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Prospects for European Integration of the Ukrainian Economy: Views from the In- and Outside

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FOREIGN TRADE INTEGRATION OF UKRAINE

The aim of this paper is to examine on the basis of selected data the extent of foreign trade integration of Ukraine and address several research questions resulting from this analysis. The integration of an economy into the international division of labor can be described by the intensity of international trade, direct investments and labor migration.

1. Introduction

In terms of its foreign trade development, the Ukrainian economy is influenced by international trade, international capital movements (direct investments) and in particular labor migration. The globalization of the Ukrainian economy can be measured using a globalization index. The globalization index KFO 2006 (see the economic cycle research of the ETH – Swiss Federal Institute of Technology in Zurich) measures economic, social and political dimensions of globalization of a national economy. This enables us to determine temporal changes in globalization for 123 countries in the time period between 1970 and 2003. The index consists of 23 economic, social and political variables. The economic dimension of the globalization index measures, on the one hand, actual trade and investment flows and, on other hand, the extent to which countries shield themselves from the outside by means of trade and capital controls. The

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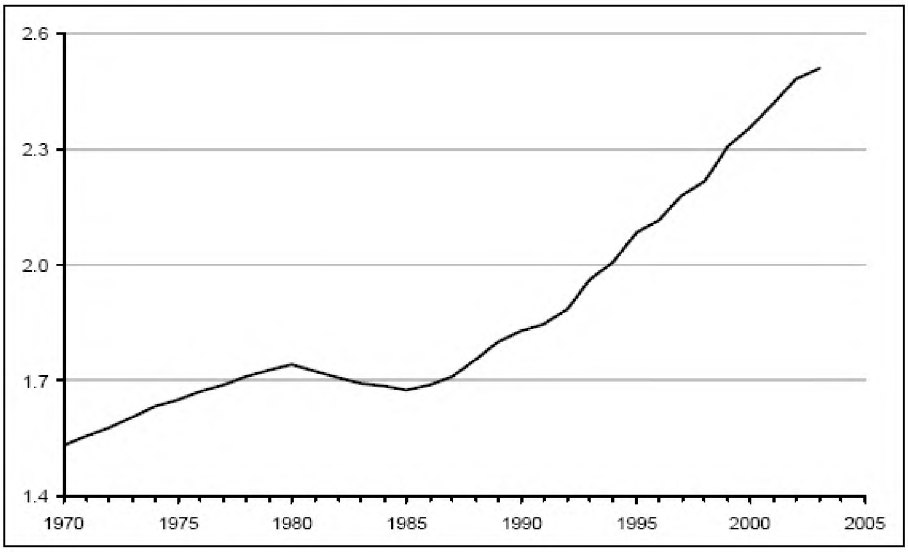
social dimension of globalization reflects the degree of the spread of information, ideas and people; the political dimension deals with the intensity of political co-operation among countries. The average globalization index of the 123 countries is presented in Figure 1.

Figure 1.

World Globalization Development



Source: ETH – Swiss Federal Institute of Technology in Zurich, http://WWW.kof.ethz.ch/globalization

Of the 123 countries, the degree of globalization is the highest in the United States of America, Sweden and Canada; Ukraine assumes 64th place here. The globalization index sees Germany in 20th position. Economic globalization of Ukraine is lower in comparison with political and social globalization – the economic globalization index puts Ukraine in 82nd place.

The paper is structured as follows. In Section 2, the trends in foreign trade integration of Ukraine will be addressed. The economic phenomenon of trade creation and trade diversion, as well as the relationship between geography and trade in the case of Ukraine, will be discussed in Section 3. Furthermore, the question of regional diversification or specialization of Ukraine's trade will be raised. The economics literature shows that for emerging markets there is economic correlation between the institutions and the commodity, factor, and financial markets of a country; this relationship will be dealt with in Section 4. A short summary concludes.

2. Foreign Trade Integration

The value of trade volume between Ukraine and the EU-25 amounted to more than 7 billion Euros in 2005; imports were valued at more than 9 billion Euros. The peculiarity of international trade of Ukraine, however, is its high volatility of trade volumes. The fluctuations of the previous five years made 13.2 percent annually for exports and 22.4 percent for imports. During the individual years, exports fluctuated between the extreme values of 2.6 and 26.7 percent; imports varied between 10.2 and 39.4 percent in the respective years. What are the causes of this instability? Are those the prices, the exchange rates, or the quantities?

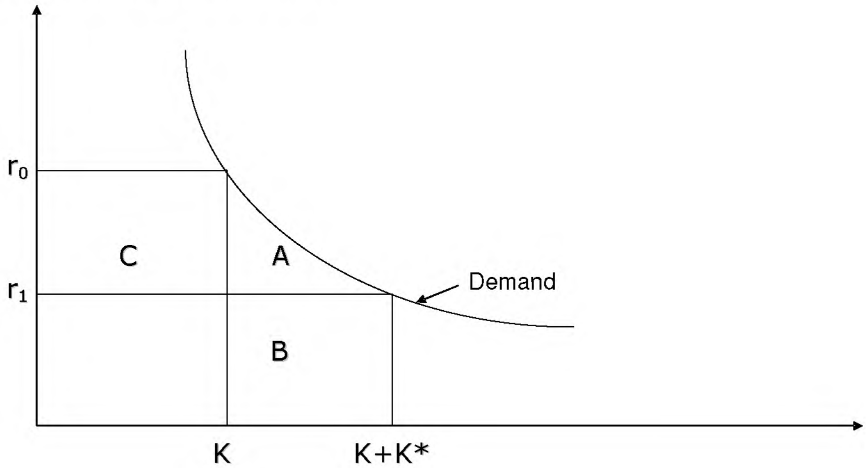
Foreign direct investments (FDI) are an additional feature of foreign trade integration of Ukraine. From an economic perspective, a distinction must be made between the flow(s) and the stock(s) of foreign investments as follows: FDI(2006) = FDI(2005) + Flows of DI(2006). To give an example: the flow of direct investments (DI) in a national economy was empirically observed at $DI(t) = 3t^{1/2}$. From this, we can determine the development of the stock of direct investments in the national economy over time: $FDI(t) = 2t^{3/2} + FDI(t_0)$. If Ukraine wants to attract more foreign direct investments, its economic policy must assure that the flows DI are activated.

The aggregate direct investments in Ukraine currently amount to more than US$9 billion. Of this, 16 percent comes from the EU-25. As a comparison though, the aggregate German FDIs in Hungary alone amounted to 10 billion Euros. One research question might be: Why are the FDIs in Ukraine comparatively low?

The economic effects of FDIs in a country can be theoretically presented on the basis of Figure 2. Surface *A* depicts net advantage from the flow of FDI. Surface $B = r_1K^*$ represents factor payment for foreign capital expenditure. Surface *C* explains the change in functional income for the benefit of employees. The research question is thus: have the potential effects of FDI on Ukraine been empirically examined? What effects from FDI can be expected for the Ukrainian workers?

Figure 2.

Economic Effects of FDIs



3. Integration Effects: Trade Creation and Trade Diversion

A particular feature of the global commodity and services markets are the considerable differences in the degrees of geographical integration and regional differentiation. International trade shows a clear trend towards regionalization. The international exchange of goods and services is essentially concentrated in the triad (EU countries, North America and Asia), while integration with the neighbouring, less economically developed economies can be intensive, such as between Western Europe and the countries of Central and Eastern Europe (CEE). A considerable part of the world trade is generated by the countries which participate in formal regional and interregional unions and grant each other trade privileges within such associations. Four largest regional integration communities account for more than one third of the world-wide commodity trade.

3.1 Trade Creation and Trade Diversion

Due to the European integration of the 25 EU states, Ukraine may experience the phenomena of trade creation and trade diversion with respect to its foreign trade relations. Trade creation can be assessed positively; the integration, for example in the form of a customs union, leads to additional trade, which increases national incomes. However, European integration can also result in trade diversion for Ukraine. Trade diversion is negative, as the previous efficient provider (e. g. a firm from Ukraine) is crowded out from the market by the integration of the EU-25.

As a branch of economics, the so-called New Economic Geography deals with spatial distribution of economic activities and, in particular, with their change in the course of globalization. It examines which technological and economic factors lead to strong concentration of economic activity in certain regions, while other regions are marked by low density of economic activities. The peculiarity of the New Economic Geography consists in its explanation of the emergence of economic core-periphery structures in an economic area. The interplay between regional factors has implications for international trade. Has this relationship been empirically analyzed for the regions of Ukraine?

3.2 Geography and Trade

The unit of measurement for geographical differentiation and regionalization of Ukrainian international trade relations is geographical distance – measured in kilometers – between Ukraine and its most important trade partners. In order to provide a graphic example of the economic relationship between geography and trade, the result of the linear regression analysis for the forty most important target countries of the Saxonian export market is presented in Figure 3.

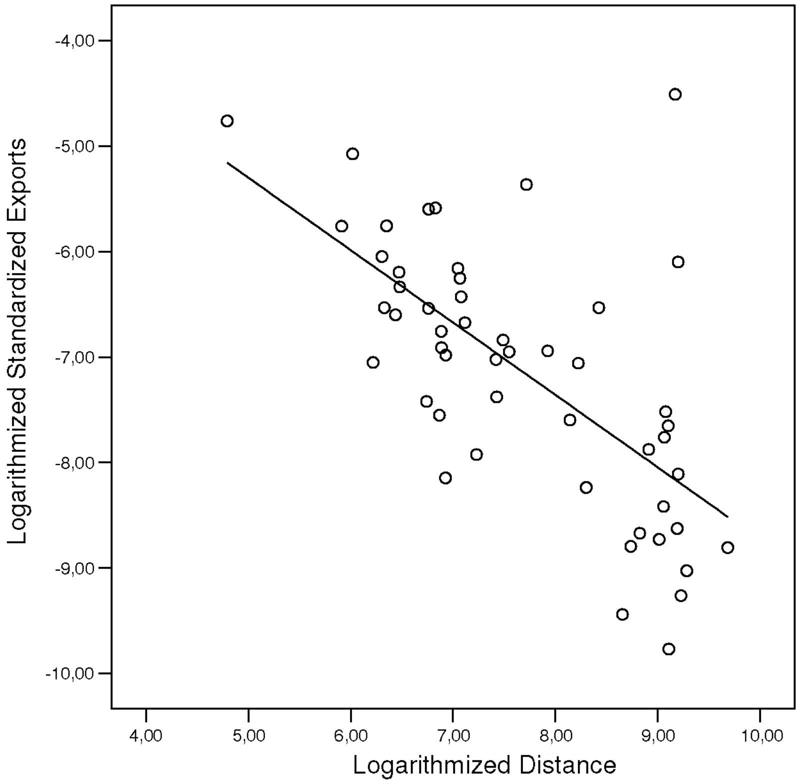
The logarithmized kilometer distances (between Dresden and the capital cities of the target countries) are depicted on the abscissa axis, while the logarithmized standardized exports of Saxony are depicted on the ordinate axis. The standardization of exports means that market size effects can be assumed neutral.

The regression line on Figure 3 shows that greater geographical distance between Dresden (Saxony) and the international trade areas produces the effect of reduced average export activity. This negative relationship between distance and export can occur of very different reasons. In addition to overcoming logistic difficulties and significant transport costs for far-away markets, economic risks arise from legal and cultural differences, in particular information asymmetries, differences in regulatory and market conditions, lack of transparency, different cultures. This in turn explains the negative relationship between export and geographical distance from the perspective of the exporting firms. Thus, geographical distance is conceived as a variable for international market entry conditions.

The so-called distance elasticity of exports can be calculated from the empirical analysis of exports. The intensity of the reaction of exports in relation to distance is measured by elasticity. Distance elasticity for Saxonian exports is 0.43. This means that if the distance increases by one unit, exports decrease at an average rate of 0.43 units. How large is the distance elasticity of Ukrainian exports?

Figure 3.

Saxonian Exports – Dresden and Worldwide Areas of Trade



3.3 Regional Specialization vs. Diversification

In the globalized economy, the concentration of production in a national economy in accordance with comparative cost advantages leads to specialization profits and, thus, to increases in income. At the same time, regional specialization can produce economic dependencies and significant macro-economic contagions. Regional diversification, i.e. a lower degree of geographical concentration, can trigger dispersion of risks and, hence, generate diversification advantages for the exporting sector of the national economy. From the viewpoint of regression analysis, this means that the regression lines in Figure 3 would have smaller slopes. Thus, there are two opposite developments in the international division of labor: regional specialization on the one hand, and regional diversification on the other.

The effect of geographical diversification is similar to that of portfolio diversification. This effect of risk dispersion will be the greater the lower is the correlation of the economic activities of both regions. However, the effect of risk dispersion also emerges in the case of positive correlation, i.e. when the economic and cyclical developments in different countries are more likely to be parallel rather than opposite. Only when correlation is +1, would there be no effect which reduces the trade risk.

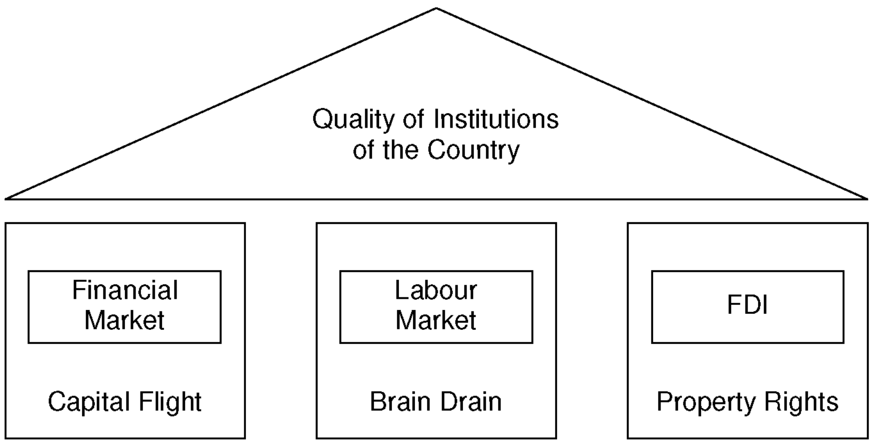
The research question is as follows: how great are the regional structures and dependencies in the Ukrainian foreign trade? Do they offer any conclusions with regard to a potential customs union with the EU-25 or with other countries?

4. Markets and Institutions of Ukraine

The attractiveness of an economy and the efficiency of its institutions can be assessed on the basis of the following factors: labor market migration (brain drain), financial markets (capital flight) and direct investments (property rights), see Figure 4.

Figure 4.

Institutions of a Country



On the basis of the mentioned features, the entrance-exit option in the market economies offers initial clues for the international evaluation and categorization of the national economy. In other words, the success of Ukraine's integration into the international economy can be analyzed from the perspective of international competition among different jurisdictions. If, for example, Ukraine is characterized by strong exit-effects on the labor market, this sheds doubt on the current state of the Ukrainian institution of labor market from a normative standpoint. One research question would be: Are there studies dealing with the state of the labor markets, the financial markets and the markets for international capital shares? What kind of assessment do such studies offer?

5. Summary

The increase in the Ukrainian foreign trade over time, the accompanying relatively weak buildup of foreign enterprise capital in Ukraine, and the relatively high percentage of Ukrainian workers employed abroad offer important clues for the evaluation and assessment of the foreign trade integration of Ukraine. In empirical terms, developments should be examined in order to determine the economic and political factors that speak in favor of or against further foreign trade integration of Ukraine into the world economy.

Bibliography

1. Babetskaia Kuharchuk, O., Maurel, M., 2004, Russia's Accession to the WTO: The Potential for Trade Increase, Journal of Comparative Economics 32.
2. Broll, U., Marjit, S. and J.E. Wahl, 2005, Regional Policy, Integration and the Distribution of Foreign Investment, Review of Regional Research 25, 107–112.
3. Deutsche Bundesbank, 2006, Determinanten der Leistungsbilanzentwicklung in den mittel- und osteuropäischen EU-Mitgliedsländern und die Rolle deutscher Direktinvestitionen, Monatsbericht Januar, 17–32.
4. Feenstra, R. C., 2004, Advanced International Trade; Theory and Evidence, Princeton.
5. Fratianni, M. and H. Kang, 2006, Heterogeneous Distance-Elasticities in Trade Gravity Models, Economics Letters 90, 68–71.
6. Harbuzyuk, O., S. Lutz, 2004, Analyzing Trade Opening in Ukraine: Effects of a Customs Union with the EU, Working Paper B 26, ZEI (Center for European Integration Studies), Bonn.

7. Hoon, H.T., 2000, Trade, Jobs and Wages, Cheltenham, Northampton.
8. KOF Globalisierungsindex, 2006, Konjunkturforschungsstelle ETH Zuerich, www.kof.ethz.ch
9. Krugman, P. R., 1991, Geography and Trade, Cambridge, London.
10. Libman, A., 2004, Russia's Integration into the World Economy, Discussion Paper 134, EIIW Working Paper No. 134, Bergische Universität Wuppertal.
11. Markusen, J. R., 2002, Multinational Firms and the Theory of International Trade, MIT Press, Cambridge, London.
12. Schnitzer, M., 2003, Privatisierung in Osteuropa: Strategien und Ergebnisse, Perspektiven der Wirtschaftspolitik 4, 359–377.
13. Van Rijckeghem, C. and B. Weder, 2001, Sources of Contagion: Is it Finance or Trade? Journal of International Economics 54, 293–308.

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