European Integration

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PRIORITIES OF UKRAINE’S EXPORT DEVELOPMENT IN THE CONDITIONS OF EUROPEAN INTEGRATION

Abstract

A comparative analysis of the coefficient of participation in the international division of labor and the coefficient of export efficiency of Ukraine and its main trading partners have been carried out. The indicators of development of goods and services exports to the EU countries are analyzed. On the basis of the «Input-Output» tables export orientation, import dependence and structure of import flows of certain types of economic activity were calculated. It is determined that the low share of imports in accumulation on the background of domestic science inability to produce innovative and technologically advanced products shows conservatism in industrial policy and production on a morally and technically obsolete equipment that does not meet the requirements of scientific and technological progress. Most likely, Ukraine’s export potential will be stimulated by the growth of demand from key partners from the EU, but it is worth noting that the rise in prices of goods for intermediate consumption from abroad, as well as the deterioration of price terms of trade, will restrain the possibility of increasing Ukraine’s exports.

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Target setting
In the conditions of global trade regulators destabilization, increasing uncertainty of the environment, the growth of competition in world markets, for the Ukrainian economy, increasing the presence of domestic exporters in foreign markets obtains high priority. In recent years, governments in many countries not only implement measures to support the real sector of economy, but to maintain national exporters as well in order to strengthen their competitive position in foreign markets. This problem is especially relevant for Ukraine as in 2017 the level of external openness in the sphere of export was 47.9% (State Statistics of Ukraine, electronic resource).

Export potential is an indicator of the development of the country’s economy and its participation in the international division of labor. By the end of 2017, the growth of export of goods amounted to 19.0%, which is definitely a positive trend compared with 2015 and 2016, when the fall in exports was 29.3% and 4.6% respectively (State Statistics of Ukraine, electronic resource). At the same time, during the years of Ukraine’s independence, the reform of economic policy mostly led to unsatisfactory results, except for years characterized by positive market conditions for key positions of Ukrainian exports.

For Ukraine, the importance of developing export potential has intensified after the signing of the Association Agreement with the European Union. Formally, the temporary application of Section IV of the Association Agreement (Assosiation Agreement between Ukraine and the EU, electronic resource) began on January 1, 2016, however, since April 2014 a mechanism of autonomous trade preferences with the EU was introduced that facilitated the access of domestic goods to the European market under the same conditions as within the framework of the DCFTA.
Actual scientific researches and issues analysis

The study of the dynamics and structure of foreign trade in the context of the impact on the growth of open type economies has been reflected in the works of number of foreign scientists, in particular R. Vernon, M. Emerson, P. Krugman, D. Rodrik and others. The issue of the consequences of export-oriented development for the national economy was investigated in works of I. Burakovsky, V. Geyets, V. Movchan, A. Mazaraki, V. Sidenko, L. Shynkaruk and others. However, the issues of Ukraine’s exports to the EU markets increasing possibilities predetermines the necessity for further research and analytical assessments.

The research objective

The objective of the study is to assess the key issues and priorities of Ukraine’s export in the context of European integration. Achievement of the above-mentioned objective is carried out through: analysis of export indicators of Ukraine and its trading partners; estimation of commodity and geographical structure of domestic export; determining the level of import dependence and export orientation of certain types of economic activity, assessing the structure of import consumption in the Ukrainian economy.

The statement of basic materials

During 2000–2017, Ukrainian export increased by almost 2.9 times, but from 2012 it was decreasing, and in 2013 – by almost 30% due to the occupation of part of the Donetsk and Luhansk regions areas that before the beginning of a military conflict provided up to 27% of national exports (State Statistics Service of Ukraine, electronic resource).
Table 1
Realization of export potential of Ukraine in 2000–2017

| Indicator                                      | 2000   | 2005   | 2007   | 2010   | 2011   | 2012   | 2013   | 2014   | 2015   | 2016   | 2017   |
|-----------------------------------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| Export, mln USD*                              | 14572  | 34228  | 49248  | 51478  | 68460  | 68530  | 63312  | 54199  | 37859  | 36364  | 43199  |
| Share in world export, %*                     | 0.23   | 0.33   | 0.36   | 0.34   | 0.37   | 0.34   | 0.29   | 0.23   | 0.23   | 0.24   | 0.24   |
| Export quota, %*                              | 62.4   | 57.1   | 44.8   | 37.7   | 41.9   | 38.9   | 34.4   | 40.0   | 41.8   | 38.98  | 40.1   |
| Export per capita, USD*                       | 298.2  | 729.5  | 1065   | 1117.9 | 1494.7 | 1505.2 | 1399.5 | 1204.4 | 844.6  | 818.3  | 976.8  |
| Coefficient of participation in the interna-   | 2.3    | 1.71   | 1.37   | 1.59   | 1.63   | 1.54   | 1.36   | 1.65   | 1.93   | 1.84   | 1.79   |
| tional division of labor*                     |        |        |        |        |        |        |        |        |        |        |        |
| Export efficiency*                            | 12.3   | 26.6   | 37.4   | 31.8   | 35.1   | 37.7   | 39.1   | 28.2   | 19.5   | 21.17  | 23.20  |
| Exports of main types of products to GDP,%   |        |        |        |        |        |        |        |        |        |        |        |
| Agriculture products**                        | 5.07   | 5.50   | 4.78   | 7.68   | 8.25   | 10.47  | 9.64   | 12.92  | 16.11  | 17.04  | ***    |
| Non-precious metals**                        | 16.50  | 14.70  | 13.19  | 11.64  | 12.46  | 9.82   | 8.76   | 11.26  | 10.43  | 8.14   | ***    |
| Chemical products**                          | 4.20   | 3.60   | 3.03   | 2.51   | 3.31   | 2.86   | 2.21   | 2.71   | 2.36   | 1.46   | ***    |
| Engineering**                                 | 5.74   | 5.19   | 5.79   | 6.52   | 7.08   | 7.34   | 5.57   | 5.25   | 5.76   | 4.42   | ***    |
| Share of Ukrainian export products in world  |        |        |        |        |        |        |        |        |        |        |        |
| exports, %**                                  |        |        |        |        |        |        |        |        |        |        |        |
| Agriculture products**                        | 0.29   | 0.55   | 0.60   | 0.77   | 0.81   | 1.12   | 1.02   | 0.99   | 0.97   | 1.01   | 1.12   |
| Non-precious metals**                        | 3.61   | 4.00   | 3.93   | 3.74   | 3.85   | 3.57   | 3.55   | 3.23   | 2.21   | 2.23   | 2.22   |
| Chemical products**                          | 0.22   | 0.28   | 0.29   | 0.20   | 0.27   | 0.28   | 0.20   | 0.18   | 0.10   | 0.08   | 0.09   |
| Engineering**                                 | 0.07   | 0.12   | 0.17   | 0.17   | 0.20   | 0.22   | 0.17   | 0.12   | 0.08   | 0.07   | 0.07   |

Source: calculated by the authors on the basis of UNCTAD Handbook of Statistics Retrieved from: http://stats.unctad.org/handbook/ReportFolders/reportFolders.aspx; Time Series on International Trade / WTO Statistics Database available at http://stat.wto.org.

Notes.
* UNCTAD Statistics, www.unctad.org Handbook of Statistics Online
**WTO, www.stat.wto.org, Time Series on international trade
*** Official data for calculations is not available

The predominance of traditional types of economic activity in exports can not be unequivocally evaluated negatively, since they were formed and developed in Ukraine taking into account the current comparative advantages. However, the main problems are (Heiets, Shynkaruk, 2014, p. 195–196):

- for a long period of time, the effectiveness of the domestic economy has not been ensured due to the diversification of goods offered at foreign markets, which reduces its dependence on demand shocks for a limited group of goods;
during the period of the reformation of the Ukrainian economy, there was no necessary renovation and restructuring of the main sectors – key exporters, and the degree of depreciation of fixed assets in mining amounted to 54.6% in 2016, manufacturing – 76.4%, and in general within the economy – 58.1 (State Statistics Service of Ukraine, electronic resource). At the same time, production on the physically and morally outdated equipment of new high-tech products is impossible.

Ukraine has not yet succeeded in taking on the European market its own reliable niche for the sale of value added goods, not raw materials and low-tech products. The major part of its largest trading partners from the EU, according to GDP and exports per capita, are at much higher level (Table 2).

Table 2
GDP and export per capita, export efficiency of Ukraine and major trade partners from the EU in 2010–2016

| Country    | GDP per capita, USD | Export per capita, USD | Coefficient of participation in the international division of labor | Export efficiency |
|------------|---------------------|------------------------|-------------------------------------------------------------------|-------------------|
|            | 2010    | 2013    | 2016    | 2010    | 2013    | 2016    | 2010    | 2013    | 2016    | 2010    | 2013    | 2016    | 2010    | 2013    | 2016    |
| Austria    | 46498   | 50460   | 44884   | 2357    | 2696    | 2366    | 1.77    | 1.76    | 1.95    | 488.9   | 471.7   | 436.9   |
| France     | 40726   | 42606   | 36832   | 1090    | 1266    | 1111    | 0.94    | 0.98    | 1.12    | 428.2   | 398.3   | 356.6   |
| Germany    | 42483   | 46577   | 42533   | 1792    | 2117    | 1976    | 1.48    | 1.50    | 1.72    | 446.6   | 435.4   | 414.1   |
| Greece     | 26782   | 21697   | 17598   | 582     | 660     | 502     | 0.76    | 1.00    | 1.06    | 281.6   | 202.8   | 171.3   |
| Hungary    | 13007   | 13570   | 12593   | 1068    | 1168    | 1167    | 2.88    | 2.83    | 3.43    | 136.7   | 126.8   | 122.6   |
| Italy      | 35663   | 35644   | 30616   | 900     | 1029    | 929     | 0.88    | 0.95    | 1.12    | 374.9   | 333.2   | 298.0   |
| Poland     | 12426   | 13574   | 12051   | 497     | 628     | 633     | 1.40    | 1.52    | 1.94    | 112.5   | 136.9   | 119.6   |
| EU-28      | 33681   | 35561   | 32016   | 1303    | 1533    | 1422    | 1.35    | 1.42    | 1.64    | 135.2   | 136.3   | 138.9   |
| Ukraine    | 3093    | 4218    | 1993    | 144     | 181     | 103     | 1.63    | 1.41    | 1.91    | 32.5    | 39.4    | 19.4    |

Source: calculated by the authors on the basis of (United Nations Conference on Trade and Development, electronic resource)

Ukraine is quite weak according to GDP and export per capita comparing with European countries. At the same time, Ukraine takes an active part in the international division of labor due to the higher export quota. The coefficient of international division of labor, calculated as the ratio of the country’s share in world exports to its share in world GDP, exceeds the same rate of France, Greece and Italy, but this active participation is not accompanied by an appropriate level of
export performance. This is evidenced by the low export efficiency coefficient, which in developed countries is 5 times higher than the average indicator in the world. Such a low indicator of Ukraine can be explained by its deformed commodity structure, the lack of institutional regulation, science and technology decline, the discrepancy of the methods of organization and management in certain industries to the requirements of modern times.

Accelerated development of foreign trade operations in comparison with the dynamics of economic processes is one of the signs of economic globalization. An increase in the level of export orientation has a positive effect on economies through the effect of comparative advantages mechanism, which enables the country to concentrate its production opportunities on those segments for which it has relatively better conditions. At the same time, the excessive growth of exports is not always effective (Heiets, Shynkaruk, p.81).

In 1958, J. Bhagwati published a paper that identified the conditions which can lead to «fluctuating growth»: the deterioration of trade conditions, low elasticity of demand of goods – key positions of export of the country, low price elasticity of demand of imported goods, reduction of domestic production of goods as a result of import growth, high share of imports in consumption (Bhagwati, 1958). The hypertrophy of the export-oriented economy of countries with underdeveloped domestic markets is substantially deepened in the context of neo-liberal globalization, in which, under the pressure of international organizations and governments of world leaders-countries, the mechanisms of industrial policy of less developed countries are transformed. As a result, processes of replacing unprofitable types of economic activity by imports are intensifying. As far as such activities are often considered as an important component of meeting basic needs of the population, this transformation of structure leads to an increase in the share of critical imports inelastic of the price, which increases the likelihood of «Bhagwati conditions» formation (Heiets, Shynkaruk, 2011, p.85).

The leading long-term trend in Ukrainian exports is the decline in the CIS share from 2011 (from 38.27% in 2012 to 15.99% in 2017) and the simultaneous growth of the share of the EU, Asia and Africa countries (Table 3). By contrast, the share of EU countries has significantly increased from 30.07% in 2005 to 40.52% in 2017.

According to the data from Table 4, Poland possessed the largest share in the geographical structure of exports to the EU in 2017 – 15.54% (in particular, in the structure of exports 16.1% – ferrous metals, 12.2% – electric machines, 10.6% – ores, slags and ashes); Italy – 14.09% (52.4% – ferrous metals, 13.8% – cereals, 10.5% – fats and oils); Germany – 10.00% (22.5% – electric machines, 12.7% – oil seeds and fruits, 8.1% – textiles goods, 7.1% – ores, slags and ashes).
### Table 3
Geographic structure of Ukraine’s export, %

| Year | CIS   | Europe | EU-28 | Asia  | Africa | America | Australia and Oceania |
|------|-------|--------|-------|-------|--------|---------|----------------------|
| 2005 | 30.77 | 31.79  | 30.07 | 25.06 | 6.99   | 5.35    | 0.04                 |
| 2006 | 32.19 | 32.91  | 31.71 | 22.01 | 6.19   | 6.65    | 0.05                 |
| 2007 | 36.69 | 29.97  | 28.44 | 22.07 | 5.66   | 5.45    | 0.03                 |
| 2008 | 34.59 | 29.47  | 27.29 | 23.72 | 5.83   | 6.19    | 0.10                 |
| 2009 | 33.94 | 25.86  | 23.97 | 30.56 | 6.62   | 2.83    | 0.05                 |
| 2010 | 36.46 | 26.90  | 25.46 | 26.68 | 5.87   | 3.89    | 0.06                 |
| 2011 | 38.27 | 26.96  | 26.35 | 25.93 | 4.89   | 3.73    | 0.04                 |
| 2012 | 38.76 | 25.31  | 24.88 | 25.69 | 8.19   | 3.79    | 0.07                 |
| 2013 | 34.87 | 26.95  | 26.47 | 26.55 | 8.05   | 3.42    | 0.06                 |
| 2014 | 27.61 | 31.77  | 31.54 | 28.48 | 9.46   | 2.55    | 0.04                 |
| 2015 | 20.47 | 34.75  | 34.14 | 32.47 | 9.98   | 2.06    | 0.04                 |
| 2016 | 16.59 | 37.92  | 37.12 | 32.44 | 10.63  | 2.02    | 0.05                 |
| 2017 | 15.99 | 41.17  | 40.52 | 29.79 | 10.96  | 2.04    | 0.05                 |

Source: calculated by the authors on the basis of (State Statistics Service of Ukraine, electronic resource)

### Table 4
Geographic structure of Ukraine’s export to EU, %

| Country          | 2005  | 2009  | 2012  | 2013  | 2014  | 2015  | 2016  | 2017  |
|------------------|-------|-------|-------|-------|-------|-------|-------|-------|
| Austria          | 3.10  | 3.27  | 3.05  | 3.31  | 3.12  | 2.67  | 2.68  | 3.05  |
| Bulgaria         | 5.31  | 6.10  | 3.33  | 3.53  | 3.24  | 3.22  | 3.10  | 2.45  |
| United Kingdom   | 1.34  | 1.87  | 3.23  | 3.27  | 3.47  | 2.83  | 2.35  | 1.11  |
| Spain            | 18.49 | 16.06 | 9.01  | 5.89  | 6.86  | 8.02  | 7.44  | 7.19  |
| Italy            | 2.12  | 2.49  | 14.52 | 14.07 | 14.52 | 15.21 | 14.30 | 14.09 |
| Cyprus           | 3.04  | 1.55  | 0.98  | 0.96  | 1.67  | 0.47  | 0.40  | 0.45  |
| Netherlands      | 12.56 | 10.13 | 4.86  | 6.21  | 6.51  | 6.96  | 7.37  | 9.56  |
| Germany          | 9.87  | 12.90 | 9.63  | 9.57  | 9.35  | 10.21 | 10.55 | 10.00 |
| Poland           | 0.19  | 0.35  | 15.08 | 15.20 | 15.55 | 15.19 | 16.30 | 15.54 |
| Portugal         | 4.78  | 3.70  | 2.01  | 1.59  | 1.83  | 2.46  | 1.69  | 1.51  |
| Romania          | 4.96  | 5.02  | 3.23  | 3.33  | 3.44  | 4.38  | 5.31  | 4.80  |
| Slovakia         | 0.32  | 0.15  | 3.94  | 4.49  | 3.94  | 3.60  | 3.49  | 3.74  |
| Hungary          | 6.73  | 7.54  | 8.84  | 9.29  | 8.88  | 6.99  | 7.80  | 7.56  |
| France           | 1.95  | 2.83  | 3.21  | 4.12  | 3.13  | 3.83  | 3.36  | 2.39  |
| Czech Republic   | 3.68  | 3.70  | 4.14  | 4.92  | 4.54  | 4.16  | 4.15  | 4.08  |
| Other countries  | 21.54 | 22.33 | 10.93 | 10.24 | 9.95  | 9.81  | 9.69  | 12.48 |

Source: calculated by the authors on the basis of (State Statistics Service of Ukraine, electronic resource).
Despite statistics show the increase in export share to the EU market during 2012–2015, in monetary value 2015 was characterized by a reduction in exports of goods to 3.98 billion USD or 23.5% (Table 5). This is partly due to the suspension of production in the occupied territories. However, in 2017, the recovery in exports to the EU was observed reaching a record – 17.5 billion USD (or 29.9%), which is the highest figure since 2012, when part of Ukraine has not been occupied yet.

Table 5

Indicators of goods and services export to the EU

| Indicator | 2005 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 |
|-----------|------|------|------|------|------|------|------|------|------|------|------|
| Export of goods to the EU, mln. USD | 10233 | 18130 | 9499 | 13052 | 17970 | 17081 | 16759 | 17003 | 13015 | 13496 | 17535 |
| In % to preceding year | 92,9 | 130,3 | 52,4 | 137,4 | 137,7 | 95,1 | 97,8 | 102,6 | 76,5 | 103,7 | 129,9 |
| Export of services to the EU, mln. USD | 1766 | 4066 | 3021 | 3117 | 3525 | 3745 | 4196 | 3992 | 2928 | 3005 | 3329 |
| In % to preceding year | 113,4 | 136,5 | 74,3 | 105,6 | 113,2 | 106,4 | 111,9 | 95,1 | 73,4 | 102,6 | 110,8 |
| Import of goods and services in EU, bln. USD | 4152 | 6224 | 4711 | 5325 | 6235 | 5864 | 5913 | 6032 | 5213 | 5373 | 5897 |
| Share of goods and services export to the EU in EU import, % | 0,29 | 0,36 | 0,27 | 0,30 | 0,34 | 0,36 | 0,35 | 0,35 | 0,31 | 0,31 | 0,35 |

Source: calculated by the authors on the basis of (European Commission Statistics, electronic resource; State Statistics Service of Ukraine, electronic resource).

The structure of exports to the EU (Table 6) shifted towards growth in machinery, vehicles and equipment, foodstuff and agricultural products, as well as wood and paper products. In general, Ukrainian export is characterized by a relatively smaller share of industrial products with a high level of processing and the highest share of steel products (22.91%).
Table 6

Commodity structure of Ukraine’s export to the EU, %

| Code UCCFEA | Commodity group                                      | 2007  | 2010  | 2012  | 2014  | 2015  | 2016  |
|------------|-----------------------------------------------------|-------|-------|-------|-------|-------|-------|
| 1–24       | Food industry and agriculture products              | 11.95 | 14.91 | 28.83 | 28.03 | 31.11 | 30.54 |
| 25–27      | Mineral products                                     | 17.01 | 18.68 | 17.05 | 16.24 | 11.35 | 10.77 |
| 28–40      | Products of chemical and allied industries          | 9.61  | 5.89  | 5.45  | 4.52  | 3.92  | 3.41  |
| 41–43      | Raw leather and fur                                  | 2.65  | 1.15  | 0.68  | 0.83  | 0.82  | 0.85  |
| 44–49      | Wood, articles of wood and other fibrous cellulosic materials | 4.83  | 4.50  | 3.71  | 4.71  | 5.95  | 6.51  |
| 50–67      | Textiles and articles of textiles, footwear          | 6.40  | 5.43  | 3.91  | 4.36  | 4.82  | 5.16  |
| 72–83      | Metals                                              | 33.01 | 33.19 | 23.58 | 25.95 | 23.54 | 22.91 |
| 84–90      | Machines, transport equipment and mechanisms         | 12.02 | 13.90 | 14.70 | 12.89 | 15.03 | 15.57 |
| 68–70, 71, 90–99 | Other goods                                         | 2.51  | 2.35  | 2.09  | 2.46  | 3.45  | 4.28  |

Source: calculated by the authors on the basis of (State Statistics Service of Ukraine, electronic resource).

Ukraine, occupying leading positions in the markets of agricultural products, ores and metals (that are characterized by instability of prices), is substantially exposed to the negative impact of global fluctuations and changes in global trade policy (Emerson, Movchan, 2016). For example, the introduction of a non-zero import duty on corn to the EU in the second half of 2017 is likely to reduce the volume of domestic exports of this product (in 2017, its share in the structure of exports to the EU was 8%). It should also be noted the tendency of increasing in 2017 export of high processed products that are supplied to industrial consumers in the EU, which makes Ukrainian exporters part of the European production chains. For example, electric equipment for the automotive industry is supplied, the value of which in 2017 amounted to 1.2 billion USD. According to the monitoring group «Ukrainian Enterprises», since 2015, 9 new factories of such kind of activity have launched production in Ukraine with total amount of 15 thousand workplaces (Movchan, 2017).
Over the last decade, the agrarian sector has undergone significant transformations: «reindustrialization» of agriculture sector lead to a mass integration into the agrarian sector of large enterprises and the formation of vertically integrated corporate structures – agrarian holdings. These processes led to the dominance of agrarian holdings in the market of almost all types of agricultural products, making them the engine of the growth of the agroindustrial complex in Ukraine. At the same time, it should be noted that the presence of natural advantages in the country, such as fertile soils and a favorable climate, does not always guarantee the efficient development of agriculture (Skrypnuchenko, 2015, p. 183). On the contrary, such a situation provokes ruthless exploitation of resources in order to obtain easy profits through the export of these resources, which causes a whole range of economic and social problems.

The results of the study indicate a reduction in the share of agriculture in the total GDP especially in developed countries. In developing countries and transition economies, the share of agriculture in the economy is usually higher, but there is a tendency towards its decline.

In the structure of import consumption in 2005–2015, the share of intermediate goods fluctuated from 61.3% to 69.8% in average, indicating a significant level of import dependence of the Ukrainian industry on imported goods, in particular on fuel and energy products (Table 7). The share of final consumption goods, where the greatest share is for household consumption, increased from 16.5% to 24.9%, and indicates about the import vector in the consumption structure. The share of imports in gross accumulation decreased from 15.3% to 7.8% and it can be considered as a negative trend as it is the basis of innovation development and a determinant of modernization shifts in the economy of Ukraine. The low share of imports of goods in gross accumulation on the background of the failure of domestic science to produce innovative and technologically advanced products shows conservatism in industrial policy and the involvement of morally and technically obsolete equipment in production that does not meet the requirements of scientific and technological progress.

In order to change the current situation, there is a strong need to rebuild production, stimulate the investments inflow, and apply effective methods for regulating access to the domestic market. Existing trends and problems require the activation of state policy not only for their containment, but also, first of all, for the innovation restructuring of the industrial machinery industry, stimulation of foreign investments inflow, the application of specific methods of converting the savings of the population into the accumulation. An analysis of the dynamics of industrial production indicates a certain recovery, in particular in the processing industry, which is a positive trend in comparison with the indicators of 2014-2015 (Table 8).
Table 7
Structure of import consumption in Ukraine in 2005-2015

| Year | Intermediate consumption | Final consumption | Gross accumulation | Total import |
|------|--------------------------|-------------------|-------------------|--------------|
|      | mln UAH | %     | mln UAH | %     | mln UAH | %     | mln UAH |
| 2005 | 139386  | 62,3  | 44705   | 20,0  | 39464  | 17,7  | 223555 |
| 2006 | 169990  | 63,1  | 51695   | 19,2  | 47515  | 17,7  | 269200 |
| 2007 | 223217  | 61,3  | 63153   | 17,3  | 78003  | 21,4  | 364373 |
| 2008 | 325990  | 62,6  | 94578   | 18,2  | 100020 | 19,2  | 520588 |
| 2009 | 271425  | 61,9  | 92365   | 17,1  | 75043  | 17,1  | 438860 |
| 2010 | 395418  | 68,1  | 121662  | 20,9  | 63864  | 11,0  | 580944 |
| 2011 | 530879  | 67,3  | 148306  | 18,8  | 109716 | 13,9  | 788901 |
| 2012 | 533125  | 66,2  | 164735  | 20,5  | 108144 | 13,3  | 806004 |
| 2013 | 505675  | 65,0  | 191463  | 24,6  | 81005  | 10,4  | 778143 |
| 2014 | 556688  | 67,3  | 205774  | 24,9  | 64302  | 7,8   | 826764 |
| 2015 | 705090  | 65,1  | 278120  | 25,7  | 100228 | 9,2   | 1083438 |

Source: calculated by the authors on the basis of National Accounts of Ukraine

Table 8
Dynamics of industrial production in Ukraine, in % to the previous year

| Indicator | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 |
|-----------|------|------|------|------|------|------|------|------|
| Industry  | 111,2| 108,0| 99,3 | 95,7 | 89,9 | 87,0 | 102,8| 100,4|
| Mining and quarrying | 103,7| 108,8| 101,5| 100,6| 86,3 | 85,8 | 99,8 | 94,3 |
| Manufacturing, including | 113,9| 109,6| 98,0 | 92,9 | 90,7 | 87,4 | 104,3| 104,8|
| Textile industry | 108,9| 107,6| 93,4 | 94,2 | 98,6 | 92,0 | 102,2| 107,2|
| Production of food-stuffs, beverages and tobacco products | 103,2| 102,9| 100,8| 94,9 | 102,5| 89,3 | 103,3| 102,9|
| Manufacture of chemicals and chemical products | 122,5| 123,7| 96,2 | 83,1 | 86,8 | 84,8 | 101,1| 118,4|
| Manufacture of basic metals | 112,2| 109,9| 95,9 | 94,7 | 85,5 | 83,9 | 106,8| 100,2|
| Engineering | 136,1| 115,9| 96,7 | 86,8 | 79,4 | 85,9 | 102,0| 107,9|

Source: conducted by the authors on the basis of (State Statistics Service of Ukraine, electronic resource).
An analysis of the export orientation of the economy shows that in average about 23.3% of goods and services produced in Ukraine are sent for export (Table 9). Most export-oriented types of economic activity are manufacture of basic metals (72.8%), manufacture of electrical equipment (68.3%), manufacture of motor vehicles, trailers and semi-trailers and other transport equipment (61.7%), mining of metal ores (55.8%), manufacture of chemicals (50.7%), textile industry (48.4%). The lowest level of export orientation is characterized the production of pharmaceutical products (16.9%), manufacture of coke oven products (7.0%), and the extraction of crude oil and natural gas (4.1%).

Table 9

Export orientation, import dependence and structure of import consumption in certain types of economic activity in Ukraine

| Type of economic activity                        | Export orientation, % | Import dependence, % | Share of import in: |  |
|------------------------------------------------|----------------------|----------------------|---------------------|--|
|                                                | 2014 2015           | 2014 2015           | intermediate        | final   | gross ac-
|                                                |                      |                      | consumption, %      | consumption, % | cumula-
|                                                |                      |                      | %                   | %       | tion, %
| Agriculture, forestry and fishing              | 28.06 31.92         | 10.44 8.37          | 50.71 50.80         | 46.58 44.94 | 2.71 4.26 |
| Mining of coal and lignite                     | 20.30 4.06          | 51.72 60.71         | 99.88 99.94         | 0.12 0.06 0.00 0.00 |
| Extraction of crude petroleum and natural gas  | 6.04 4.12           | 71.29 66.79         | 97.07 90.69         | 7.52 10.53 | -4.59 -1.22 |
| Manufacture of food products, beverages and to-
| bacco products                                 | 30.82 35.41         | 20.38 19.04         | 22.02 22.71         | 78.03 77.29 | -0.05 0.00 |
| Textile industry                               | 52.44 48.43         | 81.91 77.98         | 15.49 14.19         | 85.69 85.43 | -1.18 0.38 |
| Manufacture of wood and paper products, and pr-
| inting                                        | 35.04 39.74         | 40.81 38.39         | 92.22 92.40         | 7.40 7.57 | 0.38 0.04 |
| Manufacture of coke oven products              | 11.01 7.01          | 16.58 25.21         | 100.00 100.00       | 0.00 0.00 0.00 0.00 |
| Manufacture of refined petroleum products      | 24.51 18.96         | 80.91 79.66         | 79.88 71.67         | 21.51 26.64 | -1.38 1.69 |
| Manufacture of chemicals and chemical products | 59.88 50.69         | 78.43 75.73         | 97.53 97.75         | 4.02 4.00 | -1.55 -1.74 |
As the result of signing the Association Agreement, Ukraine (Association Agreement between Ukraine and the EU) has received tariff quotas for some goods, mostly agricultural products. Experience of using the tariff quotas in 2014–2015 by Ukraine indicates a failure in use of its own capacity for export. In particular, in 2015 only 9 of 36 quotas were used (for comparison, in 2014 only 6 quotas) on such commodity groups as natural honey, cereals, tomato, grape and apple juice, wheat, corn, oats, sugar and poultry (Burakovskyi, Movchan,
The main reasons of failure in tariff quotas use include problems with the safety of food, non-compliance of quality requirements, insufficient domestic production, focus on contracting with countries outside the EU, low demand for Ukrainian goods, lack of trading partners from the EU (Burakovskiy, 2017).

Conclusions

It should be noted that among the positive tendencies in exports to the EU are the following: value indicators of export in 2017 reached pre-crisis level, despite the loss of control over part of production assets; the share of exports of processed products in 2017 exceeded the share of raw materials by 14 percentage points; in 2017 there was a diversification of the structure of exports, although the key goods exports remain unchanged in recent years.

The results of the study made it possible to conclude that among the key priorities in the foreign trade with the EU countries, there is a need for further deepening of the level of Ukraine’s integration into the system of international technological co-operation; reducing the dependence of export production on imports of goods for intermediate consumption; expanding the practice of implementing export promoting measures of Ukraine on European markets; export promotion through preferential lending to small and medium-sized businesses.

Most likely, the export potential of Ukraine will be stimulated by the growth of demand from key partners from the EU, but it is worth noting that the rise in import of raw materials for domestic producers, the deterioration of the price conditions of trade will restrain the possibility of increasing Ukraine’s exports.

As customs tariffs between Ukraine and the EU will be lifted almost completely, non-tariff barriers will become a major obstacle to trade. To overcome it, Ukraine has become a long and complex but necessary way to harmonize EU legislation, which includes transposition of EU standards, abolition of outdated norms, strengthening institutional capacity, etc. At the same time it should be noted that 40.52% of Ukraine’s exports are supplied to the EU market, which means that Ukrainian goods are able to compete on this market.

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