Directions for Reducing Excessive Import Dependence of Ukraine’s Economy

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Abstract: The purpose of the study is to substantiate the directions and methods of reducing excessive import dependence of the Ukrainian economy. To achieve the goal of the study, the following methods were used: comparison, grouping, averages, seasonal smoothing of time series, factor analysis. The level and dynamics of import dependence of the Ukrainian economy are estimated. A comparative analysis of the import dependence of the Ukrainian economy with the import dependence of the economies of other countries was made. It is proved that the level of import dependence of Ukraine’s economy is excessive. The main reasons for excessive import dependence are identified. The negative consequences of excessive import dependence have been studied. Foreign experience of increasing competitiveness and reducing import dependence is analyzed. The effectiveness of national programs to increase domestic production is summarized. Directions to reduce excessive import dependence are proposed. The concept of rational protectionism is substantiated.

1. INTRODUCTION

The domestic market of Ukraine has a large number of imported goods. The volume of imported services is also growing. These are both investment goods and services and consumer goods and services. Large volumes of imports are an obstacle to stable economic growth. The national economy is becoming overly dependent on external conditions. Large volumes of imports require significant volumes of exports. Ukrainian exports are mainly raw materials. The development of raw material exports in Ukraine has environmental limitations. It cannot meet the growing needs of imports in the long run. Largely due to these reasons, Ukraine’s trade balance is chronically deficient.

The purpose of the study was: 1) assess the level and dynamics of import dependence of Ukraine’s economy, 2) compare the import dependence of Ukraine’s economy with the economies of other countries, 3) identify the causes and consequences of excessive import dependence, 4) develop recommendations to reduce import dependence.

2. METHODOLOGY AND DATA

To achieve the goal of the study, the following methods were used: comparison, grouping, averages, seasonal smoothing of time series, factor analysis. Several indicators have been proposed in the literature to assess the level of import dependence (Grabner, 2018). Among the possible options, the indicator of the ratio of imports to GDP was chosen. This figure is simple and easy to calculate. For international comparisons, countries were grouped according to the following criteria: import volumes, export volumes, GDP (PPP), population, GDP (PPP) per capita. The method of determining countries similar to Ukraine according to the set criteria was applied.

The information bases of the study were: 1) statistical data of the State Statistics Service of Ukraine; 2) World Bank national accounts data; 3) Trade Map of the International Trade Centre.

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3. RESULTS

The current level of import dependence of Ukraine’s economy as a whole was formed in the late 1990s. After the collapse of the Soviet Union, economic growth in Ukraine began in 1999. Before that, for seven years each year, there was a decline in production. In 1999, the ratio between imports and GDP was 0.49. It was the same in 2019. During 1999-2003, the ratio between imports and GDP was on average 0.53, and during 2015-2019 - 0.54. That is, the averages show that in the early 2000s and late 2010 the level of import dependence of the economy was at about the same level.

The dynamics of import dependence during 1999-2019 were closely linked to economic growth. As soon as the phase of economic growth began, the indicators of import dependence grew at the same time. Conversely, as soon as there was a decline in business activity, the indicators of import dependence decreased. During 2000-2019, according to annual data, this pattern was observed 13 times and, only 6 times the pattern was not observed. The lowest rate of import dependence (0.48) was recorded in 2009 during the Great Recession 2007-2009. The highest rate of import dependence (0.57) was recorded in 2000 during the phase of economic growth.

One of the main problems of Ukraine’s economy is to ensure sustainable economic growth. The growth that continued during 1999-2008 was interrupted by the Great Recession 2007-2009. In terms of the decline in real GDP in 2009, among European countries, Ukraine was second only to Latvia (-15% and -18%, respectively). The seasonally adjusted monthly time series of industrial production indicates that starting from August 2012, industrial production began to decrease again every month. This process accelerated after the political crisis, which began in November 2013.

The decline in industrial production lasted until January 2016, after which the next phase of growth began. But it was also short-lived. In October 2019, even before the start of the COVID-19 pandemic, industrial production began to decline again monthly. As a result, as of April 2021, the level of industrial production in Ukraine was approximately at the level of March 2001. This partly explains why the level of import dependence in the early 2020s was approximately at the level of the early 2000s.

In contrast to imports, exports relative to GDP tended to decline during 1999-2019. If in 1999 the ratio between exports and GDP was 0.54, in 2019 - was 0.41. In 2000-2004, this figure averaged 0.59; in 2005-2009 - 0.47; in 2010-2014 - 0.47; in 2015-2019 - 0.46. Thus, exports grew at a slower pace than imports. As a result, the negative trade balance increased. During 2000-2004, the trade balance was positive. On average, it amounted to UAH 11 billion per year. In the following years, the trade balance was already negative. In 2005-2009 - UAH 29 billion on average per year; in 2010-2014 - UAH 82 billion; in 2015-2019 - UAH 215 billion. Thus, foreign exchange earnings from exports did not cover the cost of imports.

Import dependence on consumer goods also increased during 1999-2019. This is evidenced by the share of sales of consumer goods produced outside Ukraine. This indicator is calculated and published by the State Statistics Service of Ukraine. Table 1 shows the average data for the periods during 2000-2019. During 2000-2004, the share of all imported consumer goods was 25.4%. During 2015-2019, it increased to 45.6%. It is most likely that the expansion of imported consumer goods will continue.
Table 1. Share in sales of imported consumer goods

|             | 2000-2004 | 2005-2009 | 2010-2014 | 2015-2019 |
|-------------|-----------|-----------|-----------|-----------|
| All goods   | 25.4      | 33.4      | 40.0      | 45.6      |
| Food        | 7.3       | 11.0      | 13.4      | 17.3      |
| Non-food    | 40.0      | 45.7      | 56.5      | 65.8      |

Source: State Statistics Service of Ukraine, 2000-2019; own calculations

After the collapse of the Soviet Union, the production of consumer goods declined significantly. This is especially true of non-food consumer goods. In particular, in 1990, 15 washing machines, 38 bicycles, 3,784 pairs of shoes, 23 square meters of fabrics, and 7,934 electric lamps were produced per 1,000 population (State Statistics Service of Ukraine, 2000-2019). In 2019, 7 washing machines, 3 bicycles, 561 pairs of shoes, 2 square meters of fabrics, 21 electric lamps were already produced per 1,000 population. In 2019, a significant part of non-food products was produced from raw materials of a foreign customer and was directed mainly to exports (clothing and footwear). Domestic demand for non-food consumer goods is currently met mainly by imports.

The high level of import dependence of Ukraine’s economy is also confirmed by comparisons with other countries. For comparison, countries were grouped according to the following criteria: 1) the absolute value of imports, 2) the absolute value of exports, 3) the volume of GDP (PPP), 4) population, 5) the volume of GDP (PPP) per capita. Six countries were selected for each group. Average indicators of import dependence were recorded for the period 2015-2019. The grouping of countries and the use of data for the period made it possible to eliminate the influence of other factors.

In 2019, Ukraine imported goods worth $60.7 billion. About the same amount of merchandise imports had Greece ($62.2 billion); Bangladesh (57.7); Morocco (51.1); Colombia (50.4); Pakistan (50.1); Argentina (49.1). For this group of countries, the ratio between imports and nominal GDP during 2015-2019 was 0.18. For Ukraine, this ratio, according to the World Bank, was 0.42. Within the group, the import dependence ranged from 0.11 (Argentina) to 0.41 (Morocco).

The second group included 6 countries in terms of merchandise exports. In 2019, Ukraine exported goods worth $49.9 billion. About the same amount of merchandise exports had Colombia ($39.5 billion); Peru (45.1); Bangladesh (47.5); Nigeria (53.6); Kazakhstan (57.7); Argentina (65.1). For this group of countries, the ratio between imports and nominal GDP during 2015-2019 was 0.14. Within the group, the import dependence rate ranged from 0.11 (Argentina) to 0.21 (Bangladesh).

The third group included 6 countries based on gross domestic product at purchasing power parity. In 2019, for Ukraine amounted to $562 billion. About the same amount of GDP (PPP) had Romania ($645 billion); Austria (536); Algeria (517); Chile (512); Kazakhstan (509) and Peru (436). For this group of countries, the value of import dependence during 2015-2019 averaged 0.30. Within the group, the import dependence rate ranged from 0.18 (Kazakhstan) to 0.40 (Romania).

The fourth group included 6 countries in terms of population. Countries with the same population have about the same amount of domestic consumer demand. In 2019, the population of Ukraine was estimated at 41.6 million. About the same population had Argentina (45.8 million); Algeria (44.7); Iraq (41.2); Poland (38.2); Morocco (36.2); Peru (33.0). For this group of countries, the value of import dependence during 2015-2019 averaged 0.26. Within the group, the import dependence rate ranged from 0.11 (Argentina) to 0.42 (Poland).
The fifth group included countries according to the criterion “Gross domestic product at purchasing power parity per capita”. This indicator roughly reflects the productivity of the economy and living standards. In 2019, the gross domestic product in Ukraine at purchasing power parity per capita amounted to $13.3 thousand. Approximately the same value of the indicator had Peru ($13.4 thousand); Paraguay (13.2); South Africa (13.0); Egypt (12.3); Algeria (12.0); Ecuador (11.9). For this group of countries, the value of import dependence during 2015-2019 averaged 0.24. Within the group, the import dependence rate ranged from 0.19 (Peru) to 0.30 (Paraguay).

A total of 19 countries were selected for groupings. These are quite different countries in terms of economic potential and the degree of integration into world trade. Therefore, in addition to the 5 groups, an additional group of countries was formed. Countries of this group according to some criteria are the closest to Ukraine. The selection criteria for this group were: 1) territory, 2) population, 3) type of economy, 4) size of exports, 5) size of imports, 6) GDP (PPP), 7) GDP (PPP) per capita. The group includes the following countries: Algeria, Iraq, Colombia, Morocco, Peru, and Chile. For this group of countries, the value of import dependence during 2015-2019 averaged 0.23. Within the group, the import dependence rate ranged from 0.16 for Colombia to 0.41 for Morocco.

Table 2 shows the average import dependence for all groups during 2015-2019. All of them are less than the indicator of import dependence of Ukraine's economy. The ratio between imports and GDP during 2015-2019 in Ukraine was 0.42 according to the World Bank, and 0.54 according to the State Statistics Service of Ukraine. Thus, the import dependence of Ukraine’s economy is excessive.

| Criteria for grouping | Countries | Imports/GDP |
|-----------------------|-----------|-------------|
| 1. The absolute value of imports | Argentina, Bangladesh, Greece, Colombia, Morocco, Pakistan | 0.18 |
| 2. The absolute value of exports | Argentina, Bangladesh, Kazakhstan, Colombia, Nigeria, Peru | 0.14 |
| 3. GDP (PPP) | Austria, Algeria, Kazakhstan, Peru, Romania, Chile | 0.30 |
| 4. Population | Algeria, Argentina, Iraq, Morocco, Peru, Poland | 0.26 |
| 5. GDP (PPP) per capita | Algeria, Ecuador, Egypt, Paraguay, Peru, South Africa | 0.24 |
| 6. Set of 7 criteria | Algeria, Iraq, Colombia, Morocco, Peru, Chile | 0.23 |

Source: World Bank, 2019; International Trade Centre, 2019; List of countries, 2019; own calculations

High import dependence is normal for small countries and countries-industrial centers. Small countries cannot physically produce all the necessary goods and have high levels of import dependence. Countries-industrial centers import large volumes of raw materials and at the same time in large quantities export finished products. Today, China is such an industrial center worldwide, and Poland - in Central Europe. Ukraine is neither one nor the other. Ukraine is the third-largest in Europe (after the Russian Federation and Turkey), and the eighth-most populous. Therefore, its indicators of import dependence are abnormally high.

Excessive import dependence of the Ukrainian economy was formed as a result of a set of interrelated factors. Among the main reasons are the following: low competitiveness of products; imperfect management and marketing in enterprises; imperfect trade, investment, industrial, innovation policy; corruption in public administration in favor of foreign producers.
After the collapse of the Soviet Union, a significant part of the products produced in Ukraine turned out to be uncompetitive by world standards. Due to imperfect economic policy and several other factors, a significant number of enterprises failed to modernize their production to world standards. The opening of the domestic market took place spontaneously, without taking into account the competitiveness of enterprises. Under the pressure of legal and illegal imports, many enterprises with development potential closed. Imperfect investment policy has not allowed large enterprises to connect to global chains of innovative products.

An import-dependent model of the economy has been formed in Ukraine. Competitive productions today work mainly on imported equipment, using imported technologies and partly raw materials. Transnational corporations have established networks in Ukraine for servicing and repairing imported equipment, which uses imported spare parts and consumables. This trend strengthens the technological dependence of the economy.

Excessive import dependence poses some risks to stable economic growth. First, there is a chronic trade deficit. Ukraine’s economy is currently in a phase of stagnation. When the growth phase begins, imports of goods and services will increase at the same time. The structure of Ukrainian exports is imperfect with a significant share of raw materials. In 2020, the share of exports of plant products was the largest and amounted to 24% (of which 19% were cereals). Increasing grain exports has its limits. The level of plowed land in Ukraine is one of the highest in the world. At the beginning of 2020, the area of arable land in Ukraine was 328 square kilometers, or 54% of the total area (State Statistics Service of Ukraine, 2019).

Second, the over-openness of the economy makes it highly dependent on external conditions. External conditions are beyond control. The situation in world markets is difficult to predict. At the same time, the impact of negative external conditions on the national economy can be quite large. During the Great Recession 2007-2009, the rate of GDP decline in Ukraine was one of the largest in the world.

Third, in conditions of excessive dependence on imports, the finances of enterprises and households are affected by exchange rate fluctuations. Due to several factors, exchange rate fluctuations occur in Ukraine quite often. An increase in the value of a convertible currency causes an increase in the value of imported goods in the national currency. This leads to an increase in production costs, rising prices in the consumer market, and lower living standards.

The ways to reduce excessive import dependence are closely related to the reasons for its occurrence. As a result of globalization, there is ongoing competition for a place in the world division of labor. There is also competition for a place in global value chains and foreign direct investments. Therefore, the key task of the Government is to increase the competitiveness of the economy and improve the investment climate.

Import substitution should start with traditional goods that do not require high technology. This is evidenced by the experience of countries that have successfully modernized their economies (South Korea, China, and Chile). In particular, the basis of the economy of the Republic of Korea before the rapid development in the early 1960s was agriculture and the light industry. Then the production of other consumer goods began to develop. In the 1970s and the 1980s, heavy industry and high technology developed.
The development of traditional goods production is also important for reducing unemployment. Ukraine has positive examples in this regard. In the early 2000s, Ukraine imported large quantities of cut flowers from the Netherlands and even from Ecuador. To date, these imports have been replaced by competitive domestic production, which has created additional jobs.

In the production of innovative goods, it is necessary to join global value chains. In this regard, a promising area is information technology. Creating software does not require large investments and imported materials. The field of information technologies is a promising area of job creation. In manufacturing and agriculture, jobs are currently declining due to the processes of robotics, automation, mechanization, and so on.

An important direction in reducing import dependence in Ukraine is the development of energy efficiency. The real sector of the Ukrainian economy spends relatively much energy per unit of output. Housing and communal services also spend energy resources inefficiently. A significant part of energy resources is imported. In 2020, the product group “27 - mineral fuel, petroleum, and petroleum distillation products” had the largest share in imports of goods (14.3%). Areas of reducing energy imports are to increase the efficiency of energy use in the real sector and housing and communal services, increase own production of mineral energy, increase the share of renewable energy sources.

In the context of the problem of import dependence, it is not profitable for Ukraine to liberalize its foreign trade. This is especially true of foreign trade agreements with dynamically developing countries with great export potential (China). Existing bilateral free trade agreements between Ukraine and Norway and Switzerland have further increased the import dependence of the Ukrainian economy. It is impractical for developing countries to liberalize trade relations with industrialized nations. This thesis was substantiated by Stadwell (2014) in the context of industrial development. Ukraine should make full use of the potential of free trade agreements in force.

Associations of local producers pay much attention to supporting domestic production. They come up with initiatives to place public procurement among local producers, put forward localization requirements for foreign investors, implement state import substitution programs, and strengthen the fight against smuggling. The possibility of inefficient production with the prospect of increasing their competitiveness was substantiated by Reinert (2007). According to Reinert (2007), it is better to have an inefficient manufacturing sector than not to have one at all. During the 1990s, the Verkhovna Rada of Ukraine adopted a package of laws on the protection of local producers from subsidized and dumped imports, on state regulation of imports of agricultural products, on the application of special measures on imports. In 2011, the Cabinet of Ministers of Ukraine approved the State Program for the Development of Domestic Production. Import substitution in the context of reducing the economy’s dependence on imports is a protectionist measure. Protectionism and liberalism have both positive and negative effects. The free movement of goods, services, and capital enable developed countries and multinational corporations to achieve the highest efficiency. But at the same time, liberalism is widening the development gap between rich and poor countries. Inequality between rich and poor countries continues to grow (Schwab, 2020). The Washington Consensus policy has not contributed to the economic growth of developing countries (Reinert, 2007), while protectionism helps to reduce this gap. Due to lower overall efficiency, it is possible to reduce the gap between poor and rich countries. This is a compromise between developed and developing countries. It can be interpreted as “rational protectionism”.

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4. CONCLUSION

The import dependence of Ukraine’s economy is abnormally high. This is confirmed by comparisons with other countries. Directions for reducing the import dependence are to increase the competitiveness of goods and services, more efficient use of imported materials. Protectionist policies promote the emergence of competitive industries, reduce import dependence and reduce the gap with developed countries.

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