UDC 339.97

Mikhail Smirnov

PhD (Economics), Associate Professor, Economics, Management and Politics Department, Southwest State University, Kursk, Russia 94, 50 Let Oktyabrya Str., Kursk, 305040, Russia cmirnov@gmail.com Valentin Dudko

PhD (Economics), Associate Professor, Economics, Management and Politics Department, Southwest State University, Kursk, Russia 94, 50 Let Oktyabrya Str., Kursk, 305040, Russia walentin@bk.ru

# Innovation-investment aspect of import substitution in Russia

**Abstract.** The authors prove that nowadays a considerable number of industrial clusters of the national economy are import-dependent due to the lack of Russian competitive substitutes. The provided in the article analysis of the use of average annual production capacity of enterprises in Russia on the output of some sorts of products in 1990-2014 shows that when there are statistical reserves of production capacity, the qualitative composition of fixed capital assets with a high degree of physical wear and depreciation prevents enterprises from producing competitive national products. Deindustrialization of the Russian economy in 1995-2015 led to the stagnation of the manufacturing industry production potential including some enterprises determining the food security of the country. The mentioned above facts substantiated the necessity to develop approaches to the interpretation of adverse trends in the national economy and effective investment allocation mechanisms.

Keywords: Import Substitution; Import; Competitiveness; Production; Investments; Deindustrialization; Russia

JEL Classification: C81; E01; F17; F21 DOI: http://dx.doi.org/10.21003/ea.V157-0013

## Смірнов М. О.

кандидат економічних наук, доцент кафедри економіки, управління й політики,

Південно-Західний державний університет, Курськ, Російська Федерація

#### Дудко В. А.

кандидат економічних наук, доцент, доцент кафедри економіки, управління й політики,

Південно-Західний державний університет, Курськ, Російська Федерація

#### Інноваційно-інвестиційний аспект імпортозаміщення в Росії

Анотація. У статті доведено, що нині значна кількість виробничих кластерів національної економіки є імпортозалежними внаслідок відсутності вітчизняних конкурентоспроможних аналогів. Авторський аналіз використання середньорічної виробничої потужності підприємств Росії з випуску окремих видів продукції за період з 1990 по 2014 рр. показав, що при наявності статистичного резерву виробничих потужностей якісний склад основних виробничих фондів з високим ступенем фізичного й морального зношування не дозволяє випускати конкурентоспроможну вітчизняну продукцію. Деіндустріалізація російської економіки протягом 1995-2015 р. призвела до стагнації виробничого потенціалу обробної промисловості, у тому числі й деяких виробництв, що визначають продовольчу безпеку країни. Вказані обставини визначили необхідність вироблення в статті підходів до переломлення негативних тенденцій у національній економіці й ефективних механізмів розподілу інвестицій.

Ключові слова: імпортозаміщення; імпорт; конкурентоспроможність; виробництво; деіндустріалізація; інвестиції.

#### Смирнов М. А.

кандидат экономических наук, доцент кафедры экономики, управления и политики,

Юго-Западный государственный университет, Курск, Российская Федерация

#### Дудко В. А.

кандидат экономических наук, доцент, доцент кафедры экономики, управления и политики,

Юго-Западный государственный университет, Курск, Российская Федерация

#### Инновационно-инвестиционный аспект импортозамещения в России

Аннотация. В статье доказано, что в настоящее время значительное число производственных кластеров национальной экономики являются импортозависимыми вследствие отсутствия отечественных конкурентоспособных заменителей. Приведенный в статье анализ использования среднегодовой производственной мощности предприятий России по выпуску отдельных видов продукции за период с 1990 по 2014 гг. показал, что при наличии статистического резерва производственных мощностей качественный составосновных производственных фондов свысокой степенью физического и морального износа не позволяет выпускать конкурентоспособную отечественную продукцию. Деиндустриализация российской экономики в течение 1995-2015 гг. привела к стагнации производственного потенциала обрабатывающей промышленности, в том числе и некоторых производств, определяющих продовольственную безопасность страны. Отмеченные обстоятельства определили необходимость выработки в статье подходов к преломлению негативных тенденций в национальной экономике и эффективных механизмов распределения инвестиций.

**Ключевые слова:** импортозамещение, импорт, конкурентоспособность, производство, деиндустриализация; инвестиции.

- 1. Introduction. The volatile situation in the exchange market, slumping oil prices, sanction changes in overseas trade have an impact on the economic conditions in Russia, and in the investment market in particular. In this context, the structure of investments in the Russian economy has changed significantly with the strategy of the development of import-substituting production having been chosen as a national priority. However, little attention is paid to the problem of feasibility prioritization for the development of production clusters.
- Statement of the Research Problem. Considerable depreciation of ruble in 2014-2015 amid economic sanctions im-

posed by European countries and the USA revealed one of the pressing issues - assurance of economic and food security as well as deceleration of the economic growth in Russia as a whole. At the same time, amid the significant dependence on import products, Russian analogues are characterized by low quality, and this can lead to loss of quality and reduction of the range of articles.

3. Review of Recent Research and Scientific Papers. Foreign investigations in the sphere of import substitution processes reflect the issues of public funds investing in the development of import substitution instead of modernization. In this regard Jacobs Jane (1970) [1] thought that in the short run

Russian manufacturers would be able to achieve desired results, but in the long run the losses will be great both in economy efficiency and in reduction of products competitiveness.

Similar experience of import substitution Latin American countries was studied by W. Bauer (1972) [2]. In his research, the author paid much attention to such determinants of import substitution, as structural changes caused by the effects of the world wars. J. Henry in his fundamental research of nature and essence of import substitution processes (1996) [3] highlighted the impact of developing countries on the structure of balance of payments in developed countries. This is also proved by J. Sach's research (1985) [4] devoted to the interconnection of external debt and macroeconomic indicators in Latin American countries. However, J. Eatwell's research (2004) [5] shows that the determinant in the processes of import substitution should be the demand for national analogues substituting import products.

The essence of raw import substitution at the regional level is studied by Russian scientists Animitsa E. G. (2015), Peregorodieva L. N. (2013), Trofimov G. A. (2015) [6-8]. Conceptual-theoretical aspects of the import substitution program execution assessment in the Russian economy are revealed in the works of Eletsky N. D. (2015), Polovinkin V. N. (2014), Ponomareva E. V. (2011) [90 11].

Scattered attempts to reveal the determining mechanisms of import substitution at regional and industrial levels are described in the scientific investigations by Ponomareva T. G. (2011), Zheleznyakov S. S. (2011), Semykin V. A. (2014) [12-14]. The issues of dependence of the pro-

cesses of import substitution on the availability of highly qualified personnel are revealed in works by Bodrunov S. D. (2015) [15]. Bodrunov S. D. asserts that technological backwardness is not in manufacturing equipment but in personnel's skills and competences. However, the above-mentioned investigations cannot explain the intensity of the process of import substitution in some industrial clusters.

- **4. Purpose.** The objective of the article is to form the base of evidences for the issues of import dependence of a considerable number of industrial clusters of the national economy due to the lack of Russian competitive substitutes, reveal the most urgent issues of the Russian investment policy and develop recommendations on modernization of the import substitution program.
- **5. Results.** From 1999 to 2014 in the Russian economy there was a trend for GDP growth rate reduction. The industrial growth rate in 2015 reduced in comparison with the growth rate in 2012-2014 (by 2.5%) and in 1999-2008 (by 5.1%) (Figure 1).

Industrial growth decreased significantly in 2015 in comparison with the growth rate of production in the Russian economy in 1999-2008.

Structural changes of RF GDP are characterized by the increase of the trend for the development of mining (sustained growth from 7% in 2011 to 8% in 2015), financial activities (from 2.9% in 2008 to 3.4% in 2015), real estate operations (from 7.8% in 2008 to 9% in 2015), MIS (military-industrial sector) (from 5.4% in 2008 to 6.2% in 2015) (Figure 2). However, under such conditions the implementation of the assurance of food safety programme execution and economic growth is unachievable - agricultural products output decreased from 4% in 2008 to 3.7% in 2015 and manufacturing industry output decreased from 28.4% in 2008 to 25.6% in 2015.

Amid the decline in output in 2009-2015, gross value added in manufacturing industries of the RF was also sweepingly decreasing (2012) [16]. In 2009-2015, the structure of gross value added shifted towards the increase of the return to mining (from 34.1% in 2008 to 35% in 2015) and generation and dis-

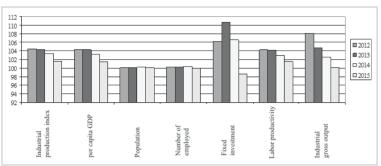


Fig. 1: Dynamics of growth of macroeconomic indicators in the Russian Federation (RF) in 2012-2015, %.

Source: Author's elaboration based at the Russian Federation Federal State Statistics Service (Rosstat)

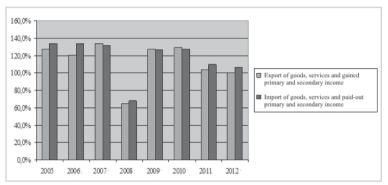


Fig. 2: Dynamics of export and import of goods and services, gained primary and secondary income of the RF in 2005-2012

Source: Author's elaboration based at the Russian Federation Federal State Statistics Service (Rosstat)

tribution of electric power, gas and water (from 10% in 2008 to 12.5~% in 2015). This indicates the decreasing production efficiency due to the use of basic fixed assets with high degree of physical wear and depreciation.

The level of the use of production capacity is close to ultimate, and in some industrial clusters in recent years it took on a value close to critical - from 80% to 93% (coal conversion, chemical industry, sugar industry, etc.). Their capacity is provided by the «Soviet heritage» and this indicates the rigidity of the real sector development.

The other industrial clusters are characterized by rather low level of production capacities utilization with a volatile growth rate and for some industrial clusters with a steady decline.

At the same time, the formation of funds of underutilized capacities cannot always assure their utilization in manufacturing products, conforming to the required level of quality. The considerable part of industrial clusters of the Russian economy (more than 50%) is significantly worn out, which casts doubt on the feasibility of their use. In other words, the qualitative composition of fixed assets with considerable degree of wear blocks the output of products demanded by consumers.

In 2008-2013, the degree of wear of fixed assets was stable, and even increasing in some industries: manufacturing industries (46.9%), construction (50.6%), public administration and defence (55.5%), public health (54.9%). Comparing the average degree of wear of fixed assets in the world economy (35%) and Russian economy (48.2%), we can see an urgent need for the renewal of fixed assets.

In 2008-2013, the coefficient of renewal of the RF fixed assets reduced in many industries. Against the low quality of the national fixed assets, when 50% of them are worn out, the task set by the Ministry for Economic Development aimed at the restructuring of industries to provide sustainable development and decrease of import dependence is difficult to be accomplished.

Russian balance of payment is sustainably positive, but has a wave-like trend to decrease - from USD 84,389 mln in 2005 to USD 3,414 mln. in 2013.

Imbalance of goods output and consumption is changing in terms of import increase due to the recovery of the Russian economy. Structural behaviour has some negative characteristics:

- · the rate of import growth is higher than the rate of export growth, which leads to the reduction of the payment balance currency (Figure 2). Export growth decrease is caused by the decrease of rates of growth of the world economy. Low growth rates in some EU countries cannot but have an impact on export, as EU is the main importer of goods and services from Russia:
- in case of positive import and export balance currency balance of services is steadily negative. And the negative balance increased fivefold in 2007-2015;
- 70% of export commodity composition is mineral commodity and 48% of import commodity composition is equipment and vehicles (2014) [17];
- the share of travelling, construction, insurance and services of non-state pension funds, financial services, charge for intellectual property use and information services is increasing

in the composition of imported services. Under the conditions of information and economic security provision such a trend can lead to the dependence on import and undermine the national sovereignty.

6. Conclusion. The undertaken study shows that under conditions of geopolitical instability, gradual devaluation of ruble import substitution shall become the turning point to the stable national economy, the factor of revival of the Russian industry. At the same time, limitation of financial and time resources, strict requirements for the efficiency of the undertaken measures adjust RF import substitution program execution.

Structural-dynamic analysis shows that in many industrial clusters potential of unused production capacities, impossible to be realized due to the high degree of depreciation and wear is formed. On the other hand, the development of manufacturing enterprises within the program of import substitution is feasible since it provides significant growth of gross value added. The mentioned factors can be taken into consideration in the modernization of the import substitution program in the RF in 2016-2020.

#### References

- 1. Jacobs, J. (1970). The Economy of Cities. Cultural heritage. New York: Random house.
  2. Bauer, W. (1972). Import Substitution and Industrialization in Latin America: Experiences and Interpretations. Latin American Research Review, 7(1),
- 95-122. Retrieved from http://www.jstor.org/stable/2502457
  3. Bruton, J. (1996). Import Substitution. In H. Chenery and T. N. Srivivasan (Eds.), Handbook of Development Economics, Vol. 2 (3rd ed.). New York: Elsevier. 4. Sachs, J. (1985) External Debt and Macroeconomic Performance in Latin America and East Asia. Brookings Papers on Economic Activity 2, 523-573.
- 4. Sachs, J. (1965) External Debt and Macroeconomic Performance in Latin Arrience and East Asia. Brookings Papers on Economic Activity 2, 523-575. Retrieved from http://www.brookings.edu/~/media/Files/Programs/ES/BPEA/1985\_2\_bpea\_papers/1985b\_bpea\_sachs\_williamson.pdf
  5. Eatwell, J. (1987; 2004). Import substitution and exported growth. In J. Eatwell, M. Milgate and P. Newman (Eds.), (4 vols.), London: Macmillan (in Russ.).
  6. Animitsa, E. G. (2015). Import substitution in industrial production of the region: conceptual-theoretical and applied aspects. Ekonomika regiona (The Economy of Region), 3, 163-164 (in Russ.).
- 7. Peregorodieva, L. N. (2013). Providing import substitution of Kaluga region. Vestnik Saratovskogo gosudarstvennogo agrarnogo universiteta im. N. I. Vavilova
- (Proceedings of Saratov State Agrarian University named after N. I. Vavilov), 1, 87-91 (in Russ.).

  8. Trofimov, G. A. (2015). Import substitution vehicles at the level of industry branches. Institut finansovikh issledovaniy (Institute for Fiscal Studies), 71-79

- 9. Eletsky, N. D. (2015). Import substitution in Russia: not the challenge but the task. *Molodoy ucheniy* (Young scientist), 6, 406-408 (in Russ.).
  10. Polovinkin, V. N. (2014). Issues of import substitution in the national economy. *Expertiny soyuz* (Expert Union), 12(42), 30-33 (in Russ.).
  11. Ponomareva, E. V. (2011). Ways of the improvement of the efficiency of the Russian national innovation system on the basis of technical regulation. Ekonomika i upravlenie (Economy and Management), 12(2), 162-166 (in Russ.)
- 12. Ponomareva, T. G. (2011). Post-crisis development of economic entities and organizations in the age of globalization. Saint-Petersburg: Polytechnic University publishing house (in Russ.).
- University publishing house (in Huss.).

  13. Zhelesnyakov, S. S. (2011). Regional budgetary policy improvement in terms of territorial differentiation of municipal entities. *Izvestiya Yugo-zapadnogo gosudarstvennogo universiteta (Proceedings of SWSU)*, 6(39), 46-52 (in Russ.).

  14. Semykin, V. A. (2014). Top-priority problems (issues) of social-economic and institutional development of region(al) agrobusiness in open economy. *Vestnik Kurskoy gosudarstvennoy selskokhozyaystvennoy akademii (Bulletin of Kursk State Agricultural Academy)*, 5, 89-97 (in Russ.).

  15. Bodrunov, S. D. (2015). *Theory and practice of import substitution: Lessons and problems*. Saint-Petersburg: INIR named after S.Y. Witte (in Russ.).

  16. Smirnov, M. A. (2012). Business planning of regional conversion: the innovation-investment aspect. *Izvestiya Yugo-zapadnogo gosudarstvennogo universiteta (Proceedings of the SWSU)*, 5(44), 294-298 (in Russ.).
- 17. Yaskova, N. Y. (2014). Innovation focus of investment activities a part of modernization of the national economy. Ekonomicnij casopis-XXI (Economic Annals-XXI), 1-2(1), 42-45. Retrieved from http://soskin.info/en/ea/2014/1-2/contents\_11.html (in Russ.)

Received 12.02.2016

# Institute of Society Transformation (IST)

Non-governmental Research & Analytical Centre, Director Dr. Oleh Soskin

## **Key activities:**

- Organizing and holding of interactive workshops, roundtables, presentations
- Preparing of analytical materials, political and economical forecasts, commentaries and other intellectual products
- Organizing of study visits for state executives and business structures to states with stable democracy
- Realizing of public relations for organizations, companies, cities, regions
- Advisory work on current and strategic economical and political issues
- Publishing of research books (IST prepared and published 15 monographs)
- Publishing of The «Economical Annals-XXI» Journal
- Forming and supporting of IST's Internet holding (57 websites)
- Holding of on-line Internet conferences and polls etc.

Institute of Society Transformation has realized 85 large international projects. IST created 16 regional Centres on European and Euro-Atlantic Integration. Telephone/Fax: +380 44 235 98 28 (27), E-mail: os@osp.com.ua,

Internet: www.soskin.info, www.ist.osp-ua.info