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ASSESSING THE POTENTIAL OF EU-UKRAINE FREE TRADE

The main goal of this article is to evaluate the effect of deepening of the economic integration towards economies of the EU neighbouring countries within the scope of the European neighbourhood policy. Based on scientific theoretical provisions, analysis of the current situation and statistics, this article is deemed to identify the cuts of the effects of the economic integration and evaluate its potential influence on progress of the Ukrainian economy.

Key words: European neighbourhood policy, Economic integration, Trade liberalization effects, Free trade agreement.

Introduction

As the globalisation processes affect the structure of the international relations and delete the boundaries between the interior and exterior, negative phenomena of the regional level can rise to the international scale. Due to technological progress and the liberalization of trade and movement of factors production alongside with the increasing scope of interaction between the countries there is a greater sensitivity towards the internal economic and political crises occurring in other countries. The realisation of the high level of mutual dependence forced the EU to make some radical changes in its outlook on its neighbouring countries and assess the potential of such countries as possible economic and political partners.

With this in view EU initiated a European Neighbourhood Policy (ENP) which "is designed to give new impetus to cooperation with the EU's neighbours following enlargement" (Strategy Paper, 2004). This policy reinforces a new quality level of cooperation with the neighbouring countries allowing them to enjoy certain privileges offered by EU membership, to participate in the key EU policies and programmes. Also, in the long run it can give them access to the EU market via free trade agreements.

The EU perspective of access to the common market is based on the positive experience of the transition of the Central and Eastern European countries with a purpose of encouraging the process of restructuring, modernization and welfare growth. The largest economic effect is expected from the development of the economic integration and acquisition of new trade preferences. However, it is not clear what cross-sectional view of the economic integration development effects will be produced and how they will affect the economies of the neighbourhood countries. To answer these questions a comprehensive assessment of the impact of integration and free trade is required. The purpose of this article is to conduct an ex-ante assessment of the Ukraine's free trade potential and of the possible consequences of signing a Free Trade Agreement (FTA).

1. The theoretical aspects of free trade

The acknowledged benefit of free trade has already become an axiom of theoretical economics. As early as in the 18th century A. Smith stated that countries can gain from both export and import of goods. D. Ricardo stated that trade between two countries can be profitable for

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both countries if one of them exports goods which have a comparative advantage in its industry. The theory of Heckscher-Ohlin claims that the differences of the comparative advantage of the countries depend on their factor endowments: a country has a comparative advantage in the production of goods which uses surplus factors of the country. Based on the latest trade theories trade between countries can be developed even in case of similar factor endowment. The group of the new trade theories takes into consideration the imperfect competitiveness of the markets and makes an assumption that the main impulse of the international trade is the differentiation of production and growing economy of scale. Trade theories are closely related to economic integration theories which are based on customs union theories.

The liberalization of trade can generate a number of positive and negative effects between countries signing free trade agreements and third parties. In economic theory such effects are mainly classified into two basic groups (McDonald, Dearden, 1994):

- static effects – changes in the trade model of the countries which signed the agreement with fixed production and technology factors;
- dynamic effects – structural changes of the production structure of the countries which signed the agreement arising from changes to the competitive environment.

Of all static integration effects one should, first of all, point out the removal of customs tariffs which leads to such economic consequences as trade creation, trade diversion and trade expansion. A number of researches conducted on the elimination of customs tariffs confirmed the hypothesis that as an end result preferential trade agreements do not necessarily lead to a shift to a freer trade because international trade can be affected:

- by trade creation effect, when in result of the removal of tariffs trade is created among partner countries;
- by trade diversion effect due to third party discrimination caused the replacement of low-cost goods for higher-cost goods from FTA partner with duty free import, thus, sold cheaper than the products of the rest of the world which are protected by customs tariffs;
- by trade expansion effect, which is case when a lower market price in one of the FTA countries stimulates aggregate demand in this country and has to be satisfied by way of foreign trade.

Having established that preferential trade liberalization does not always lead to a freer trade, the factors which could minimize the scale of negative effects were identified (Molle, 1994):

- The production structure. Two economies can be either complementary or competitive. With complementary production structures it is most likely that both countries have reached a high specialization along the lines of certain product group, thus, preferential trade advantages lose their importance. If the products of one country are competitive towards the other, specialization along the lines of inter-industry trade is feasible and FTA conclusion is likely to be beneficial.

- The size of the union. The more numerous and the larger the countries are participating in the FTA conclusion, the better the prospects for division of labour and the smaller the risk of trade diversion.

- The level of the tariffs. The higher are initial tariffs of the trade partners, the greater are welfare effects of the FTA.

- Transport and transaction costs. FTA weakness can lead to a perspective where transport costs will replace the tariffs as an obstacle to further specialization. Therefore, FTAs are concluded between neighbouring countries.

- Flexibility. The benefit of preferential trade is greater, when both countries can react flexibly to new perspectives which arise as a result of specialization and are demanding changes in production structures.

Closer economic integration also includes elimination of non-tariff barriers (NTB). NTB which require direct use of physical resources create costs to all the parties – producers, exporters and importers, thus failing to produce a comparative advantage as well as economies of scale and competitive environment for a party. The removal of NTB means a realistic cost-reduction and, therefore, it creates better conditions for welfare growth than an equivalent elimination of tariffs. Moreover, as a result of their abolishment the effects of trade creation, trade diversion and trade expansion take place.

Dynamic effects are a consequence of economic adaptation and production structure adjustment to the changing situation, they are related to the potentially created conditions of FTA in reaching economic growth both in individual sectors and in the whole economy:

- Improved competition and efficiency. FTA implies a potential of production efficiency growth. The increasing import competition and expansion of export opportunities as well as the general mode of competition encourages the manufacturers to look for ways of decreasing production costs. The influence of the increase of technical efficiency in result of removal of protection upon welfare is potentially many times greater than the benefit of the creation or diversion effects (Pelkmans, 2001).

- The effect of economies of scale. In case of closed economies, the scale of production and cost-reduction related to it are limited by the size of the market. As shown by P. Krugman, the analyst of the phenomenon of economy of scale, trade can be simply a method of expanding the market by creating conditions of using economy of scale (Krugman, 1994). With the increase of the market size the effect of economy of scale is expressed by decreasing production volumes as the production process is cheaper due to the rising volumes of production. In case of FTA each country has an opportunity to specialise by producing a narrower range of products and buying other products from trade partners and at the same time reaching not only cost economy effect, but also increasing consumer welfare while expanding on the product mix.

- Long-term productivity growth due to specialization. Investment in research and innovation increases specialization as well as stipulates productivity growth. Based on the new theory of growth the cumulative factor – physical and human capital, innovations – is not influenced by the law of diminishing returns, thus the integration will always affect the growth rate and this long-term effect will be much stronger than the short-term static effects (Hansen, Nielsen, 1997).

- The increase in foreign direct investment (FDI). The positive effect of FTA was empirically revealed while analysing the agreements between the EU and Central and East European countries: the increase in FDI determined by the regional trade agreements among the European countries reached 78% (Baltagi, 2005); as a result of FTA conclusion between Korea and the USA the DFI of the agreement countries went up by 14-35%, other countries – 28-35% (Kang, Park 2004).

- The transfer of technology and knowledge. The increasing openness of the country determined by FTA also makes a way for economic growth, as it unlocks the channels for the distribution of the results of scientific research and technological progress.

2. The EU outlook on the neighbourhood policy

European Neighbourhood Policy, first defined as a vision of a "broader Europe", is currently the major political initiative of the EU directed at the countries in its close vicinity. The form of relation development with the neighbouring countries was being constructed based on the experience gained while supporting the political and economic transformations, as well as economic expansion and modernization in the new member states. ENP implementation is

sought to decrease poverty and create a space for common well-being and values based on a deeper economic integration, closer political and cultural connections, reinforced cooperation across borders and common responsibility for conflict prevention between the EU and its neighbours (Strategy Paper, 2004).

The greatest innovation of ENP is the possibility of obtaining a stake in the EU's Internal Market. The concept of internal market was established by the Treaty establishing the European Economic Community and defined as "an area without internal frontiers in which the free movement of goods, persons, services and capital" (The Treaty establishing the European Economic Community, 1957). It is the cornerstone of EU integration. The economic integration in the theory of economics is defined as "elimination of economic frontiers between two or more economies" (McDonald, Dearden, 1994).

The communication "Wider Europe – Neighbourhood: A New Framework for Relations with our Eastern and Southern Neighbours" released in 2003 expressed a determination to deepen the partnership with the neighbouring countries on the EU level and "be offered the prospect of a stake in the EU's Internal Market and further integration and liberalisation to promote the free movement of – persons, goods, services and capital" (Communication, 2003). The Communication on strengthening the European neighbourhood policy emphasised the objective to create "close cooperation comprehensive FTA" with all the ENP partners, including "other" elements as well as the liberalisation of trade flows among partner states, ensuring a certain level of asymmetry (Communication, 2006). The plan is to cover the entire trading of goods and rendering of services between the EU and ENP partners within the ENP framework. The goal is for economic integration to cover not only free trade, but also the solution to the issue of NTB and gradual comprehensive convergence in the areas of trade regulation such as technical norms or standards, sanitary and phytosanitary rules, as well as competition policy.

The document expanding on the communication (Non-paper, 2006) describes deeper economic integration as a long-term, complex and multi-stage process:

- the implementation of the entire Action plan;
- conclusion and implementation of comprehensive FTA;
- growing intra-regional trade between countries while other bilateral and regional agreements shall be made beyond the bilateral FTAs;
- agreements between the EU and the neighbouring countries concerning the creation of neighbourhood economic community.

Therefore, the long-term vision is the economic community of the EU countries and the neighbouring states named Neighbourhood economic community which would include such points as "the application of shared regulatory frameworks and improved market access for goods and services among ENP partners, and some appropriate institutional arrangement such as dispute settlement mechanisms" (Communication, 2006).

The idea of "deep and comprehensive Free Trade Agreement" is successfully implemented in practice. The report on the implementation of the European Neighbourhood Policy in 2010 (Report, 2011) claims the Eastern neighbourhood is marked by a significant progress in both bilateral and multilateral cooperation. In the format of bilateral cooperation Ukraine is the most advanced as it continues negotiations on the Association Agreement which also includes the formation of the Deep and Comprehensive FTA. FTA covers a wide range of areas: tariffs, services, customs and trade facilitation, intellectual property rights, sanitary and phytosanitary standards, public procurement, geographical indications, trade defence instruments, and technical barriers to trade. The Communication "A New Response to a Changing Neighbourhood" (Communication, 2011) published in 2011 includes economic expansion priorities which still en-

list strengthening trade ties, encompassing negotiations on Deep and Comprehensive FTA with willing and able neighbouring countries as well as further expansion of trade liberalisation instruments. In case of the most advanced neighbouring countries deep and comprehensive FTA can lead to progressive economic integration with the EU's Internal market.

To operationalise all the above mentioned strategic goals on a tactical level a "Medium Term Programme for a renewed European Neighbourhood Policy" was published (Programme, 2011) to ensure the following in the area of strengthening trade ties:

- Establish a realistic and transparent set of benchmarks for each of the Internal Market areas and for the relevant horizontal areas in order to support progressive economic integration with the Internal Market;
- Conclude bilateral DCFTAs based on progressive regulatory convergence towards the EU acquis in selected sectors or areas of mutual interest and building on their participation in a wider system of diagonal cumulation of origin;
- Establish a process for allowing partners that have concluded DCFTAs and have a fully functioning independent judiciary and an efficient public administration and have made significant progress towards eradicating corruption into “the nonregulated area” of the Internal Market for goods.
- Strengthening sanitary, veterinary and phytosanitary standards as a key element to develop agriculture and food industries notably by participation to trainings of the Better Training for Safer Food programme
- Enhance the technical support given to our partners in order to speed the preparation of Agreements for Conformity Assessment and Acceptance of Industrial Products (ACAA).

3. The commitments of Ukraine within the framework of the Neighbourhood policy

The Ukraine Action plan includes obligations to take actions which would make the neighbouring countries closer to the EU in the defined priority areas. The main focus in trade relations and economic reforms is given to:

- Free movement of products. Ukraine is under obligation to gradually eliminate all the export and import limitations, increase the transparency of trade rules and procedures.
- Customs. Ukraine is committed to continue on with the harmonization of the legal framework with EU legislation, increase import and export control, adopt and apply the Harmonized System.
- Standards, technical norms and conformity assessment procedures. Ukraine committed itself to harmonize the legislation with the EU technical legislation of the priority sectors, to strengthen institutions responsible for standardization, accreditation, conformity assessment, metrology and market overview as well as integrate them into the European and international structures.
- Elimination of import licence quantitative restrictions.
- Sanitary and phytosanitary issues. Ukraine committed itself to fully implement WTO provisions concerning the application of the sanitary and phytosanitary measures, to complete the comparative assessment of the sanitary and phytosanitary control systems of the EU and their country.

4. Free trade agreement potential assessment methodology

Free trade agreements represent one of the forms of economic integration the conclusion of which is expressed in bilateral trade liberalisation. Free trade means elimination of tariff and non-tariff barriers while keeping those instruments for the third parties. The planned signing of

deep and comprehensive FTA within the ENP framework should cover the entire trading of goods and rendering of services between the EU and Ukraine partners (Non-Paper, 2006). FTA conclusion within the ENP framework will be implemented depending on the Ukraine's economic circumstances and level of development.

While developing the assessment methodology an analysis on the research of economic integration and free trade effect was completed. The scope of the research included the assessment samples of the future agreements of the EU with Canada, ASEAN, India and South Korea. Based on the assessment logic of this research an assessment objective was drawn – to evaluate the potential of the EU's and Ukraine's economic integration and its perspectives, to forecast the positive/negative effects of this process and to offer the possible ways of maximizing the benefits. The majority of the economic integration effect research cases initiated by the EU structures are focused on the impact of the integration process as well as on the benefit for the EU Internal market itself, with less effort dedicated to the analysis of the perspectives of the other participants of this process.

As a part of implementation of this objective this research is aimed at forecasting the potential effects of the stipulated free trade. Economic integration impact assessment and forecasting of trade effects will let us define the benefit of the integration for Ukraine's economy. The projections of the integration effects will make it possible to forecast the positive and negative effects which will depend on the plans of FTA conclusion. The achieved results will provide useful insights into formulating the recommendations on the prospects of deepening the economic integration and on the content of FTA regulations.

The following aspects are taken into account while assessing the effect of the economic integration:

- Which integration effects will be achieved as a result of FTA conclusion?
- What are the prerequisites of the occurrence of these effects?
- What will be the distribution of the economic integration benefits between the EU and Ukraine?
- How can positive integration effects be maximized and negative ones minimized?

The analysis of the scientific research works in the area of economic integration, most of which are ex-ante research types, has shown that the authors who analyse the trade liberalization processes do not reach a consensus on the impact of the bilateral free trade or regional trade agreements. The main problem is the selection of data and the choice of the measuring methods. Many trade barriers are not measured in an objective way, meanwhile, the impact in certain sectional views is not easily given a quantitative representation. Therefore, this work is primarily focused on a more qualitative assessment enabling to form the qualitative research questions and analyse the statistical indicators which can provide answers to those questions.

The model is based on the free trade agreements' assessment guidelines developed in the University of Sussex. In order to determine the potential welfare effects of the prospected FTA the authors of the assessment guidelines recommend completing an evaluation in the following 5 cross-sections:

- level of tariff protection - the higher are the initial barriers, the greater are the likely effects on both trade creation and trade diversion;
- bilateral trade intensity - the larger the current share of trade with potential FTA partners, the greater the likelihood of creating an FTA which would increase the common welfare;
- trade structure similarity - the more similar is the product mix in the economies concerned and the higher the elasticities of supply, the greater would be the possibility of trade creation effect;

- differences in comparative advantage - the greater the differences in comparative advantage between FTA countries, the higher is the likely gain from trade creation;
- number of partners - the higher number of FTA partners, the greater would be the possibility of seeing trade creation effects and lessening of trade diversion risks.

The main sources of the statistical data are such international databases as WITS, UN COMTRADE, international organizations WTO, UNCTAD, INTRACEN.

5. The expansion of Ukraine's trade policy and trade

The scope of Ukraine's trade with the countries of the EU shows a stable tendency of growth. In 2009 Ukraine's export to the EU grew by 43.4%, while the import from the EU countries went up by 24.5%. The EU-Ukraine trade in services is very limited, nevertheless, it shows growth. A large share of Ukraine's goods imported in the EU market acquires preferences according to the Generalised System of Preference.

Ukraine has been a member of WTO since 2008. Its average bound tariffs for agricultural products make up 10.66 % and 4.95% for non-agricultural products. The highest tariffs can be applied to such groups of products as sugar (50%) and sunflower oil (30%). Ukraine is committed to an obligation not to subsidize the export of agricultural products, while a limit is set for the Trade-Distorting Support. In the area of services liberalization Ukraine undertook to provide foreign service providers access to its market in such sectors as financial services, communication, transport, etc.

In the sphere of the customs progress has been made in adjusting the legal framework while adopting international customs standards, improving the competences of the customs services. Since 2008 the Harmonized System has been in force in Ukraine.

Ukraine is implementing the regulations of the Action plan and holds negotiations on the conclusion of the deep and comprehensive FTA between Ukraine and the EU.

In 2010, Ukrainian government undertook a set of core reforms with the potential to bring the country closer to European standards as envisaged in the Association Agenda. Particular achievements include the adoption of Public Procurement and of Gas Sector Reform laws. However, the business climate continued to be negatively affected by impediments such as corruption, non-transparent taxes and customs regimes. There was limited progress on implementing the customs related priorities. Customs procedures are being computerised but the risk-based customs control system needs a substantial upgrade.

On free movement of goods in May 2010 the government adopted a decree 'on approving the plan for priority measures regarding the reform of the system of technical regulation'. There are concerns over measures relating to the export of grain in result of introduction of grain quality checks and the quotas for grain exports. Ukraine continued gradually bringing its sanitary and phytosanitary standards in line with the EU's, and there was progress on the SPS negotiations.

At present Ukraine continues negotiations on the Association Agreement which also include the formation of the Deep and Comprehensive FTA.

6. The assessment of the impact of the free trade agreements

The assessment of the level of tariff protection

The higher are the current trade barriers, the greater are the likely effects on both trade creation and trade diversion after the conclusion of the FTA. Thereby also a possibility is given for a new trade partner to supply the goods at a cheaper rate than for non-FTA country, which means that the likelihood of trade diversion is increasing (Gasiorek et al, 2006).

In 2010 the average bound tariffs in the Ukraine reached 5.8%. A higher level of protection was applied for the imports of agricultural products – the average bound tariffs amounted to 11%. Zero tariff is applied to 51% of Ukraine's import of non-agricultural goods (the non-taxable share of agricultural products made up 21.8%). The highest conventional tariffs are used for the agricultural product groups – the average tariff is 9.7%, meanwhile, the average tariff for non-agricultural products is 3.8%. The greatest tariff protection is applied to the products of sugar and confectionery category (average conventional level of tariffs in this category is 17.5%), to beverages and tobacco (15.7%), cereals and their products (12.7%), clothes (11.4%), products of animal origin (11%). Ukraine applies relatively low customs tariffs for the most marketable foreign groups of goods as well as for those that take up the biggest share in the import structure. The group of mineral and metal products constitutes the largest part of Ukraine's import structure (28.2% of total import), so the average conventional tariffs in this import category makes up 3%, while 69.6% of products in this groups are duty free.

Thus, Ukraine is highly advanced in the area of trade liberalization: the trade in non-agricultural products is mostly accomplished without tariff limitations and the level of the tariffs applied is low. It can be concluded that due to the low level of the current tariffs the scope of trade distortion, which is caused by the tariff import protection, is minimal. Since the present-day (i.e. prior to FTA conclusion) level of tariff protection for non-agricultural products is not high, the signing of FTA will not form a strong basis for the occurrence of the effects of trade creation or trade diversion. However, due to a relatively high current tariff protection of agricultural products it should be noted that the agricultural production in trade can potentially see the occurrence of both trade creation and trade diversion effects. Therefore, the welfare effect expected from the FTA conclusion will mostly depend on the terms of the agreement. A low tariff means that the preference limit which will be applied in FTA is not significant. Therefore, the conclusion of FTA between the EU and Ukraine should not encourage the trade to shift from CIS to EU countries. The most substantial FTA consequences will occur in the sectors of agriculture and industry where the tariff protection is of maximum value, in case it is abolished. Their ultimate scope will depend on the degree of elasticity of supply and on the level of competition distortion between the countries caused by the maximal tariffs.

In 2008 the main trading partner for Ukraine's export of agricultural products was the EU. On the EU market the average tariff protection level for Ukraine's agricultural products' export makes up 12%, while 67.4% of Ukraine's agricultural products enter the EU market without any tariffs. The preference limit (corrected in accordance with the weight of import), which shows the actual value of the provided trade preferences, constitutes 0.9 in case of Ukraine's export to the EU. Russia's market is the second largest export market for Ukraine's agricultural products. The assessment of the level of tariffs applied in Russia to the imported agricultural goods shows that the average level of tariff protection for Ukraine's agricultural products' export is 13.8%, while the preference limit is 22.4. In the case of the EU, due to the relatively high tariff barriers and low preference limit, it is likely to observe a positive FTA impact on Ukraine owing to the effect of trade creation; though, this is expected on condition that trade in agricultural products will be included in the FTA. Ukraine's non-agricultural products also find their main market in the EU. The average level of the conventional tariff for Ukraine's export makes up 3.6%, while the preference limit stands at 0.6. 91.1% of Ukraine's non-agricultural products enter the EU without any tariffs. Since the current EU tariff protection level is low, the effects of trade creation and diversion will not be significant even for the EU.

NTB are not applied in Ukraine, except for health, social security and environmental protection purposes. Quantitative limits, anti-dumping or other protection instruments are not ap-

plied to the temporary import protection. However, Ukraine is known for its relatively frequent cases of applying informal non-tariff barriers due to institutional weakness, legal framework gaps and high level of corruption. Cumbersome procedures and practices, which create additional costs for trade, are often encountered there. FTA will take part in NTB elimination via the harmonization of technical standards and mutual recognition.

The analysis of trade intensity in Ukraine and the EU

The larger the current share of trade with the future FTA partners, the greater the likelihood of creating an FTA which would increase the common welfare; if the volumes of the current trade are small, the third parties can gain more due to trade diversion. Trade is as intensive, as open the economies are. The degree of openness of trade is determined by calculating the weight of import and export in relation to GDP. A higher openness indicator shows that the economy is more dependent on the relations with the external world. Ukraine's consistent process of trade liberalization which dates back to the gaining of independence leads to a high level of trade openness. In 2010 the relation between the turnover of goods and GDP reached 79.7%.

The EU is the major trade partner of Ukraine – its share climbed to 31.4% of goods turnover in 2010, Russia's share takes the second place – 28.2%. In 2009, Ukraine's share of export to the EU reached 26.7%, however, the same year the scope of export fell down to as low as 44.8%. Nonetheless, the tendency of growth was restored and year 2010 saw a yearly export increase to 46.5%. As a rule Ukraine's export used to be directed to CIS markets, however, over the latest years it has been decreasing. Upon conclusion of FTA with the EU the integration effects will not be significant after the tariff protection elimination because the level of EU tariff protection is not high. A greater role can be expected from the gradual abolishment of the regulatory norms and NTBs which would raise the competitiveness of Ukraine's companies in the EU.

The EU is the main Ukraine's import supplier whose share made up 35.2% in 2010. Over the period of 2008-2009 Ukraine's import from the EU declined respectively to 20.6 and 43.7% per year, however, just like in the case of export in 2010 the growth tendency was restored and an increase of 43.5% was reached. A relatively high share of import from the EU in the import structure in case of FTA conclusion would become a prerequisite for the formation of the trade creation effects, however, the welfare effects can not be easily defined. Their scope will depend on the extent to which the tariff alterations will condition the competitiveness differences between the CIS and non-CIS countries. Nevertheless, due to the current low tariff protection level the closer economic integration effects will not be substantial.

The assessment of the trade structure similarities

The more similar is the product mix in the FTA participants and the higher the elasticities of supply, the greater is the possibility of trade creation effect as it opens up new opportunities of buying goods from the most effective manufacturers. The analysis of trade structure by sectors is essential to identify the distribution of the closer economic integration effects by sector and spot the sensitive sectors which will be affected by the FTA the most.

The largest share of Ukraine's export is taken up by iron and steel – as much as 34%, other top positions are metals and chemical products. Ukraine's export to the EU is dominated by raw materials, mineral fuel, oils and chemical products. Due to EU's low level of tariffs for Ukraine's export goods the conclusion of FTA will not lead to a significant trade creation effect.

The import structure of Ukraine is similar where nuclear reactors and means of transport are of great importance. Cars and transport equipment, raw materials as well as chemical products prevail in the import from the EU. While assessing the FTA impact the effects of trade creation

and diversion are most likely to be seen in the above mentioned sectors. The EU will compete with the trade partners who export the same products to Ukraine, i.e. FTA can lead to trade diversion for the benefit of the EU. However, due to the low tariff protection level implications can be made that FTA effects will not be substantial, only NTBs can make a possible difference.

In order to assess the impact of the trade structure similarity Finger-Kreinin index was used (Finger, Kreinin, 1979), it is usually applied in the assessment of international economic initiatives. According to its authors the trade diversion effect will be important only in the case when the less developed countries export the same goods the industrial countries do. Meanwhile, if the export structures are not alike, i.e. there are only a few or absolutely no "overlapping" groups of products, the trade diversion probability will be minimal. An analogous evaluation is given to the customs tariff cuts in the framework of GATT – they will be useful for the less developed countries only to an extent to which the structure of their export to OECD countries will match the trade structure of the industrial countries.

Finger-Kreinin export similarity index is calculated by using the following formula:

$$S_i(ab,c) = \left\{ \sum_i \text{Minimum} [X_i(ac), X_i(bc)] \right\} 100$$

where : $S_i(ab, c)$ – the similarity of the export of countries a and b to a common market c while exporting product i;

$X_i(ac)$ – the share of product i in the general export of country a to the common market c (world);

$X_i(bc)$ – the share of product i in the general export of country b to the common market c (world).

According to the equation, if the product distribution of countries a and b in the export is the same, ($X_i(ac) = X_i(bc)$ for every i), the value of the index will be equal to 100. Meanwhile, if the export countries of countries a and b are absolutely different, (for every i $X_i(ac) > 0$, $X_i(bc) = 0$, and vice versa), the index will be equal to zero.

The index calculations include export indicators of Ukraine and the EU according to 99 product groups as of 2008. The calculations showed that the export index of all the products made up 43.11%, including agricultural products – 54.36 and non-agricultural – 43.12. According to the research results the EU export structure is rather similar to the Ukrainian export structure, thus, the probability of occurrence of the trade creation effect is relatively high. The similarity of the export structures of agricultural products is quite high which leads to a conclusion that the trade creation effect is more likely to occur in this particular area. If the elasticity of supply is high and Ukrainian manufacturers' costs are lower, FTA will open the doors for a larger export to the EU.

The assessment of EU's and Ukraine's comparative advantages

In order to forecast the FTA effects it is necessary to assess the ratio of competitiveness of the future partners. The greater the differences in comparative advantage between FTA countries, the higher are the expected trade creation effects and growth of welfare after the conclusion of FTA. The calculations of the manufacturers' competitiveness were based on the RCA (Revealed Comparative Advantage) index.

$$RCA_{ij} = \frac{X_{ij} / \sum_i X_{ij}}{\sum_j X_{ij} / \sum_i \sum_j X_{ij}}$$

where: X – export, i – country, j – product (or industry branch), t – group of products (or industry branches), n – group of countries (Laursen, 1998).

The RCA value greater than 1 shows a country's specialization in the export of a certain commodity as well as the com-

parative advantage of the concerned group of countries. Meanwhile, the RCA value lower than 1 shows the absence of the comparative advantage in the export of this particular product. To assess the competitive advantage of Ukraine the authors completed a research of two cross-sections. First of all, the largest share product group in the export structure was identified with the calculation of its export RCA index. Then, the export RCA index of all the product groups was calculated and the commodity groups with the highest comparative advantage were identified.

The data of Ukraine's export structure shows an extremely high export concentration level of this country. The main 15 export sectors make up as many as 78.38% of total export. The major part of export is constituted by both: product groups with high comparative advantage and those with RCA value lower than 1. A strong advantage belongs to the sector of iron and steel (RCA = 12.4) as well as (RCA = 8.6), steel products have an average advantage (RCA = 3.6), while mineral products along with nuclear reactors do not have it (RCA respectively 0.5 and 0.4). Of the 15 export product groups with the highest comparative advantage 8 are in the largest share of the fifteen commodities of the export structure. To summarize, it can be stated that Ukraine's export is marked by a relatively high RCA degree which shows its significant international competitive advantage.

The verification of the research model prerequisite calls for the assessment of the trade competitiveness ratio of the future FTA partners. If the differences of the comparative advantage of the concerned FTA countries, i.e. the EU and Ukraine, are relatively substantial, it would be a prerequisite for the formation of welfare increasing FTA effects. Pharmaceutical products have the highest comparative advantage in the EU's export structure, the rest of the export products included in the largest share of the export structure have either a weak RCA degree, or their estimation is lower than 1. While assessing all the 15 product groups within the largest share of the EU's export structure it can be noticed that the export of only 2 of them (pharmaceuticals and beverages) is marked with an average RCA degree, 9 show a weak RCA, whereas the rest of the 4 export commodity groups do not possess a comparative advantage. In the rating of the product groups according to the largest RCA index the 15 sectors of the highest comparative advantage make up only 14.77% of export, whereas in case of Ukraine – as many as 62.48%.

The ratio of competitiveness of the EU and Ukraine leads to a conclusion that Ukraine has a greater comparative advantage while exporting iron and steel commodities as well as steel products. EU export is more competitive in such sectors as nuclear reactors, chemical products and means of transport.

The number of FTA partners

The more countries participate in FTA, the greater is the likelihood of involving the most effective manufacturers. This way the trade diversion scope is minimized and the probability of trade creation is increased. The research was completed by analysing only the EU and Ukraine, however, in the long-term perspective after concluding the FTA and depending on the successfulness for this initiative alongside the bilateral agreements with the EU regional agreements will be signed as well. This would extremely reinforce the trade and economic integration in the region and add to the countries' efforts of better integration into EU's economy. At the further stages the EU and its partners can consider the possibility of creating a Neighbourhood economic community drawing from the European economic area experience.

CONCLUSIONS

1. The findings show that the deepening of the economic integration can potentially occur not only in the static trade creation, trade diversion or trade expansion effects, but it can also lead

to such dynamic economic integration consequences as the effect of economies of scale, increase in FDI, growth of productivity due to specialization, efficiency rise caused by the growing competition, etc.

2. The analysis of the current progress of Ukraine in the area of implementation of its obligations within the ENP framework showed that the compilation of the Action plan and the implementation of its regulations stimulate the country in the area of deepening the economic integration. The decrease of customs tariffs and a more effective performance of the customs system, the harmonization of the legal regulations of trade issues, institutional reforms and the implementation of other Action plan initiatives speed up the convergence between the EU and Ukraine in the sphere of trade, improve trade conditions which are a prerequisite of the increase in trade volumes.

3. The completed assessment of the prospected FTA envisions the general result as bringing possible positive impact of deepening the economic integration for Ukraine's economy. Since the current Ukraine's tariff protection level is low, the prospected elimination of tariff barriers in case of signing the EU-Ukraine FTA will not create a basis for the occurrence of large-scale trade creation or trade diversion effects. The effect of the deepening of economic integration will have the greatest impact on the sectors of agricultural and industrial products which have a maximum tariff protection. In case of these sectors both trade creation and trade diversion effects are likely. Their final scope will depend on the degree of elasticity of supply and on the extent to which the tariff protection level will condition the competitiveness differences of the countries. While taking into account the unlikely significance of the impact of tariff barriers' elimination a prediction can be made that a more positive influence to form the FTA effects will be exerted by the gradual abolishment of legal regulation norms and non-tariff barriers within the FTA implementation process. This way the export potential of Ukraine's companies would go up as well as their competitiveness in the EU's internal market.

4. The high trade intensity of both the EU and Ukraine is a prerequisite for achieving a common welfare growth as a result of the conclusion of FTA. The very fact of high trade volumes even prior to FTA conclusion shows that they both are effective suppliers for one another, thus, the trade diversion risk decreases. The assessment of the trade structure similarities between the EU and Ukraine shows that the highest degree of similarity lays in the category of the agricultural products. This brings us to a conclusion that the trade creation effect upon conclusion of FTA will be more probable in this area of trade in agricultural products. If the elasticity of supply is high and Ukrainian manufacturers' costs are low, FTA will open the opportunities of a larger Ukrainian export to the EU. The differences identified as a result of research on the comparative advantages of the EU and Ukraine increase the likelihood of the occurrence of trade creation effects. The research also showed a strong competitive advantage of Ukraine in the main export categories as well as their high specialization level in those sectors which could be reinforced by concluding the FTA. Meanwhile, the production of the less competitive economic sectors with no comparative advantage can be replaced by import from the EU countries. ENP has the potential to develop into a multilateral agreement between the EU and ENP partners concerning the formation of Neighbourhood economic community. The higher the percentage of agreement partners, the greater would be the possibility of the occurrence of trade creation effects and the lessening of risks of trade diversion.

5. Since the effects of the economic integration and their impact on the countries depend on the volumes of the integration, it is recommended to focus the negotiations mainly on its scope including not only the customs tariffs, but also the cuts on other trade obstacles, such as customs procedures, product standardization and certification, competition policy, public pro-

curement procedures and services. A closer economic integration creates a basis for welfare growth due to the use of a larger economies of scale effect in manufacturing, transfer of technologies via the trade and FDI channels, the positive effects of the harmonization of legal framework regulating the economic relations, etc. The welfare effects caused by a closer economic integration despite a longer period of time required for their full expression will significantly exceed the possible negative trade effects brought by the FTA conclusion.

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