The Effect of Selected Economic Indicators on Export of Goods of Regions of Ukraine

SERHIY MOROZ[1], KHABIBULLO PIRMATOV[2], ELENA HORSKÁ[3], ĽUDMILA NAGYOVÁ[4], and ZUZANA POLÁKOVÁ[5]

[1] Associate Professor, Department of Marketing and Trade, Faculty of Economics and Management, Slovak University of Agriculture in Nitra, Tr. A. Hlinku 2, 949 76 Nitra, Slovak Republic, smorozmail@gmail.com
[2] Ph.D. student, Department of Marketing and Trade, Faculty of Economics and Management, Slovak University of Agriculture in Nitra, Tr. A. Hlinku 2, 949 76 Nitra, Slovak Republic, hpirmatov@mail.ru
[3] Professor, Department of Marketing and Trade, Faculty of Economics and Management, Slovak University of Agriculture in Nitra, Tr. A. Hlinku 2, 949 76 Nitra, Slovak Republic, elena.horska@uniag.sk
[4] Professor, Department of Marketing and Trade, Faculty of Economics and Management, Slovak University of Agriculture in Nitra, Tr. A. Hlinku 2, 949 76 Nitra, Slovak Republic, ludmila.nagyova@uniag.sk
[5] Associate Professor, Department of Statistics and Operations Research, Faculty of Economics and Management, Slovak University of Agriculture in Nitra, Tr. A. Hlinku 2, 949 76 Nitra, Slovak Republic, zuzana.polakova@uniag.sk

ARTICLE INFO

ABSTRACT

The paper is devoted to estimation of impact of selected economic indicators (gross regional product per capita, foreign direct investment per capita, and the average monthly nominal wage of the regular employee) on export of goods per capita of regions of Ukraine. It is based on the data of State Statistics Service of Ukraine for 2010-2015. The prepared regression model confirms that all above-mentioned indicators have a positive impact on export trade activities at a regional level of the country. Though, the level of influence of the indicators on export of goods per capita is different. The results of the paper show that the impact of foreign direct investment on export activities was not statistically significant. Gross regional product positively affects this indicator. The lowest influence on the export of goods per capita is observed for the average monthly nominal wage of the regular employee.

INTRODUCTION

Brief explanations of major trade theories are presented in Table 1. It is clear that theoretical approaches regarding explanation of causes and peculiarities of international trade changed substantially because of the impact of different economic situations and tendencies.

Table 1. Main trade theories

Theory	Explanation
Traditional trade theory	The theory is grounded on the concept of comparative advantage in order to explain inter-industry trade. Its various models can be identified, depending on explanations of what causes the relative cost and price differences across countries.
New trade theory	It is an extension of traditional trade theory, which explains why trade occurs between countries with similar technologies and endowments. Particular attention is given to economies of scale and product differentiation in imperfectly competitive markets, as an explanation for intra-industry trade.
Trade and multinationals theory	Due to the emergence of foreign direct investment and multinational firms, both the location and ownership of firms could span multiple countries throughout the world. Significant volumes of trade take place between parent firms and their subsidiaries and within multinational firms. Intra-firm flows of factors of production, especially mobile factors such as knowledge assets, are observed.

Source: authors' own composition based on Smith (2013).

The influence of various factors on export activities of countries and companies is considered in many publications. For instance, attention can be given to papers concerning these activities in non-European countries, as well as some multi-countries studies. Lugovskyy and Skiba (2016) research the effect of distance on export prices. It is noted that the existence of positive or negative effects depends on whether the rate of importer's income is higher or lower compared to the incomes of countries, in which export flows are directed.

Benkovskis and Wörz (2016) evaluate the effect of non-price factors (for instance, quality or taste) on export performance of emerging economies. Utilizing a relative export price index, researchers point out that these factors are very essential for countries in terms of their export competitiveness. However, the impact of this kind of factors is different for each country.

Employing a pendulum gravity model of outward FDI and export, Liu et al. (2016) determine that the ratio of export to outward FDI depends on the stages of the outward FDI undertakings. On the initial stages, this ratio is higher or much higher, and, on later stages, it is lower compared with the world's average.

Bournakis and Tsoukis (2016) evaluate the influence of government size and institutional features on export performance of OECD countries. It is discovered that domestically-produced goods and government size have a non-linear effect on export performance. At the same time, measures of labor market rigidity have a negative effect on export portions.

Cipollina et al. (2016) estimate how the exporter's ability to innovate and meet quality standards influences the overall quality of exports. Using a gravity model, they argue that the most innovative industries are more likely to have the higher quality rate of their goods and more competitive positions. Also, a substantial role in this respect belongs to the technological state of the industrial sector and economic situation of exporting country.

With respect to exports of European countries, several studies can be mentioned. Söderlund and Tingvall (2014) explore effects of institutions on firms' export activities. They identify that, in case of week institutions in recipient countries, export operations have the relatively short period and small volume. At the same time, this dependence on institutional quality decreases gradually over time.

Esteves and Rua (2015) evaluate the role of domestic demand pressure regarding exports activities in Portugal. It is stated that this variable is relevant for the short-run dynamics of exports of this country.

Navarro-García et al. (2016) assess the linkages of human resources, competitive intensity, export commitment, strategic behavior with strategic and operational export performance. Using structural equation modeling through Partial Least Squares, it is confirmed that positive relationships exist in this case. It is also identified that fluctuation in these relationships is connected with the existence of an export department in organizations.

Villena-Manzanares and Souto-Pérez (2016) consider whether corporate image, sustainability, and innovative orientation have an influence on export performance of manufacturing SMEs in Spain. Applying the technique Partial Least Squares, the researchers find out that there factors are positively associated with export activities of companies.

Wagner (2016) investigates how the quality of firms' exports and the distance to destination countries for Germany are connected. The researcher finds a positive correlation between the quality of exported goods and this distance.

Araujo et al. (2016) explore the impact of contract enforcement and export experience firm export dynamics in the condition with incomplete information. It is confirmed that there is a positive influence of export activities of companies in this respect. Though, conditional on survival, the export growth of companies is negatively associated with the quality of the country's institutions,

Enjolras et al. (2016) research the way of influence of SMEs' innovation on their export capabilities. Based on received data, they identify several common practices between innovation and export processes, namely: network management, consideration of the customer, the acquisition of information, skills management, the capitalization of knowledge, the global strategy, the follow-up of the projects, the intellectual property, and the corporate culture.

Pekovic and Rolland (2016) analyze the link between quality standards and export activities concerning the following selected indicators: the logarithm of exports per employee, the logarithm of exports per employee destined for EU countries, the logarithm of exports per employee destined for non-EU countries, and the export share in total sales. It is revealed that there is positive and statistically significant relationship among the indicators.

Spanos (2016) carries out research regarding the impact of internal organization of firms on the export activity. The researcher determines that firms with layers are positively correlated with export performance. Based on results of regression analysis, it is found out that a greater number of layers allows them to export a higher volume of goods to more destinations.

Using an error correction dynamic panel model for eleven euro area countries, Bobeica et al. (2016) explore whether there is a relationship between domestic and foreign sales. They identify that there is a statistically significant substitution effect in this case. Besides, the link among domestic demand and export activities appears to be asymmetric.

Also, there are some publications regarding the influence of different factors on the export trade in Ukraine. For example, Shevchuk and Cherkas (2008) investigate geographical diversification to promote technological export of the country. They also study peculiarities of regional industrial production and its impact on the structure of export trade.

Cherkas (2013) considers the issues of structural changes of the export trade in the country. The researcher argues that there is an asymmetrical impact of exchange rate dynamics on the industry's performance and export activities in its primary and technological sectors.

Vdovychenko and Zubritskiy (2016) analyze the influence of discretionary fiscal policy on Ukraine's export trade. The used gravity model allows them to find out that fiscal consolidation has a positive effect on this trade with a lag of 2-3 years.

At the same time, there is the lack of studies regarding the influence of economic indicators on export trade at Ukraine's regional level. The peculiarity of our paper is that it evaluates the influence of gross regional product per capita, foreign direct investment per capita, and the average monthly nominal wage of the regular employee on export of goods per capita of regions of Ukraine. Taking into consideration the chosen indicators, this type of research is quite new for the country.

Thus, the aim of this paper is to identify whether there is a dependence of export of goods per capita on gross regional product per capita, foreign direct investment per capita, and the average monthly nominal wage of the regular employee. The data of State Statistics Service of Ukraine are employed to carry out the analysis of the existing economic situation of the country's regions. All indicators were recalculated in USD, using information of National Bank of Ukraine regarding on annual average official exchange rate of hryvnia to the U.S. currency.
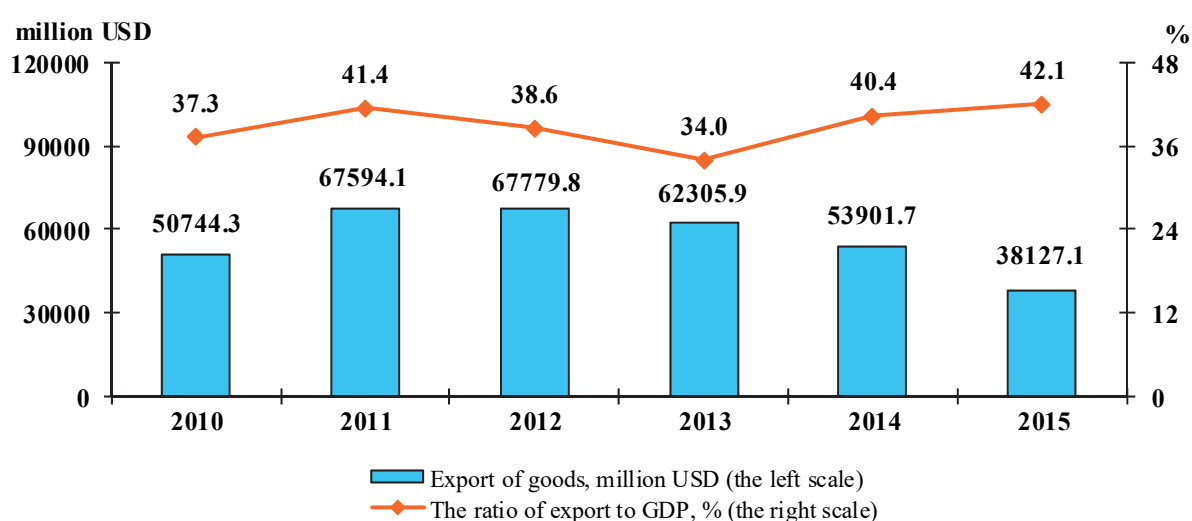
1. METHODOLOGY

The paper analyzes the impact of gross regional product per capita (USD) (x_1), foreign direct investment per capita (USD) (x_2) and the average monthly nominal wage of the regular employee (USD) (x_3) on the export of goods per capita (USD) (y). To carry out analysis, inputs of regions of Ukraine were employed. We analyzed data for six years (from 2010 to 2015), using a methodology for processing panel data with support of GRETL and SAS.

2. RESULTS AND DISCUSSION

It is worth to note that the situation with the export of goods till 2012 was quite favorable for Ukraine. In 2010-2012, its volume increased from 50744.3 million USD to 67779.8 million USD (or by 33.6%) (Table 2). Later, as a consequence of the deteriorated economic situation in Ukraine, caused by the conflict in the eastern part of the country and the annexation of Crimea, there was a significant reduction of this indicator. In 2015, it was equal to 38127.1 million USD, or by 38.8% less than in 2013.

Table 2. Export of goods from Ukraine, 2010-2015

Source: authors' own composition based on the data of State Statistics Service of Ukraine (2015c, 2016c), World Bank (2017).

To compare this export with the overall development of the Ukrainian economy, the ratio of export to gross domestic product (GDP) was calculated. During 2010-2015, GDP and export of goods decreased by 33.4% and 24.9% correspondingly. As a result, despite the decline of commodity export volume, this ratio was higher in 2014 (40.4%) and 2015 (42.1%) in comparison with 2013.

Selected economic indicators of the regions of Ukraine are presented in Table 3. The data show that there was a constant growth of these indicators between 2010 and 2014. For instance, the increase was observed regarding the average level of foreign direct investment per capita from 618.8 USD to 922.3 USD (or by 49.0%), gross regional product per capita from 2207.5 USD to 3667.4 USD (or by 66.1%), the average monthly nominal wage of the regular employee from 221.7 USD to 365.5 USD (or by 64.9%), and export of goods per capita from 647.5 USD to 2483.8 USD (or by 283.6%) during the given period. In 2014-2015, the above-mentioned indicators fell by 19.4%, 24.9%, 28.5%, and 13.6%, respectively.

Table 3. Selected economic indicators of regions of Ukraine (at the beginning of years), USD

	2010	2011	2012	2013	2014	2015	2015 as % of:	
							2010	2014
Foreign direct investment per capita:								
the minimal level	61.1	55.2	57.4	59.4	64.3	52.2	85.4	81.2
the maximum level	7031.9	7936.2	9006.9	9783.0	10190.7	8068.1	114.7	79.2
the average level	618.8	679.5	760.9	846.4	922.3	743.5	120.2	80.6
the standard deviation	1342.3	1514.2	1716.1	1850.9	2004.6	1595.5	118.9	79.6
Gross regional product per capita:								
the minimal level	1204.3	1378.5	1660.2	1818.2	1895.9	1184.4	98.3	62.5
the maximum level	7840.6	8874.4	10006.7	12192.3	13687.2	10445.5	133.2	76.3
the average level	2207.5	2573.7	3102.3	3472.2	3667.4	2754.7	124.8	75.1
the standard deviation	1280.3	1470.0	1656.5	1991.1	2313.0	1785.5	139.5	77.2
The average monthly nominal wage of the regular employee:								
the minimal level	181.2	209,1	234.8	273.4	295.1	212.6	117.3	72.0
the maximum level	405.7	432.4	503.5	576.5	626.4	452.3	111.5	72.2
the average level	221.7	255.3	295.9	339.4	365.5	261.3	117.9	71.5
the standard deviation	44.0	45.5	55.9	62.1	69.3	49.4	112.3	71.3
Export of goods per capita:								
the minimal level	117.9	97.6	151.5	124.9	138.5	129.2	109.6	93.3
the maximum level	2496.4	2958.1	3903.9	14254.2	12408.6	11469.6	459.4	92.4
the average level	647.5	822.4	1105.3	1120.7	2483.8	2146.5	331.5	86.4
the standard deviation	617.0	794.3	1081.3	3785.6	3560.7	2938.9	476.3	82.5

Source: authors' own calculations based on the data of State Statistics Committee of Ukraine (2010a, 2010b), State Statistics Service of Ukraine (2011, 2012, 2013, 2014a, 2014b, 2014c, 2015a, 2015b, 2015c, 2016a, 2016b).

In the first step, we tested cross-correlation between variables (multicollinearity) through SAS statistical software. For testing, we used the Tolerance function, which values are greater than 0.1, confirming the mutual independence between variables. The absence of multi-collinearity is also confirmed by the Variance Inflation function, which values are less than 10, fulfilling the condition for confirming the absence of multi-collinearity (Table 4).

Table 4. Multicollinearity testing

Variable	Pr > |t|	Tolerance	Variance Inflation
Intercept	<.0001	.	0
ln_x1	<.0001	0.57901	1.72710
ln_x2	0.9968	0.51304	1.94916
ln_x3	0.0002	0.77019	1.29838

Source: authors' work in SAS

To test homoscedasticity, we used the Test of First and Second Moment Specification using SAS software as well. The P value (0.1807) confirms homoskedasticity (Table 5).

Table 5. Homoscedasticity testing

	Test of First and Second Moment Specification	
DF	Chi-Square	Pr > ChiSq
9	12.62	0.1807

Source: authors' work in SAS

For modeling dependence between the above-mentioned indicators was used the Fixed effect model, the equation becomes:

$y = 108.505 + 0.985 \ln x_1 - 0.19 \ln x_2 - 7.6796 \ln x_3$ (Table 6).

Table 6. Fixed effect model

Model: Fixed-effects, using 150 observations

	Included 25 cross-sectional units				
	Time-series length = 6				
	Dependent variable: ln_y				
	Coefficient	*Std. Error*	*t-ratio*	*p-value*	
const	108.505	35.1269	3.0889	0.0025	***
ln_x1	0.985401	0.123933	7.9511	<0.0001	***
ln_x2	−0.190054	0.121932	−1.5587	0.1217	
ln_x3	−7.67957	2.4573	−3.1252	0.0022	***
Mean dependent var	6.346592		S.D. dependent var		0.775602
Sum squared resid	6.242829		S.E. of regression		0.226209
LSDV R-squared	0.930351		Within R-squared		0.476629
LSDV F(27, 122)	60.35663		P-value(F)		4.77e-58

Log-likelihood	25.59936	Akaike criterion	4.801287
Schwarz criterion	89.09908	Hannan-Quinn	39.04880
rho	−0.000930	Durbin-Watson	1.730059

Joint test on named regressors -

Test statistic: $F_{(3, 122)} = 37.0348$

with p-value = $P(F_{(3, 122)} > 37.0348) = 4.3454e\text{-}017$

Test for differing group intercepts -

Null hypothesis: The groups have a common intercept

Test statistic: $F_{(24, 122)} = 31.8334$

with p-value = $P(F_{(24, 122)} > 31.8334) = 1.81759e\text{-}041$

Source: authors' work in GRETL, based on the data of State Statistics Committee of Ukraine (2010a, 2010b), State Statistics Service of Ukraine (2014a, 2014c, 2015c).

The selected regression model explains the variability of export of goods per capita (USD) to around 93% (R-squared = 0.930351, Table 6). The effect of foreign direct investment in the regions was not statistically significant (P value = 0.1217). Gross regional product positively affects the export of goods per capita (USD): with the increase of 100 USD, we can expect an average increase of exports by about 268 USD (P value = 0.0001). Since we have used the logarithmic model, regression coefficients need to be de-logarithmized (0.9854 de-logaritmized = 2.68. When we interpret the results in 100 USD, the value of the coefficient is 268).

The average monthly nominal wage of the regular employee also has a positive effect on the export, although not as significant as for previous indicators. If this wage increased by 100 USD, the export would increase by an average of 0.046 USD (P value = 0.0022) (analogously as in the previous case, -7.67957 de-logaritmized = 0.00046. In the interpretation of the results in 100 USD, the value of the coefficient is 0.046).

DISCUSSION

In this paper, we tried to point out the ties between export and investments, gross regional product and average monthly nominal wage of the population. We performed the analysis in the above-mentioned regions during the 2010-2015 period. As we used both cross-sectional and time-based data when processing, we employed the Fixed effect model. Based on the results, that direct foreign investments do not significantly affect exports from Ukraine, but the rest of independent variables do so (which is questionable), we concluded that more detailed analyses are required, whether within each region individually or for each year separately. Such detailed analyses could be then the basis for decision makers and managers in the field of analysed macroeconomic indicators.

There is the lack of publications concerning Ukraine and other countries, in which the impact of the above-mentioned indicators on the country's export activities was simultaneously evaluated as well. Though, there are some publications devoted to the assessment of the influence of other variables on country's export. For example, Rodil et al. (2016) analyze the influence of different variables concerning innovation and structural characteristics on the export behavior of Spanish firms. As in our study, obtained results show a positive link between innovation and export activities, though the influence of selected indicators on export behavior of firms was different.

Oura et al. (2016) explore whether innovation capacity and international experience have a significant impact on export performance of Brazilian small and medium-sized enterprises. Based on their findings, researchers argue that international experience is more important and influential in terms of its impact on export performance of companies in comparison with innovation capacity.

Fedoseeva and Zeidan (2016) examine the role of BRIC countries in European exports, considering several trade determinants, such as exchange rates, relative prices and foreign demand. They note that all these determinants are relevant for European exports. However, their impact is heterogeneous regarding countries and economic sectors. Moreover, exchange rate changes have an asymmetric effect on export operations.

The above-mentioned articles confirm that indicators may have different positive and negative impacts on export activities. In each case, there are specific features and tendencies. That is why, regarding Ukraine, it is necessary to continue research in this direction.

CONCLUSION

To analyze the situation, we selected four economic indicators, namely: gross regional product per capita (USD) (x_1), foreign direct investment per capita (USD) (x_2), the average monthly nominal wage of the regular employee (x_3), and export of goods per capita (USD) (y). The input data for six years from 25 regions of Ukraine were used for this analysis. In addition to foreign direct investment, it was proved that gross regional product per capita and the average monthly nominal wage of the regular employee also had a positive impact on export of goods per capita. There is a need of further development of the export trade in Ukraine. However, the results of this study show that it is necessary to use a clearly defined approach to promote export growth, taking into consideration existing regional peculiarities.

REFERENCES

Araujo, L., Mion, G., Ornelas, E. (2016), "Institutions and Export Dynamics", *Journal of International Economics*, Vol. 98, pp. 2–20.

Benkovskis, K., Wörz, J. (2016), "Non-price Competitiveness of Exports from Emerging Countries", *Empirical Economics*, pp. 707–735.

Bobeica, E., Esteves, P.S., Rua, A., Staehr, K. (2016), "Exports and Domestic Demand Pressure: A Dynamic Panel Data Model for the Euro Area Countries", *Review of World Economics*, Vol. 152, No. 1, pp. 107–125.

Bournakis, I., Tsoukis, C. (2016), "Government Size, Institutions, and Export Performance among OECD Economies", *Economic Modelling*, Vol. 53, pp. 37–47.

Cherkas, N. (2013), "Impact of Exchange Rate and Imports on the Export Structure Dynamics in Ukraine", *Economy and Forecasting*, Vol. 2, pp. 128–139.

Cipollina, M., Demaria, F., Pietrovito. (2016), "Determinants of Trade: the Role of Innovation in Presence of Quality Standards", *Journal of Industry, Competition and Trade*, Vol. 16, No. 4, pp. 455–475.

Enjolras, M., Camargo, M., Schmitt, C. (2016), "SMEs' Innovation and Export Capabilities: Identification and Characterization of a Common Space Using Data Spatialization", *Journal of Technology Management & Innovation*, Vol. 11, No. 2, pp. 56–69.

Esteves, P.S., Rua, A. (2015), "Is There a Role for Domestic Demand Pressure on Export Performance?", *Empirical Economics*, Vol. 49, No. 4, pp. 1173–1189.

Fedoseeva, S., Zeidan, R. (2016), "A Dead-end Tunnel or the Light at the End of it: The Role of BRICs in European Exports", *Economic Modelling*, Vol. 59, pp. 237–248.

Greene, W.H. (2003), *Econometric Analysis,* 5th Edition, Prentice Hall, Upper Saddle River.

Liu, Z., Xu, Y., Wang, P., Akamavi, R. (2016), "A Pendulum Gravity Model of Outward FDI and Ex-

port", *International Business Review*, Vol. 25, No. 6, pp. 1356–1371.

Lugovskyy, V., Skiba, A. (2016), "Positive and Negative Effects of Distance on Export Prices", *Journal of Economic Behavior & Organization*, Vol. 127, pp. 155–181.

Navarro-García, A., Arenas-Gaitán, J., Rondán-Cataluña, F.J., Rey-Moreno, M. (2016), "Global Model of Export Performance: Moderator Role of Export Department", *Journal of Business Research*, Vol. 69, No. 5, pp. 1880–1886.

Oura, M. M., Zilber, S. N., Lopes, E. L. (2016), "Innovation Capacity, International Experience and Export Performance of SMEs in Brazil", *International Business Review*, Vol. 25, No. 4, pp. 921–932.

Pekovic, S., Rolland, S. (2016), "Quality Standards and Export Activities: Do Firm Size and Market Destination Matter?", *Journal of High Technology Management Research*, Vol. 27, No. 2, pp. 110–118.

Rodil, Ó., Vence, X., Sánchez, M.D.C. (2016), "The Relationship between Innovation and Export Behavior: The Case of Galician Firms", *Technological Forecasting & Social Change*, Vol. 113, Part B, pp. 248–265.

Shevchuk, V. O., Cherkas, N. I. (2008), "The Regional Industrial Production and the Geography of Foreign Trade Influence on the Technological Export", *Regional Economy*, Vol. 2, pp. 34–43.

Smith, P.J. (2013), *Global Trade Policy: Questions and Answers*, John Wiley & Sons, ew York.

Söderlund, B., Tingvall, P. G. (2014), "Dynamic Effects of Institutions on Firm-level Exports", *Review of World Economics*, Vol. 150, No. 2, pp. 277–308.

Spanos, G. (2016), "Organization and Export Performance", *Economics Letters*, Vol. 146, pp. 130–134.

State Statistics Committee of Ukraine (2010a), *Statistical Yearbook of Ukraine for 2009*, Kyiv.

State Statistics Committee of Ukraine (2010b), *The Number of Population as of 01.01.2010 and the Average Number of Population in 2009*", http://ukrstat.gov.ua/operativ/operativ2009/ds/kn/kn_u/kn1209_u.html (referred on 25/01/2017).

State Statistics Service of Ukraine (2011), *Population of Ukraine in 2010. Demographic Yearbook*, Kyiv.

State Statistics Service of Ukraine (2012), *Population of Ukraine in 2011. Demographic Yearbook*, Kyiv.

State Statistics Service of Ukraine (2013), *Population of Ukraine in 2012. Demographic Yearbook*, Kyiv.

State Statistics Service of Ukraine (2014a), *Investment of External Economic Activity of Ukraine. Statistical Publication*, Kyiv.

State Statistics Service of Ukraine (2014b), *Population of Ukraine in 2013. Demographic Yearbook*, Kyiv.

State Statistics Service of Ukraine (2014c), *Ukraine's Foreign Trade. Statistical Yearbook*, Kyiv.

State Statistics Service of Ukraine (2015a), *Statistical Yearbook of Ukraine for 2014*, Kyiv.

State Statistics Service of Ukraine (2015b), *The Number of Population as of 01.01.2015 and the Average Number of Population in 2014*, http://www.ukrstat.gov.ua/operativ/operativ2014/ds/kn/kn_u/kn2014_u.html (referred on 25/01/2017).

State Statistics Service of Ukraine (2015c), *Ukraine's Foreign Trade. Statistical Yearbook*, Kyiv.

State Statistics Service of Ukraine (2016a), *Gross Regional Product in 2014. Statistical publication*, Kyiv.

State Statistics Service of Ukraine (2016b), *Investment of External Economic Activity of Ukraine. Statistical Publication*, Kyiv.

State Statistics Service of Ukraine (2016c), *Ukraine's Foreign Trade. Statistical Yearbook*, Kyiv.

Vdovychenko, A., Zubritskiy, A. (2016), "Fiscal Policy Effects on Commodity Exports in the Gravity Model of Ukraine's Foreign Trade", *Finance of Ukraine*, Vol. 6, pp. 51–71.

Villena-Manzanares, F., Souto-Pérez, J. E. (2016), "Sustainability, Innovative Orientation and Export Performance of Manufacturing SMEs: An Empirical Analysis of the Mediating Role of Corporate Image", *Journal of Industrial Engineering and Management*, Vol. 9, No. 1, pp. 35–58.

Wagner, J. (2016), "Quality of Firms' Exports and Distance to Destination Countries: First Evidence from Germany", *Open Economies Review*, Vol. 27, No. 4, pp. 811–818.

World Bank (2017), *World Development Indicators*, Ukraine, http://databank.worldbank.org/data/reports.aspx?source=2&series=NY.GDP.MKTP.CD&country=UKR (referred on 25/01/2017).