domestic market potential to re-establish the manufacturing industry, increase its technological level and competitiveness;
- anti-recession – the protection of economy from external shocks caused by fluctuations in oil prices, exchange rates, political conditions, in conditions of radical macroeconomic imbalance.

Import substitution represents a complex of mechanisms of economy regulation, both macroeconomic and branch, sectorial pursuing short-term and long-term aims. Such mechanisms include the following:

- protectionism – a political (exogenous) factor in achieving economic security by restricting imports of food and consumer goods. This implies taking the measures that restrict imports and increase consumer demand for domestic companies' production (customs duties, embargoes, subsidies, concessional loans, technical barriers, etc.). However, protectionism, pursuing short-term goals of protecting the domestic market, contradicts the idea of import substitution as a driver of technological modernization and structural changes based on the economic potential of the domestic market, and does not create conditions for increasing the competitiveness in the internal market;

- a strategy of addressing the endogenous potential of the national reproduction system (investment, innovation, employment, consumer spending) aimed at implementing the long-term priorities for structural change. Import substitution is a system in which cross-sector and inter-industrial redistribution of investment, labour, income is realized, and the reproduction of intellectual capital is accelerated.

- socialization of market transformation of economy in the process of stimulating employment in manufacturing and high-tech industries, income growth, the development of the means of social mobility connected with scientific activity, innovative entrepreneurship.

The link between import substitution, the growth of national competitiveness and the improvement of social well-being is manifested in the structural transformation of the economy, the provision of a positive structural shift and the overcoming of negative macroeconomic dynamics.

It is methodologically important to highlight the general principles of import substitution analysis in the countries that have purposefully implemented the state import substitution policies. Such principles include initiating a positive structural shift (regardless of its depth and speed) in the process of catching-up industrialization, or re-industrialization, saturating the domestic market and reaching the trajectory of accelerating economic growth, and combining protectionist and incentive measures.

The first targeted attempts to replace imports with national products were made in the United States, France, and Germany in the 1850s-1860s, when England was dominating in industrial production and international trade. Later, Japan in the late 19th and early 20th centuries formulated industrial development priorities related to the substitution of products from the United States and Western Europe.

In the second half of the 20th century, import substitution became an essential part of the economic policy of former colonies and countries considered to be underdeveloped for a long time. The structure of economy of the colonial countries was dominated by the extraction of raw materials and agriculture, so import substitution meant an increase in the level of raw materials processing and access of the local population to the benefits available to metropolitan areas. In the 1960s, the idea of import substitution as a form of decolonization was reinforced by R. Prebisch "theory of dependence" [3]. According to it, the trade relations between Western and developing countries are dominated by unequal exchange (a consequence of previous colonization), which is often caused by artificial overpricing of imported finished products and dumping of exported raw materials.

Thus, import substitution policies in Kenya in the 1970s were largely initiated by the British Government, which had difficulties in providing the former colony with the necessary consumer goods. British investment allowed Kenya to establish mineral processing and food production facilities that the Kenyan economy hadn't practically had before.

In Cuba, after the revolution and nationalization of private enterprises to reduce the dependence on the United States, a plan to develop its own processing industries (mainly in agriculture) was implemented. Also the Government Plan of Cuba developed ambitious projects to organize the machine-building industry with the support of the USSR. Later, however, in 1968, integration with the Council for Mutual Economic Assistance forced the Cuban leadership to abandon the establishment of heavy industry in the country. As a result, the Cuban government's efforts focused on increasing sugar production and exporting it to the socialist countries.

Summarizing the experience of import substitution in Brazil, Argentina, China, South Korea, we conclude that in all these countries the government used a wide range of instruments to stimulate domestic production: protectionist import duties and quotas, tax incentives for investors in priority industries, equipment import incentives, cheap loans, subsidies, and public investment in infrastructure.

However, the final objectives of import substitution policies varied from country to country. Thus, while the authorities of Brazil and China initially focused on export of manufactured products, in South Korea and Argentina – on their domestic consumption.

The state import substitution program in Brazil ("Plano Brasil Maior") in the 1970s initially guaranteed domestic export producers partial tax returns and financing from the state fund for export operations on a competitive basis. The state was supported by 20 largest national companies, 11 of which were controlled by the state (in energy, metallurgy and oil production industries), 7 – by foreign investors, and only two were national private firms. At the first stage of import substitution development in Brazil, the main emphasis of government support was in favor of modernization and diversification of these enterprises. At the second stage, the share of budget allocations for education in GDP was doubled: from 2.2% in 1964 to 4% in 1970. At the third stage, by the mid-1970s, the shortage of new technologies

and lack of domestic investment resources forced the government to make the economy more open to foreign investors [12].

As a result of the implementation of import substitution strategy in Brazil, the structure of the economy significantly increased the domestic production of modern industries of the 4th technological layer at that time: mechanical engineering (mainly cars and tractors, engines), electronics, metal-working machines, energy equipment. In the airplane industry Brazil became one of the leaders (medium-line aircraft "Embraer"), as well as in shipbuilding. While in the mid-1960s Brazil imported 80-85% of these products from the USA, Japan, Canada, Germany, Great Britain, etc., by the mid-1970s it exported more than 40% of these industries production. In 1968-1975 GDP of Brazil increased in 2.2 times, and by its absolute volume the country moved from the 28th to the 8th place in the world. In Brazilian GDP itself the share of industrial products increased from 15% to 38%, and the share of export of technologies (patents, licenses) to other developing countries increased from 0% to 1.5% of GDP [13].

At the same time, since the late 1970s, the industrial development of Brazil has slowed down, as tax incentives and financial assistance have been concentrated in branches of transnational companies and state-owned corporations. Their total volume was insufficient to start mass innovation in industry, and by now up to 60% of the country's GDP is produced in agriculture, and the important social problems – high levels of poverty, inequality in income distribution – are left unresolved.

Import substitution in Chinese economy, started in the 1960s in the process of mass industrialization, began with the development of basic industries – metallurgy, mining, energy within the framework of unified state property. Together with the urbanization growth, the increase in literacy level of the population and the quality of labor force, this allowed to deploy in the 1980s the production of mechanical engineering products, organic chemistry with the attraction of foreign direct investment, and in the 1990s – radio electronics, instrument-making within the framework of mass private and joint investment. By the early 2000s these industries met the domestic demand up to 75%.

Today import substitution in China increasingly takes the form of localization of production of the most high-tech components for radio electronics, automobile industry, biochemistry, and plastic production. The main factor in the development of Chinese technology platforms was joint public and private investments in universities' R&D, which began to attract foreign scientists to conduct research in China. By 2010 the share of business funding for R&D (1.5% of GDP) was ahead of South Korea (1.8%) and close to Japan (2%) [14].

As a result of a consistent strategy of "unlimited market for technologies" and "picking up" in 2012 by the share of high-tech products in manufacturing exports (32%) China reached the level of South Korea (35%). This gives the evidence of a success of import substitution economic strategy implemented for half a century, supported by the huge domestic demand, massive state investments, and later by strong state support of foreign investments in manufacturing industries and dynamic stock market.

In South Korea import substitution development strategy was formed in the 1950s as a part of the post-war economic recovery. The following decade, the government had decided to provide its own food and light industry products. Since the mid-1960s, South Korea has consistently implemented a policy of export-oriented import substitution, relying on the chemical industry shipbuilding, automobile manufacturing, electronic engineering, food industry.

Focusing of South Korea on the world standards of competitiveness in the industrial policy development explains the success of import substitution, which was later replaced by the stimulation of manufacturing exports. Such "import substitution neo-industrialization" used as "locomotive" joint public-private investments within the largest holding companies in the country. At the same time, the investment policy of the state, although agreed with representatives of large Korean business, contained coercion to modernization of production funds by administrative methods.

Priority measures to support South Korean import substitution enterprises, introduced into five-year state plans and legislated by law, included the establishment of state industry standards and quality control systems, temporary protectionism for priority industries, control of commodity prices and industrial services, and the establishment of specialized innovations investment funds and credit for exports.

In South Korea, however, domestic financial resources, including forced savings, have become the main source of investment on the first stage of import substitution. In particular, in 1962-1965, up to 45% of investments in manufacturing industries were financed by bond loans distributed to the population on a forced basis (their total emissions exceeded \$2 billion). Similar experience was realized in

Singapore where in 1959-1968 the state formed the Central Fund of savings, accumulating 5% of income of both businessmen and hired workers (in 1968-1974 – 15%) [15].

Another significant source of financing for investment in import substitution production in South Korea was a centralized investment fund in which the state accumulated revenues from exports of oil, ore, and palm oil. In the 1960-1970s this fund invested more than \$70 billion. As a result, South Korea's GDP grew in 1.6 times between 1965 and 1975, and the share of manufacturing industry reached 65% of GDP. By the 2000s the country had become a world leader in shipbuilding, and later in radio electronics, automobile manufacturing.

Industrial economic policy in Argentina was also a "catch-up import substitution industrialization" based on the redistribution of resources from agrarian to industrial sphere. The state used tax incentives, nationalization of loss-making enterprises, budgetary investments in the most promising production, direct financing and preferential lending of exports of machinery and equipment. Argentina's import substitution policy "stretched" for 40 years, but this allowed the economy to move from agricultural to industrial. The share of industrial production in the GDP of Argentina in 1927-1968 increased from 20% to 36% and its manufacturing sector – from 26% to 52% of the general industrial output [16].

However, at a later stage of industrial development (1970-1980s), import substitution policies in Argentina did not show the desired results. The shortage of new technologies increased the technological lag and reduced the competitiveness of the country's industrial products, reducing its exports by 15% during the 1980s. This was largely due to the decline in foreign direct investments, as a result of the binding the national currency to the dollar, the decrease in the attractiveness of the manufacturing industry compared to traditional agriculture and raw materials extraction. As a result, by the beginning of the 21st century the competitiveness of Argentine industrial products had significantly decreased even in the Latin American market, and the economy did not reach a new stage of innovative development.

### 3 Results and Discussion / Результаты и обсуждение

In general, the analysis of international experience of import substitution made it possible to draw the following conclusions.

First, in countries with targeted import substitution policies, its main objective was to initiate structural changes in the economy by stimulating investment in the manufacturing sector, which products were demanded both by the domestic market and for export. At the first stage, the sources of import substitution were budget allocations, financial resources of state banks. Then national banks and companies were involved in the import substitution process.

Second, import substitution has been most developed in the countries that originally focused on manufacturing exports (South Korea, Brazil, and China). The realization of their export potential required large-scale foreign investments, high transparency of economy, stimulation of borrowing technologies by the state, and development of their own applied science.

Third, countries that have failed to create conditions for massive inflows of foreign direct investment and technology transfers (Argentina, Mexico) are lagging behind export-oriented countries in their social-and-economic development. Thus, the financial crisis of 1997 led to a slowdown in economic growth and a long recession in Argentina (so-called "lost decade"), while in South Korea, Singapore, China, it took 1-2 years to overcome the recession from the crisis.

It can be argued that the need for import substitution is caused by the same thing that gives rise to recession – a negative structural shift that, having begun in the 1990s, has not ended to this day. Therefore, the initiation of import substitution in the economy is the most demanded. Its connection with structural changes is in investment, innovative and technological development of the manufacturing sector for producing the output for the domestic market, and the simultaneous export of raw materials processing products.

We believe that the recession is a significant obstacle to the development of import substitution. Recessive processes, on the one hand, reduce consumer spending and compress demand, on the other, discourage long-term investment in production modernization. Therefore, the state import substitution policy should be directed towards overcoming the recession. That is why it is important to highlight scenarios for recessive processes:

- "W-recession" when GNP and GDP fluctuate between 1.5 and -1.5% over several years, and there is no significant growth in investment, income, consumer spending. W-recession is caused by the adaptation of economy to the action of both exogenous and endogenous factors of negative dynamics;

- "U-recession" is the least long-term (1-1.5 years) and most often caused by exogenous factors and external shocks, which can be replaced by a positive trend in the implementation of import substitution policy;

- "V-recession" is characterized by significant (up to 3-4%) reduction of key macroeconomic indicators and near-zero growth within 2-3 years. It should be noted that the V-recession carries the risks of a transition to stagnation or stagflation with a deeper decline in delaying the transition to import substitution;

- "L-recession" in which against the background of rapid GDP decline there is a danger of development of long stagnation (more than 3 years). The exit from L-recession requires structural transformation of economy and changes in its institutional environment.

We have identified the recession processes taking place in a catching-up economy as a W-recession, which, with increased external shocks (such as imposing new sector sanctions, the slowdown of the world economy, the volatility of oil prices), could move into an L- or V- recession with the risk of deep stagnation. In turn, the development of import substitution by the process of structural transformation will contribute to the transition of W- to U-recession with the creation of preconditions for reaching the long-term trajectory of economic growth.

Consequently, import substitution should derive from three sources: a large domestic market for consumer goods and means of production, high raw materials availability and available competitive positions in the world market.

In fact, this means the exit of the catching-up economy from the "half-periphery" in the international division of labor (in terms of R. Prebisch's "theory of dependence" "half-periphery" means countries with developed but technologically lagging industries, supplying leading countries with raw materials, intermediate product and labor [3]) and the "reversal" of the key factor of industrial production competitiveness from resource to innovation-technological.

Therefore, we consider neo-industrial development of economy as the re-establishment of a competitive manufacturing complex capable of saturating the domestic market without the long-term application of restrictive barriers to imports, along with the innovative development of commodity production, which creates the material basis of national competitiveness.

From the point of view of import substitution, neo-industrialization means a system policy of regulating national reproduction with profound changes in investment and credit relations, institutional and technological structure, and the research sector, taking the advantage of domestic market potential.

The objective essence of import substitution, in relation to neo-industrial development, is to initiate the restoration of economy identity as a multi-sector industrial system, partially lost in the process of market reforms. The negative structural shift can deprive the economy the opportunity to accelerate innovative development along the way of competitive export-oriented manufacturing. At the same time, the whole path of industrial development of the country, beginning with the industrialization of the 1930s, is connected with the reconstruction of chains of industrial production, which are largely located within the country. Such path dependence on the previous development has not only remained the same, but has even intensified as a result of de-industrial structural shift. Therefore, the re-establishment of the technologically modernized manufacturing industry is possible only as a result of the development of domestic market-oriented industries, i.e. import substitution.

Such an approach should take into account institutional provision of interaction between the state and business in attracting investments in the manufacturing sector, development of science and production relations on innovative development of existing and creation of new competitive manufacturing industries within the framework of the technological platform and import substitution clusters.

#### **4 Conclusion / Заключение**

Based on the analysis of foreign experience, prospects and risks of its implementation in the economy of catching-up modernization, we draw the following conclusions.

Macroeconomic tasks associated with structural changes in the economy that can be solved through import substitution include:

1. The growth of national competitiveness in the process of innovative development of industry, initiated, on the one hand, by a large domestic market, on the other – incentives for investment in industry, which saturates the domestic market with competitive benefits.



2. The increase of added value in the process of recovery of lost elements in production chains due to the connection of demand incentives for domestic goods and investment in their production, innovative modernization of enterprises.

3. Reaching the trajectory of stable economic growth with an increase in employment, personal income in the process of neo-industrialization with a specific increasing the industry share in GDP.

Today we note the greatest need for the development of import substitution in the economy of the catching-up type, when external shocks and exogenous (first of all, political) factors triggered a recession and increased the danger of conservation of technological lag. Import substitution should contribute to the implementation of endogenous factors of economic growth (changing the structure of investment, industrial production, employment, income).

The concentration of the state efforts on protectionism and selective support for import-substituting industries (i.e. Argentina) does not produce the expected results in the long term. On the contrary, the "integration" of import substitution into the circumspect structural policy (such as in South Korea and China) maximizes the national competitiveness growth in both domestic and global markets.

Import substitution policy affecting the structure of the economy was not initiated by many countries of catching-up industrialization, in particular in Russia. The result was deepening structural problems, a recession and the risks of moving into the long-term stagnation. The delay in the transition to import substitution, systemically connected with structural changes by institutional, investment, fiscal, financial and credit, innovation and technological, social mechanisms, deepens structural problems and delays the recession. In turn, the concept of the relationship between import substitution and structural transformation of the economy should be based on its neo-industrialization.

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