

## Third International Scientific Conference ECOLOGICAL AND ECONOMIC PROBLEMS OF INTERNATIONAL TRADE AND INVESTMENTS

Lviv, Ukraine, October 22-23, 2015

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# ЕКОЛОГО-ЕКОНОМІЧНІ ПРОБЛЕМИ У МІЖНАРОДНІЙ ТОРГІВЛІ ТА ІНВЕСТИЦІЯХ

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# ECOLOGICAL AND ECONOMIC PROBLEMS OF INTERNATIONAL TRADE AND INVESTMENTS

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## THE RESEARCH OF ECOLOGICAL AND ECONOMIC PROBLEMS IN WORLD TRADE AT IVAN FRANKO NATIONAL UNIVERSITY OF LVIV

#### Prof. Dr. Ihor Hrabynskyi

Ivan Franko National University of Lviv, Ukraine

Since late 1970s ecological issues have become increasingly popular in the Ukrainian economic science and shortly the research centres whose aim was to study certain ecological problems became the basis for the formation of three research schools. *Sumy School* conducts researches on the damage and loss assessment methodology and the environmental management efficiency (Prof. Dr. O. Balatskyi, Prof. Dr. L. Melnyk). *Odessa School* studies regional economic and ecological problems and market development (Prof. Dr. B.Burkynskyi) and *Lviv School* of Ecological Economy headed by its founder Prof. Dr. Yu. Tunytsia.

Today Lviv School is represented by 56 scientists: Prof. Dr. Yu. Tunytsia, Prof. Dr. M. Malskyi, Prof. Dr. I. Hrabynskyi, Prof. Dr. T. Tunytsia, Dr. H. Stebliy, Dr. I. Shehynskyi, Dr. L. Ukrainets, Dr. I. Pinchuk, Dr. Yu. Fedun, Dr. D. Khodyko, Dr. M. Hnatyshyn and others.

The above mentioned researches have contributed to the solution of the ecological and economic problems of the world economy by their works in which they study and scrutinize ecological and economic problems of the world economy and international economic relations (I. Hrabynskyi, T. Tunytsia, L. Ukrainets, I. Pinchuk, Yu. Fedun, M. Hnatyshyn, D. Khodyko). I, personally, introduced such terms as "environmental quality", (1982), "environmental quality index" (1983), "ecological threshold of economic development/growth" (1994), a model of the world economy as a closed ecological and economic system (1982), a

model of a national economy as an open ecological and economic system (2000), "comparative (absolute and relative) ecological and economic benefits in foreign trade" (2000), etc.

A research of a country's foreign trade efficiency is incomplete if the environmental management is not taken into consideration as today's exhaustion of natural resources endangers industrial production in future.

A controversy between the rapid economic development and the environmental protection has raised the problem of ecological and economic efficiency of foreign trade. Consequently, it is necessary to define country's ecological and economic benefits in foreign trade in order to further form the most reasonable foreign trade structure.

At the Department of International Economic Relations at Ivan Franko National University of Lviv we have carried out three state financed research projects (research supervisor Prof. Dr. I. Hrabynskyi). The aim of the first project "The concept of the sustained ecological and economic development of Ukraine under conditions of\_its integration into the European Union" was to work out the concept and efficient economic tools and mechanisms which ensure the maintenance of sustained development standards in the process of Ukraine's integration into the European Union.

Having conducted the research we have created a formalized dynamic model of the national economy as an ecological and economic system; identified and analysed factors hindering sustained economic development; elaborated a concept of Ukraine's sustained ecological and economic development in compliance with national interests and European Union standards; analysed the possible influences on ecological indicators; revealed the consequences of each instance of influence on the dynamics of main macroeconomic indicators; developed an indicator of sustained economic growth and its calculation methods; calculated a reasonable value of the indicator of economic growth sustainability and possibilities of its achievement.

The second project "Theoretical basis of identifying the ecological and economic benefits in Ukraine's foreign trade" was devoted to creation of a formalized dynamic model of the national economy as an ecological and economic system; identification of the factors hindering sustained economic development; finding out the

possibility of influence on foreign policy ecologization in the framework of the WTO; forming a scientifically substantiated concept of absolute and relative ecological and economic benefits of a state in foreign trade; elaboration of absolute and relative ecological and economic benefits in foreign trade; establishing a reasonable (with regard to ecological efficiency) state's foreign trade structure and possibilities of its achievement.

The task of the third project "Theoretical basis of determination and analysis of an innovative factor of Ukraine's economic growth in the process of foreign policy liberalization" was to determine and analyse innovative factors of Ukraine's economic growth in the process of foreign policy liberalization.

Nowadays professors, lecturers and postgraduate students of the Department are working at the research topic "Foreign trade ecological and economic benefits in the process of globalization of world economy". The task of the research is to determine main transformations in comparative ecological and economic benefits in international trade under conditions of economic globalization. Our researchers have published 14 scientific monographs, and over 270 articles on ecological and economic problems of world economy and international economic relations. The Department initiated regular international economic conferences "Ecological and economic problems in international trade and investments" the first of which was held on September 28, 2011, second – on October 15-16, 2013, and third – on October 20-21, 2015.

Thus, we can state that for the last twenty years an informal scientific group uniting the scientists who collectively work out formulated research problems and which justly claim to be called a scientific school, researching ecological and economic problems of the world economy has been formed at the Department of International Economic Relations.

### EUROINTEGRATION PROSPECTS OF FOREIGN TRADE OF UKRAINE

#### Prof. Dr. Svitlana Pysarenko

Ivan Franko National University of Lviv, Ukraine

The economic part of the Association Agreement between Ukraine and the EU envisages the creation of free trade zone (FTA) between Ukraine and the EU. The consequences of signing the FTA and implementation of it are very important for the future development of the economy of Ukraine and for its foreign trade.

In the FTA 15 major areas of cooperation are identified including the issues of trade and customs. To those issues such areas as trade facilitation and cooperation in customs sphere; tariff proposal; technical barriers to trade; trade defense instruments, as well as rules of origin, including geographical indications, dispute settlement, transparency are related [1, p. 24-59].

To conclude the possible impact of the FTA on Ukraine's foreign trade, it is necessary to evaluate the results of foreign trade of Ukraine in 2014, when the autonomous preferences regime which was introduced in April 2014 was acting for EU - Ukraine trade.

The volume of trade in goods and services between Ukraine and the EU in 2013 amounted to 32.3% of total turnover of Ukraine's foreign trade. In 2014 in comparison with 2013 it increased by 3.5% (to 35.8%). Exports of goods and services of Ukraine to the EU member states in 2014 amounted to 31.8% of total exports of goods and services (increase by 4.9% in comparison with 2013) and the volume of imports from the EU member states to Ukraine increased by 2.8% and amounted to 40.0% of total imports to Ukraine. A negative balance was left in bilateral trade between Ukraine and the EU in 2014 which decreased in comparison with 2013 by 7 117.4 million USD (from 10 810 million USD to 3 693,2 million USD) – Table 1.

**Table 1.** Foreign trade of goods and services between Ukraine and the EU

Indicators	2014	2013	Foreign trade of Ukraine with the EU in 2014 to	
	million USD		2013	
			million USD	%
FTA – entire in Ukraine	123897,3	158 178,9	-34 281,6	78,3
FTA with EU	44 297,4	51 128,6	-6 831,2	86,6
The share of FTA with EU in the entire share of FTA (%)	35,8	32,3		
Export of Ukraine, total	63 890,5	74 832,3	-10 941,8	85,4
Export of Ukraine to EU	20 302,1	20 159,0	143,1	100,7
The share of exports to EU (total export of Ukraine (%))	31,8	26,9		
Import of Ukraine, total	60 006,8	83 346,6	-23 339,8	72,0
Import of Ukraine (EU)	23 995,3	30 969,6	-6 974,3	77,5
The share of imports from EU (total import of Ukraine)	40,0%	37,2%		
Balance of FTA (total in Ukraine)	+3 883,7	-8 514,3	12 398,0	
Balance of FTA with EU	-3 693,2	-10 810,6	7 117,4	

Source: [2]

The main volume of Ukraine's exports to the EU in 2014, as in 2013, was represented primary by raw materials and semi-finished processing. The share of these items in the structure of Ukrainian exports to the EU in 2014 decreased by 0.57% (from 74.70% to 74.13%) mainly due to the following commodity groups as ferrous metals, ores, slag. Export of cereals, electrical machinery and equipment to EU increased respectively by 0.2% and 0.7%. (Table 2).

**Table 2.** The main commodity groups of Ukrainian exports to the EU in 2014

Name of product groups	2014 (in % comparison to 2013)	The share of EU exports in total exports of Ukraine, %  Years	
	10 2013)		
		2013	2014
Black metals	95,8	24,5	22,9
Cereals	105,0	10,4	10,6
Electrical machinery and equipment	110,6	9,0	9,7
Ores, slag and ash	92,3	10,3	9,3
Energetic materials	98,4	6,3	6,1

Source [2]

The share of high-tech exports in commodity structure of Ukraine's exports to the EU in 2014 relative to 2013 increased by 0.6%, remaining at a low level (16.29%) -Tabl.3.

Table 3.

The structure of Ukraine's exports to the EU in terms of technological products (%)

The structure of Ukraine's	Рік	
exports to the EU in terms of technological products, %	2013	2014
Total exports of Ukraine	100,00	100,00
High-tech exports	15,69	16,29

Raw materials and semi-finished products of primary processing	74,70	74,13
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Source [2]

Thus, we can conclude that the structure of Ukraine's exports in 2014 compared to 2013 largely didn't change. This is an indication that the regime of autonomous trade preferences introduced by the EU in April 2014 providing for the absence of customs duties on goods, including a relatively high-tech, had no significant effect on the range and volume of Ukrainian exports to the EU (Table 3).

The share of imports from EU member states in total commodity imports to Ukraine in 2014 amounted to 60.4%. Its structure consisted mainly of high-tech products (Table 4).

Table 4.

The main commodity groups of Ukrainian import from the EU

Member States (%)

Name of product groups	Import of Ukraine with the EU in 2014 compared to	The share of imports from the EU in commodity structure of imports of Ukraine		
	2013	2013	2014	
Energy materials; oil and refining products	125,8	11,3	18,0	
Boilers, machines, instruments and mechanical devices	68,0	12,5	10,8	
Pharmaceutical products	78,9	8,7	8,7	
Plastics	82,6	6,6	7,0	
Electrical machinery and equipment	79,4	6,6	6,7	
Land vehicles other than railway	43,5	10,3	5,7	
Paper and cardboard	65,4	4,3	3,5	

Source [2]

In short - and medium term new opportunities for exports from Ukraine to the EU member states will be formed by reducing tariff barriers to enter the EU market under the provisions of the FTA. Considering high level of high-tech manufacturing in the EU and its own limited resource base (the EU is an importer of many kinds of raw and semi-raw materials), Ukraine will have certain advantages in the trade of raw materials, which will be provided only by trade with low added value (in particular vegetable products, fats and oils, base metals and products made from them, mineral and food). As a result the increase in exports is possible and, consequently, in production, mostly in agriculture and the food industry.

Also the EU market is characterized by considerably higher tariff protection, especially in agro products (current average customs tariff rate on EU import duty is 7.6%, in Ukraine - 5.0%, and by goods of Ukrainian Classification of Goods for Foreign Economic Activities groups 01-24 (agriculture) - 19.8% and 9.2%, respectively.) The EU import duties on certain tariff lines are 1.5 - 14 times higher than the rates of import duty of Ukraine.

The excess of the average import duties on certain products of Ukraine compared with similar rates of the EU leads to the conclusion that in the short term it is possible to provide a higher level of protection of the domestic market of Ukraine in this period which might ensure improved conditions for Ukrainian exports to the EU. This in turn can help to accelerate economic growth mainly due to such economic activities as agriculture and food processing, textile and leather industry, metallurgy and metal as well as increasing the number of employed mainly in such economic activities as agriculture and food industry.

In the medium term decline in tariff protection of relevant segments of the internal market in Ukraine based on the alignment of import duties of Ukraine and the EU will lead to the gradual "damping" impact of tariff effect on exports of Ukraine that will help reduce its exports to EU member states in case of absence of a significant increase competitiveness of domestic products.

Unlike exports of Ukraine to the EU member stated, which mainly consists of raw materials, imports from the EU consists mainly of deep processing products. Thus, the analysis of the consequences of signing the Association Agreement with the EU for

Ukraine allows to conclude that in the next 3-10 years and in the longer term they will be controversial. This is due to the fact that, on the one hand, the gradual integration of Ukraine into the EU internal market will occur (providing "the share in the EU's Internal Market" for Ukraine) and vice versa - European exporters to the Ukrainian market. On the other hand, improved access of imports of high quality goods from the EU in Ukraine will create additional competition for Ukrainian producers.

For Ukraine's-EU foreign trade implications of the Association Agreement between Ukraine and the EU will greatly depend on the successful application of the compensation package, which provides the modernization of industrial enterprises in Ukraine on an innovative basis (structural transformation, reduce costs and therefore the cost of production, improving the efficiency of export industries - metallurgy, chemical industry, agriculture, fishing and light industry) during the transitional period of ten years, during which export duties for Ukraine in the trade with the EU will be abolished. At the same time (within 5 - 10 years) for some European goods Ukrainian customs duties will only be partially reduced (by 20% -60%) [2, p.50-51]

One of the most sensitive issues for Ukraine is so-called "geographical names" for Ukrainian products. According to Ukraine Association Agreement with the EU which provides the formation in Ukraine of the system of protection of geographical indications in accordance with the provisions of the Agreement which emphasize on national identity of Ukrainian products on the domestic and global markets. Ukraine should abandon the use of over 3,000 geographical names, even in relation to traditional Ukrainian products such as sparkling wine. This will promote a positive image of the state as a producer of special quality products [2, p.52].

A great importance for Ukraine's foreign trade in agricultural products will have such issues as: a rejection from existing EU export subsidies for agriculture; adoption and implementation of technical regulations for a specific industrial products, which are based on the main provisions of EU; creation of appropriate infrastructure - research laboratories, the implementation of their accreditation; implementation of sanitary and phytosanitary measures [2, p.37, 41-45].

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#### COMPARATIVE ANALYSIS OF INTERNATIONAL COMPETITIVENESS IN FOREST-RELATED INDUSTRIES OF SELECTED ECONOMIES

#### Dr. Olena Maksymets

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In the research we focused on the initial stage of assessing industrial competitiveness on the international level for different periods – before, during and after crisis. The research concentrates on the context of forest products industry international competitiveness considering international trade aspects and the efforts of the countries to maintain or improve their positions in world trade in forest products. Also it was analyzed what sectors of forest products industries in US, Sweden and Ukraine are the most competitive.

The preliminary comprehensive analysis supports the determination of what could be further changes and tendencies within the given sector and supply following in-depth study with a necessary background.

Explanatory data analysis, time series analysis, principal component analysis, canonical correspondence analysis, as well as meta-synthesis and content analysis of scientific and business edition concerning the global trends in forest product industries for the last seven years were used.

The assessment of international competitiveness of forest products industries and key factors that influence international

performance becomes very important both from theoretical and empirical points.

For more then 40 years there have been different approaches to assessment and analysis of competitiveness developed by scientists and professionals. The problem was studied and discussed within different disciplines and moreover interdisciplinary approaches were developed. This proves the importance of the research despite several arguments against (Krugman, 1994).

It becomes more complicated to properly address the issue of international competitiveness as well as to evaluate the influence of different factors for the particular industry and country. It is caused, in our view, by the rapid changes in the environment the countries and industries are functioning on the global arena and shifts in the importance of certain factors. Before the crisis international competitiveness of forest products enterprises was to a major extent influenced by raw materials and labor (and thus their weight in the competitiveness assessment was more significant). We think that nowadays the shift has been made towards capital, environment and innovation

We have examined development, challenges and prospect of forest products industries in three countries – US, Sweden and Ukraine. The selection was made considering the fact that each of the countries had strong competitive advantage in different sectors of forest product industry (US – lumber and wood-based panels, paper products, Sweden – paper and paperboard production, Ukraine – timber and wood fuel). But in recent years these sectors were put under pressure by financial crisis, environmental concerns, competition over raw materials and capital, rapid penetration of Chinese forest products companies on the global market as well as decrease in economic development and construction.

Also it was important to identify the possibilities for Ukrainian forest products industry to enter international market with value added commodities using the experience of Swedish and US companies.

We have determined what sectors the US, Swedish and Ukrainian forest products industry currently are more competitive on the global market in, and whether countries are been left behind in the development of their forest sector. To accomplish this, the

current state of the forest product industry is analyzed both in terms of selected sectors and products, and by comparing countries with others during various stages of economic development.

Analysis of international trade on the industry level provides greater detail and better understanding of the international competitiveness and its trends for a given country for such reasons: examining the degree of specialization for a given industry can identify comparative advantage or disadvantages for that industry's competitiveness (Fetscherin et al., 2012); an industry-level analysis enables inter-country comparisons of a given industry; and industry-specific analysis enables intra-country comparisons of an industry's degree of specialization and the comparative advantages or disadvantages between and among national industries.

We tracked the influence of export on international competitiveness of the country's forest product industry, which gives support to the theory that we put into the background of our research. The analysis proved that comparative and competitive advantage theories explain sufficiently enough the current tendencies in the forest products industry competitiveness. If a country is able to trade its products abroad in the modern tough conditions and increasing global competition, it proves to be more competitive.

The results demonstrated that Sweden and US forest industries (both low and high value-added) faced a variety of problems especially in the last years, while Ukraine maintained its competitive advantage in low value-added products (with the exception of particle-boards production). We observed that China was able not only to maintain the production volumes of low value-added forest products, but also increased substantially exports of high-value added ones and price level was not the reason for that.

Swedish forest products industry is loosing its competitiveness on the international markets because of China. Currently the changes and pressure are not very high, but each year the shifts have negative impact. Capital-intensive forest industry in Sweden exploited the potential provided by new technology and innovations and it was known that Swedish forest industry was successful mainly due to the enthusiasm for innovations and technology. But now we observe the difficulties in selling Swedish forest products on the international market. Thus, Sweden should struggle to keep competitive position

first of all against Chinese forest industry companies. As Chinese government has also set the goal towards developing forest products industries in the innovative and environmentally friendly way, it would be a challenge for Swedish companies to sustain the competitive advantage they had before the crisis.

In Ukraine significant positive shifts were made towards wood-based panels manufacturing, but it should be mentioned that such facilities are rather hazardous both for environment and people health. Further progress should be made towards investing in environmental technology. As well considering increasing importance of wood fuel as an alternative energy source and high dependency of Ukraine on Russian gas, incentives towards extension of wood fuel use inside the country should be worked out and implemented.

Conducted empirical tests of the basic assumptions and propositions in the field of assessment of forest product industry international competitiveness would not have a purely academic interest, but also they would be greatly relevant from a practical use and application in policymaking process on the industrial level.

In this research we did not estimate the influence of the factors on forest products industry international competitiveness because the model is hardly applicable for the entire industry. The problem originates in fact that all the causal factors interact in complex ways with the result and it is difficult to weight their separate importance as great changes occurred for different forest product industry sectors within the last five years.

Instead we have proved that comprehensive measurement of comparative and competitive advantages is a necessary prior step to the analysis of why a country's industry is doing well or badly. This paper has intentionally raised a problem of explaining and assessing international competitiveness on the industrial level because of the difficulty to evaluate and create an aggregate index of international competitiveness for forest products industry. And while studies on the company level should be successful, even here the difficulties may remain in addressing causal significance of the various factors which have influenced international competitiveness of the particular forest products company.

Future research should be focused on the in-depth analysis of particular sectors/groups of companies and therefore should extend policy prescriptions for improving international competitiveness.

JEL G24

### FOREIGN DIRECT INVESTMENTS, AS ECONOMIC CATEGORY, THEIR ESSENCE AND CLASSIFICATION

#### Dr. Iryna Prykhodko

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A necessary condition for good economic development of any country is the foreign direct investment. The question of the investment has been always in the focus of many researchers. The works of many foreign and domestic scientists were devoted to the investigation of the foreign investment, in particular V. Soldatenko, V. Fedorenko, B. Gubsky, A. Gavrilyuk, A. Rogach, G. Biletska, M. Birk etc.

The basic theories of FDI are based on three approaches:

- 1. Neoclassical (the theory of the competitive advantage of nations M. Porter, T. Ozawa, the investment field theory D. Lukyanchenko; "the way of investment development" theory J. Dunning; the international corporations technological theory J. Gelbraith)
- 2. Institutional (the institutional environment theory J. Buchanan, the transaction costs theory O. Williamson);
- 3. Econometric (the econometric models C. Edwards, M. Lansbury, N. Payne) [3].

Classifying foreign investments some authors offer the following features:

- I. For the recipient country characteristics and favorable policies to attract foreign investment:
  - 1) due to the tax regime; 2) due to the form of guarantees.
- II. For the qualitative characteristics and the foreign investment flow purpose: 1) in the degree of return; 2) the volume; 3) the geopolitical orientation; 4) the investment purposes; 5) the qualitative form of registration; 6) the degree of primacy; 7) the

nature of participation in the investment process; 8) the level of profitability; 9) the level of the investment risk; 10) the nature (effectiveness) impact on the economy of the recipient country [6].

M. Birk offers the following classification of the foreign direct investment due to: the direction of the capital flow (internal and external); the origin of capital (from developed countries and developing countries, from the offshore); the type of product and the stages of production (horizontal, vertical, which in turn are divided into the backward and the forward) [2].

FDI can also be classified from the point of view of the perspective of a foreign investor (the donor) and the position of the host (the host country). The purpose of these approaches is to provide a qualitative assessment of: 1) the investment activities of the foreign investors, and 2) the impact of foreign direct investment on the enterprises in the recipient country, involving the experts for the economic research[2].

V. Antonov shares FDI from the point of nature (effectiveness) impact on the economy of the host country: 1) extensive; 2) intensive (innovation); 3) venture capital; 4) pseud-investments [1].

The classification of the investments according to Y. Skornyakova:

- the investment into the non-financial assets including real investment in the fixed assets and the investments to increase the working capital and investments into the intangible assets;
- the investments in the financial assets (the financial investments);
- the investments into the alternative investing objects (precious metals and stones, antiques etc.) [6, p. 198].
- T. Mayorov in his work proposed to extend the classification of investments in five characteristics: 1. the investing objects (property): the real and the financial investments. The author devided the real investment into the investments of the "external conditions" and investment in the activities. 2. The nature of participation in the the company: the direct and the portfolio investments. The direct investments include those which form more than 10-25% of the capital of the company and are entitled to participate in the enterprise management. The portfolio investments include only the investor dividends on shares of the company or other securities. 3. During the

period of investment: short-term (one year) and long term (over one year) investments. 4. the ownership investors: private, public, foreign and compatible. 5. the region: the domestic investment engaged in the investment objects in the country and investments abroad[4]. I. P. Moiseenko proposed to allocate the medium-term investments, and extended the classification in terms of risk and singled out the risk-free, low-risk, medium-risk, high-risk, speculative that are differed by the risk level or the expected income [5].

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#### FEATURES OF ENERGY-EFFICIENT AND ENERGY-SAVING POLICY OF PORTUGAL

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Modern EU policy in power generating field includes three main aims —competitiveness of energy sector, sustainable development and safety of power supply. The first aim (competitiveness) is related with liberalization of energy sources internal market, ensuring effective competitiveness, creation of electricity transmission network, and also scientific and research activities in the field of clean coal production, reducing financing of coal mining industry, development alternative power sources, increase of energy-efficiency, nuclear investigation). The second aim (sustainable development) covers the widening of renewing sources use, improvement of energy efficiency, development of nuclear-power engineering, trading harmful emissions. The third aim (safety of power supply) is concretized in such elements: management of European oil and gas reserves, power of oil processing plants, energy saving, terrorism protection, development of internal dialogue.

Besides the EU energy policy can be considered today as such that has two factors – internal and external[1].

Portugal membership in EU became a driving force stimulating changes in the country economy at the end of 1980ies – beginning 1990ies.

For the last ten years Portugal was a highly power-dependent country that varied from 80 to 90%. However a great accent on renewable and energy efficiency as well as ecomonic context, allowed the country to reduce its dependence to a lower level. In 2013 the energy dependence decreased to 73,9%, however it is still at the high level [3, c.15].

The contribution of endogenous renewable sources corresponds on average (2009 - 2013) to 22,4% and 48,8% of total primary energy consumption and total electricity production. This makes Portugal a reference to the level of the European context. In 2012

Portugal detained the seventh largest share of renewable energy in the EU -28. The percentage of renewable energy represented in 2012, 14,1% of gross final energy consumption in the EU -28 (12,9% in 2011) and 24,6% in Portugal (24,5% in 2011)[3, c.15]. For the production of electricity from renewable energy sources Portugal had in 2012 a 47,6% incorporation rate, the third largest of EU -28, after Austria (65,5%) and Sweden (60,0%), and far above the European average (23,5%) [4].

Total gross production of electricity in 2013, including import balance, was 54,448 GWh. In this production, 59,8% came from renewable sources (mainly water and wind). The high production of electricity from renewable endogenous origin had a positive impact on reducing the import balance of electricity [3, c.16].

At the summit held in Madrid (Spain) on March 5, 2015 the leaders of France, Spain, and Portugal discussed the problem of transit of the spare energy produced south of the Pyrenees mountains separating France from Spain and Portugal. Portugal generates about 25% of the energy it produces from renewables while Spain generates some 17% [5]. The summit agreed a «high level group» would increase the efforts to develop energy interconnections in southwest Europe and ensure that all planned projects are finished on time.

The European Commission, the EU executive, is keen to complete a single European energy market and has cited conflict between Ukraine and the main EU energy supplier Russia as a key reason to invest in infrastructure that can aximize alternative supplies.

Concerning cooperation of Ukraine and Portugal on energy supply at the 16<sup>th</sup> Conference of the United Nations Framework Convention on Climate Change, and the 6<sup>th</sup> Meeting of the parties of Kyoto Protocol in 2010 in Cancun a bilateral cooperation between Portugal and Ukraine was signed. It allows two countries to realize the projects of so called «green investments» (directed at realization of law carbon national strategy of economy development). «Green investments» include not only introduction of energy saving technologies but they are also the projects of effective renewable energy.

Within this agreement Ukraine committed to reduce voluntarily

to 2020 the harmful greenhouse gases emissions by 20% in comparison with reference data for emission calculations in 1990 [2].

Analysis of the energy saving technologies in European countries indicated our awareness of the necessity of energy saving policy. Though different countries are at the different stages of realization of the energy saving programs, there is an obvious tendency of stimulation by the European countries of the higher effectiveness of energy resources use. Despite dominating programs on supply of energy resources to Europe, the awareness is growing that it is impossible to develop further the energy and to provide power safety of states without solving the problems of energy saving. European countries are trying to find a balance between supply of energy resources and their effective use and also formation of a common energy policy, considering the problems of energy saving and environment safety.

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## THE IMPACT OF INTERNATIONAL MIGRATION ON TRADE AND FOREIGN DIRECT INVESTMENT BETWEEN CHINA AND AFRICAN COUNTRIES

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During the past 30 years, China has become an important part of the international community. At the end of 2013 the total volume of international trade in China reached 4.16 trillion USD, making China the second largest exporter and importer in the world. Over the last decade, China's international trade has grown due to entering the WTO, although after the global crisis in 2008 the growth of exports slowed - especially to the EU members. China has also become one of the most important recipients of investment from MNC. The volume of total foreign direct investment (FDI) China received amounted to 1.34 trillion USD; among developing countries, China is the largest recipient of FDI. And after 2000, China has also become an important source of capital. In 2013 the flow of outward foreign direct investment (OFDI) from China amounted to 101 billion USD, and the total OFDI in China reached 554 billion USD - that is, almost half of the total FDI received [1].

52% of trade flows and 71% of China's FDI goes to Asian countries. North and South America accounted for 20% of total imports and exports of China, Europe – for 19%. Cumulative FDI of China reached 89 billion USD in the Americas and 33 billion USD in Europe (i.e.16 and 6% respectively).

Engaging China to the world economy was reflected not only by intensifying trade and investment flows, but also by the migration. The growth rate of migration from China was significant, though not as much as the growth rates of foreign trade and investment. According to the Department of Economic and Social Affairs the number of immigrants from China has doubled for 30 years - from 4.3 million in 1990 to 8.4 million in 2010, while in 2013 their number was already 9.3 million persons. On the other hand,

according to the Taiwan's Overseas Compatriot Affairs Commission 2013 there were 41,350,000 Chinese persons outside of mainland China, Hong Kong and Taiwan [2]. Methodology, as well as the definition of migration, which is used in Taiwan, is significantly different from the methodology of the UN.

Over the past 30 years, migration from China has accelerated, as the number of Chinese migrants during 1990-2000 increased by 37.7%, and during 2000-2010 - by 44%. Only migration to Africa is very low – it accounts for only 0.67% of Chinese migrants. Moreover, in recent years this share even slightly decreased - from 0.71% in 2000 [3]

While Asia remains the most important recipient region, the growth rate of migration to North America and Europe are the highest

Chinese migration to Africa has a long history. Modern migration flows from China to Africa changed its scale because of the structure of China's economy, on the one hand, and the growing interest in African countries, on the other. Official data of UN [3] show that at the end of 2013 the total number of migrants from China to Africa reached 54,568 persons, while estimates with regard to illegal migration vary between 150 000 to 580 000 depending on the methodologies different data sources and different Approximately half (47.9%) of Chinese migrants are concentrated in East Africa, primarily in Mauritius (40.6%) and Madagascar (5.7%). In South Africa, important areas of migration from China are South Africa (31%) and Botswana (5.5%). The West Africa accounts for 5.5% of the total number of Chinese migrants on the continent, most of which are concentrated in Ghana (3.9%). In North Africa, there are about 8.7% of Chinese migrants, and most important recipient is Libya (5%).

New flows of migrants from China to Africa are heterogeneous. They consist of at least three types of workers - workers with a temporary contract, entrepreneurs, transit workers [6].

Migrants entrepreneurs from China contribute to the development of local economy due to: 1) providing an important source of investments at a time when humanitarian aid is no longer able to meet the needs of African countries; 2) offering new jobs; 3) reducing poverty, 4) creating a multiplier effect through the transfer

of management experience; 5) encouraging technology transfer; 6) imposing production, management, marketing skills and innovation [7]. However, actual results are little so far, but resentment of African politicians is growing about the influx of cheap Chinese products that inhibit the development of African industries.

Based on the study several important conclusions might be made. First, migration policy and labor market regulation should be adapted to the changing structure of migration flows from China and focus primarily on attracting qualified specialists and development of internal business networks that stimulate the growth of trade and foreign direct investment from China. Secondly, as Chinese migrants tend to concentrate in certain places, a number of measures to stimulate investment and economic development, on the one hand, and to prevent the growth of social tension, on the other, must be taken at the level of local authorities. Third, given the fact that the existence of ethnic communities promotes foreign investment, promotion of cooperation with these communities improves international economic activity in general. So, encouraging of the international business is an important instrument of government policy aimed at increasing the efficiency of migration processes.

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IEL F21

## FEATURES OF THE STATE SUPPORT FOR INNOVATIVE ACTIVITY IN GERMANY AND POLAND

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In modern conditions one of the main sources of economic growth are innovations and development of technologies. The innovative way of development is priority for any state. The achievement of high level of competitiveness and national security of the countries is impossible without expansion and development of innovative activity.

Diversification of structure of economy, and, above all – shift of emphasis from raw branches on the hi-tech industries, not only is one of the main objectives facing economy of Armenia now but also in many respects depends on rates of development of the technological focused business.

The small and medium-sized innovative companies as economic subjects are most motivated and flexible in achievement of the purpose of a conclusion of scientific and technical products to the market and play an important role in development of new perspective niches. However the high-tech companies in an early phase of the development in the majority don't cause interest in professional foreign and domestic investors. Without getting financial support, they are closed at a formation stage. Possibilities of a choice of financial instruments and attraction of the demanded volume of investment at such companies are very limited as low financial

stability and limited solvency, and also high risk of bankruptcy and lack of assets, necessary for pledge, are, as a rule, inherent in them.

The market of venture business demands active participation of the state for creation of adequate institutes of venture investment, formation of material, legal and educational conditions for emergence of enough the innovative companies. An important task thus is definition of ways of complex development of the national venture industry and a role of private business in this process. The state, taking these or those steps to areas of support of venture business and its infrastructure, plays a catalyst role in development of the perspective directions, promoting change of the existing situation at which perspective technological products remain out of the sphere of interests of the acting investors.

Today the majority of the measures taken in the leading countries is directed on stimulation of innovative activity, including in the sphere of the small business (SB). The governments of the vast majority of the states consider development of the national innovative systems (NIS) and stimulation of innovative activity as a basis of economy regulation. Characteristic of NIS of the leading countries of the world is active state support of SB innovative activity.

In questions of innovative development Germany is the recognized leader among the European Union countries. According to data of the German Institute for Economic Research (DIW Berlin) Germany takes the leading positions on production of volume of a gross value added in the sphere of the production connected with scientific researches. The main share of investment into development of innovative activity is the share of the industrial enterprises which are interested in implementation of scientific researches and development and in active introduction of innovations. The state also gives essential support to the innovative companies.

The economic policy of Germany is directed on improvement of financial conditions for innovations, especially in small and medium business. Support is got by the researches and development of the increased importance for the country in general aiming to lift to world-class domestic science and equipment in the chosen areas. Research and development of long-term character, interfaced to the

great risk, demanding serious expenses in which financing participates as well the private capital, is preferred.

In Germany work programs for protection of the intellectual rights of industries, universities and public research organizations. Private inventors and small enterprises have the right for financial support of the state when patenting the inventions.

The new economy which basis is made by high-tech industries of information and communication technologies sector and science sphere, in much bigger degree in comparison with traditional economy appears depending on an investment component that is confirmed by practice of the leading European Union countries, first of all, of Germany. High scientific and technical level of the country is provided considerable on volumes and various on sources investments into innovations, including information sphere.

However thus the main objective of the state consists not in continuous building of the funds allocated for scientific researches, and in creation and improvement of necessary frame conditions for expanded financing of own research and development by firms in the advanced areas. In this sphere the federal government is guided by the concept of Public-Private-Partnership (PPP), and the principles of public and private partnership extend not only on the national companies. In the European Union Germany is the participant of the majority of scientific and technical programs, and also the member of many specialized European scientific organizations.

The main financial source for scientific researches in Germany, as well as in other West European countries, is private business (2/3 of all expenses on research and development). One more important source of financing of researches and development of innovations, finishing them to the level of commercialization and effective introduction is foreign investments. High scientific and technical capacity of Germany, the developed infrastructure, qualified personnel, recognized level of the German scientists, engineers, and the most important - investment appeal of the state, thanks to purposeful economic policy of the German government, turn the country into the main object of foreign investments into innovative projects. Volumes of the state support of carried out research work are much higher than in other countries, and "rational use" of results of intellectual activity of employees the highest in the world.

Measures for stimulation of innovative development of German economy, carried out by the German federal government and state land institutions, can become a source of useful experience for the Armenian departments responsible for ensuring the accelerated development of innovations sphere.

Poland is a country with rather large and quickly growing market economy. Poland is one of the most important investment markets in the Central and Eastern Europe. According to the Global Innovation Index Poland could increase bigger innovative potential thanks to investments of the EU within programs of development. It should be noted that at that time when many European countries fought in the conditions of world financial crisis, Poland could show surprising stability, having shown growth in comparison with decrease in the countries entering EU-15. But this growth happened in many respects thanks to accumulation of the capital and more high efficiency which cornerstone development of new technologies is.

Information support of SB is considered in developed countries as very important measure of stimulation of innovative activity. Networks of consulting services, the information and training centers for SB, databases are created.

There was an effective system of support measures of SB innovative activity in the countries of Eastern Europe. So, the Polish Agency for Enterprise Development (PARP) attaches the extreme importance in regulation of innovative activity of SB to information assistance.

Innovative development demands attraction of considerable financial resources. Poland, it as well as many other EU member states, seeks to reach higher costs of R&D.

Therefore studying European, in particular German and Polish experience of innovations financing and its application in the Republic of Armenia can play an important role in innovative development of our country.

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### SOCIAL ENTREPRENEURSHIP – INNOVATION STRATEGY OF ECO-ECONOMIC DEVELOPMENT

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The global warming caused melting of polar icecaps; biodiversity is declining at an unusually high rate raising serious problems about the impact on future generations [1]. That is why the enterprises also have to change their attitude to conducting business and implement eco-strategies. New approach is studied in the framework of socio-economic development model which integrates moral responsibilities with company goals [2]. More advanced model integrates even four features – social benefit at the local level; financial sustainability; conservation of the global eco-system and empowerment of the human spirit [4].

The best form for the implementing this models is social entrepreneurship. Social enterprise was created as a new and alternative method of business with fairness features, democratic approach, social responsibility and environmental friendly elements. This is a new appearance of enterprise of 21<sup>st</sup> century, which operates freely on open market using common demand, supply and competition rules [3, p.2].

The classical definition of social entrepreneurship is provided by Dees (1998) who stated that mission of social entrepreneurship is to create and sustain social value (not just private), recognize and relentlessly pursuing new opportunities to serve that mission, add innovation and act without being limited by resources [6, p.9].

All of these statements notice that social entrepreneurship could not be developed with innovations and eco-strategies solutions. Even Ashoka, the largest network of social entrepreneurship worldwide, providing criteria for social entrepreneurship fellows underlined about necessity of creativeness: social entrepreneurship has to have a new idea for solving a critical problem; being creative; have an entrepreneurship personality; envision the broad social impact of the idea and possessing an unquestionable ethical fiber [7, 6, p.11].

Now social entrepreneurship is dynamically growing in European countries, USA and Canada, addressing to solve unemployment problems, to provide social protection and to promote sustainable development ideas. In the UK it is estimated 60,000 social enterprises employed more than 650,000 people and generating 8,4 billions of GBF for national economy. Such enterprises function in different spheres of economy, for example, delivering services to communities, social care services or even community-owned buildings [5].

Social enterprises are successfully working in eco-sphere helping society to solve environmental problems. The main areas of their activity are increasing quality of drinking water, air pollution, land degradation, deforestation, waste handling and others.

Kateryna Smagliy describes in the book: Everyone is a Changemaker: Social Entrepreneurship and Strategic Philanthropy several examples of international experience of successful social entrepreneurship. To the main bright eco-projects she considers waste recycling in Turkey and USA, decreasing of carbon emissions, energy efficiency and eco-production [9].

For example, the company Copmadam started as an experimental project in Ayvalik addressing to solve the problem of

women's employment in Turkey and recycling or re-using waste. Copmadam produces unique women bags and accessories from packing waste in a creative and aesthetically way. The US Company Ecoist produced designer clutches in the same special technic borrowed from Mexico. This business gave constant job for 40 women in mini-plant in Peru.

The other prominent example of eco-social entrepreneurship is D.Light Company founded by Sam Goldman in 2004, after working in Peace Corpus in India. In India half of population (600 million of people) still lives without electricity and they use gas lamps which is dangerous for people as well as environment. Sam Goldman together with Ned Tozun discovered a sun lamp which does not need batteries. This innovation improved thousands of lives and significantly decreases carbon emissions [9].

Organic production and vegetarian cuisine also could help to preserve our planet decreasing greenhouses emissions. According to recent researches, the meat production influences on climate changes and caused 18% of greenhouses emissions. The biggest social business of organic production is "The Whole Foods Markets" founded in 1980 by four initiative entrepreneurs from Texas. The owners of this business use only green energy and do not use plastic packaging Also they promote among the other farmers organic technologies and help them to transfer from common way to organic production [9].

The great example of organic production could be a social enterprise: Jardins de Cocagne in France. It is the network of agricultural production companies created for social and labor rehabilitation of vulnerable categories of the population.

The other very important feature of social entrepreneurship is that all enterprises try to use 100% renewable energy, implement energy efficiency technologies in production and in even everyday usage, to carry about wasted plastic and plant as much as possible new trees. In Great Britain Suma Wholefoods Company shows us the unique democratic way of managing enterprise and eco-orientated goals of company described above [11].

In Ukraine, the idea of social entrepreneurship also is not new, first organizations began to set up just after getting independence in 1991. These enterprises focused on creation working places for

disabled people (organizations UTOG and UTOS) and not called social enterprises. Since 2004, the definition of social entrepreneurship was highly promoted by international foundations. UCAN began to conduct trainings for social entrepreneurship and provide grants for the development of such initiatives among NGOs [10].

Then in 2010, this idea was picked up by the British Council in Ukraine. It was created a consortium "Promoting social entrepreneurship Ukraine", which included the International Fund "Renaissance", Fund "Eastern Europe", PricewaterhouseCoopers Ukraine, Erste Bank. Thankful to this activity was prepared series of trainers from different regions of Ukraine as well as offered small loans for social entrepreneurs by Erste Bank [11].

Actually, the Consortium initiated and supported the creation of resource centers of social entrepreneurship in different parts of Ukraine, which led to creation of database for general information about case, providing trainings, spread printed materials and other [11].

Now, we could also find eco-enterprises which are already working for sustainable development. They try to handle electronic waste, used automobile tires; the Company "Laska" gathers used cloth, repair it and sale. The other social enterprises promote organic agriculture and free-pesticides production. But there are still a lot of urgent and important ecological problems in Ukraine. The ecological experts defines several of them: water and air pollution, degradation of land resources, deforestation and illegal cutting, using pesticides in agriculture, destroyed mines and quarries, liquidation of consequences of Chernobyl disaster.

Summing up saying above there are many opportunities for development of eco-social entrepreneurship in Ukraine. With appropriate state support and developed mechanisms of financing such enterprises they could achieve great results. But it is necessary to join efforts on two levels: national and local. On the national/state level it should be created a map of social needs and resources of regions with indication of the important eco-problems of the region. And on the local level (local communities, communities of temporarily displaced persons or other socially disadvantaged

groups) has to be implement mechanism of getting financial support of such initiatives.

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## THE ENVIRONMENTAL COMPONENT IN ECONOMIC SECURITY OF THE IMPORTER

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Increasing aggressiveness of external and partly internal environment leads to the emergence of new threats and their impact on enterprise performance. It is important to form theoretical and methodological aspects of evaluation of the economic security of industrial enterprise taking into account the environmental component.

The following scientists made significant contribution to the study of issues related to the management of company's economic security and its assessment: Abalkina L., Bendykov M., A. Baranowski, Bespalko A. Vashchenko N., V. Gaponenko, Gorodetsky A. Grechko D. Dovbnya S. Dolgopolov Yu Donets L., V. Ismagilov, canonry S., O. Lyashenko, Martyushev L., B. Mikhailov, Muntiyan V., E. Oleynikov, Pasternak-Taranushenko G., D. Pilova, Pokropyvnyy S., G. Semenov, Tambovtsev V., Terekhov AS, Turylo A. U Shembel

The object is a economic security of the importer LLC "Ferozit." The subject of the study is theoretical and methodical aspects of the security evaluation of the importer taking into account environmental factors.

"Enterprise's economic security " means the securing the company, namely its capital, personnel, tangible and intangible assets, rights, position in the markets, image and prospects for development from negative impact of internal and external factors. The major influencing economic factors are: the state of the current economic situation in the country; financial market; inflation rate; purchasing power; level of effective demand; change in the rules of currency circulation; interest rates on loans; loss of raw materials markets; fluctuations in prices for raw materials and components; economic policy on the import of raw materials; expansion of imports and increase of import quotas outside the context of

domestic production; unfavourable investment climate in the real economy; property redistribution and nationalization of private enterprises. Also we can form major influencing ecological factors as: ecology in the region that determines the specific production opportunities in the region; the system of direct administrative restrictions that limit the development of environmentally hazardous industries, and in some cases their closure.

It is important to study the impact of enterprises' foreign trade to implement a system of economic security:

- 1. Consideration of international requirements for the organization of security systems;
- 2. Organizing companies' structure and divisions considering foreign economic activity;
- 3. Development of the concept of security specific to foreign trade:
- 4. Development of security mechanisms in the implementation of economic activity;
- 5. Development of performance indicators and assessment of the security considering environmental components.

The environmental component of major impact can be defined within the production process. Using special software and advanced production lines reduces harmful effects on the environment and minimizes the cost of raw materials. In particular in the enterprise product line is built vertically, which makes it possible to place them on a relatively small area. Also new equipment allows to use waste and defective products for heating individual sections of the production line and warehouse, which significantly reduces waste and the amount of heat and power that comes from outside.

Thus, the analysis the particular category of economic security proved that the use of a systematic approach is the most versatile and allows combining the best elements of existing approaches. The threats are now arising in foreign trade, classified by source of origin, as well as their influence on components of stock performance of economic security. The main goal of modernization of the economic security is to ensure stable and efficient operation in modern conditions and ensure the formation of high potential in the future.

### THE ECOLOGICAL PROBLEMS OF THE THEORY OF SUSTAINABLE DEVELOPMENT

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The theory of sustainable development is a candidate to become the main theory of human's development of XXI century. The wide spreading process of its popularization covered the whole planet. The theory claims the equilibrium of three main goals - economical, ecological and social during the development of humanity. Now science proved the existence of a direct link between human activities and the economic environment. Human activities encompassed almost the entire planet. The transformation made by man in the course of economic activity affects mostly negative environmental impact.

Sustainable development theory says that the environmental component should ensure the integrity of natural systems. It's claimed that future generations have the right to use natural resources. Therefore, man-made environmental impact is estimated and the existing approaches to consumption and production are reviewed. Sustainability can be understood in two ways. First means that current generation of poor have to live in the same level of living for the better living of the future generations. Second approach is when future generations should be able to live in the same high standards of living. Theodore Panayotou [1, p.141] says that real sustainability is the winning of both current and future generations and sustainability needs economic growth. Herman E. Daly [2, p. 270] calls the challenge of sustainable development as impossibility theorem: the oxymoron is the world growing economy without environmental degradation and out of poverty.

Some authors point on some imperfect aspects in the theory of sustainable development. Alex Geisinger [3] articulates such negative attitudes in human - nature relations:

- Approach of the man's domination over nature
- The consumer attitudes to nature nature is seen as a resource

- Approach of separation of man from nature.

Other authors say that the theory of sustainable development is trying to reconcile conflicting objectives - environmental protection and economic growth [2, 4, 5].

- H. Hove points on three negative conclusions of sustainable development [5]:
- 1- Sustainable development continues the underpinning of former approaches as a result of Western thoughts construct
- 2- The main focus is on unsustainable expansion of economic development
- 3- The wide meaning of this term allows using of different approaches for the actors.

Also H. Hove says about the lack of attention to excessive consumption in developed countries [Hove, p. 51].

Ingmar Lippert articulates such problems in sustainable development [6]:

- New technologies, management offered as a solution to the ecological crisis, although often these factors are the cause of the ecological crisis
- Using of the term sustainable development in the political context.
- I. Lippert says that our understanding of dealing with nature rationally is limited with our knowledge [6]. The full management in such a complex systems like environment is quit impossible. There is a possibility that we cannot consider all the factors of influence. So the forecasts are losing credibility. Also a lack of knowledge about the future needs is a negative aspect.

The accordance of proclaimed concepts and the real action remains the open question. Research of J. L. Moore [7] showed that there is a contradiction in the fact that the authorities declare about the sustainable future, and what they actually do for the sustainable development.

Research of M. J. Milne, H. Tregidga, S. Walton [8] indicate that business is ready for a narrow understanding of sustainable development, using instrumental approach to the environment. This situation not only contrasts to the requirements of sustainable development, but also enhances the status quo of traditional business approaches to the environment.

It is believed that poor countries have a negative factor of environmental impact. Emphasizing sustainable economic growth, opportunities for overcoming differences between economically developed and undeveloped countries are reduced. Due to the economic levers poor countries will take those decisions that benefit the rich countries. Some authors say that poor countries fall into the trap of excessive use of their natural resources and the environmental pollution. The graphic evidence of this approach is the environmental Kuznets curve with G. M. Grossman A. B.Krueger corrections [9]. It is a hypothesized relationship between the indicators of pollution and the economic growth. The environmental Kuznets curve shows that environmental degradation first rise with increasing income per capita. And then beyond some amount of income per capita the indicators of the environmental degradation fall.

The investigations of Stern D. I. [10] argued with this statement. It shows that developing countries are solving environmental problems with even shorter lag and even better then developed countries. So, the relations between the environment and the development of the country are much complicated then the classic environmental Kuznets curve.

Now mankind has several problems - both economic and social. However, there is a certain type of problems that can prevent a lifetime on this planet. This is the environmental problems of humanity. The economic and social developments are necessary elements of solving this problem the primary. The humanity is too busy with preoccupation with the symptoms of environmental degradations [1, p.142]. The ecological problems could be solved only by alleviation the roots of causes. The roles of governments are much wider than just to allow markets to function. The national and international low in environmental policy has to make rules in the markets. The main instruments of making policy are well known. There are direct regulations, Pigouvian subsidies, Pigouvian taxes and tradeable permits [11, 2003]. With an active using of these instruments governments can manage the natural resources and the process of production. Traditional business approaches to the environment can be changed with regulations and restrictions. The governments should take an active part in promoting

environmental development. The particular importance should be attached to the new technologies and innovations, which seem to be the ways to reduce human pressure on nature.

Mankind should pay more attention to the environmental dimension of the sustainable development. If advocates of the theory sustainable development say about achieving the three main goals at the same time, we insist on the primacy of environmental sphere.

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JEL M31

# PROBLEMS OF MARKETING PLAN FORMING FOR SALES ON FOREIGN MARKETS ACCORDING TO INTERNATIONAL MARKETING RESEARCH

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In modern conditions world market is characterized with fierce competition among companies over territory of sales, customers, raw materials, energy resources and labor. Therefore, to survive in this struggle and succeed, any company is forced to use wide variety of marketing tools and instruments. The special role for a company trying to enter a new foreign market is market research. As environmental aspects are becoming very important (and for some products predominant) factor influencing sales, we should consider them along with economic aspects.

Market researches are informational and analytical basis for decision-making and reduction of uncertainties. With their help emerging and marketing strategy development, implementation of commodity policy, formed a feedback with consumers, stimulates demand and increases the efficiency of the enterprise.

Improving sales policy on foreign markets should be based on international market research. The availability of reliable information is crucial for decision-making process on B2B markets, characterized by a significant sales volume and purchases.

Each customer is unique on B2B market and this feature gives opportunities on one hand and threatens companies' activity on the other.

In our research we have studied foreign economic activity of major producer of windows and supporting commodities in Ukraine (Fakro-Lviv. Ltd.)

It was revealed that domestic market is very competitive and in order to get competitive advantage the company should consider other countries as new markets. According to the calculations it is obvious that Ukrainian market of windows and supporting commodities is characterized by prevalence of supply over demand. And major producers seek for the possibilities to trade their goods on foreign markets.

Also the result of international trade flows analysis showed that export of windows exceeds import, indicating in some aspects the competitiveness of Ukrainian producers. We have defined that Fakro-Lviv, Ltd. has advantage in trading its commodities on international markets:

- prices are competitive compared to average export prices;
- high quality and meeting the needs of the most demanding consumers worldwide:
- care about the health and safety of customers and the environment.

We have defined that for the company it is important to enter Kazakhstan and Uzbekistan markets. These countries now show significant increase in construction volumes and customers are considering high-quality and environmentally safe products as priority.

The results of market analysis for these countries showed that the demand for window construction is connected with the intensive development of the construction. Besides, qualitative characteristics of Fakro-Lviv's windows assure another competitive advantage on these potential markets over Chinese win

Entering the market of Kazakhstan and Uzbekistan will give the company an opportunity to expand significantly sales volumes and open the "corridor" of entering the markets of other neighboring countries. Another stage to consider is establishing own manufacturing process in Kazakhstan and Uzbekistan.

The major aspects for the company to consider are: constantly increasing competition from Chinese companies, logistics, environmental factors, safety and energy efficiency features, peculiarities in standards.

The propositions according to market research for the company can be formed as follows: reduction of the costs using scale effect; increase of energy efficiency of the windows and supporting commodities; promotion and advertising of the commodities as highquality, safe to environment and health products.

JEL B27

#### THE SILK ROAD ECONOMIC BELT

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The Silk Road Economic Belt and the 21st Century Maritime Silk Road (the Belt and Road) were proposed by Chinese President Xi Jinping during his visits to Central Asia and Southeast Asia, respectively, in September and October of 2013. A clear sign of the political significance of the Belt and Road is that it was included in the Decision of the Central Committee of the Communist Party of China on Some Major Issues Concerning Comprehensively Deepening the Reform, adopted on November 12, 2013.

The Belt and Road Initiative, according to Vision and Actions, is "open to all countries, and international and regional organizations for engagement." It "advocates peace and cooperation, openness and inclusiveness, mutual learning and mutual benefit," as well as "promotes practical cooperation in all fields, and works to build a community of shared interests, destiny, and responsibility featuring mutual political trust, economic integration and cultural inclusiveness." Thus the Belt and Road Initiative is nothing less than a Chinese call on the international community to jointly work toward a "harmonious and inclusive" world. It is an updated—but much

more detailed and operational—version of the "harmonious world" proposed by the former Chinese President Hu Jintao in 2005.

As such the Belt and Road Initiative probably should not be called a strategy. Besides, a strategy may smack too much of geopolitical ambitions, and Beijing has made it abundantly clear that the Belt and Road is a vision for "harmony, peace and prosperity," not a geopolitical conspiracy. In other words, it should not be viewed as a Chinese scheme to counter the U.S. "rebalance" to Asia or to expand Beijing's geopolitical influence in the Eurasian continent and beyond.

But regardless of how reassuring the Chinese official rhetoric sounds, it is inevitable that some analysts will view the Belt and Road as a geopolitical strategy. Most importantly, economic interests—though couched in terms of mutual benefit and prosperity—are geopolitical interests. As Chinese investment—by state-owned or private actors—in and trade with foreign countries increase, so do its geopolitical interests in those countries. One can certainly have geopolitical interests without economic interests, but economic interests are necessarily geopolitical interests.

As one famous Chinese analyst pointed out a few days ago, the Chinese government shouldn't be shy about using "strategy" to describe the Belt and Road Initiative, as long as Beijing is firmly committed to bringing about mutual benefits through the implementation of this strategy. After all, deeds speak louder than words. "China should have full confidence to proclaim to the world that the Belt and Road is a Chinese grand strategy," he wrote. "It is a public strategy, not a conspiratorial one."

## THE PROSPECTS OF TRANSITION OF THE UKRAINIAN FOSSIL FUEL POWER PLANTS INTO RENEWABLE ENERGY SOURCES. THE EU EXPERIENCE

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#### **Actuality of work**

It is commonly agreed that the key factor to successful reforms in Ukraine is reform in an energetic sphere. The Minister of Foreign Affairs of Lithuania Edgars Rinkewichs stated that energetic is not only an economical issue, but this is the geopolitical issue as well, and we can see this pretty well on the example of Ukraine. [1] Moreover, Ukrainian society can observe prosperous experience in energy supply security of more successful European post -soviet counterparts such as Poland, Lithuania, Latvia and others. This success has made them stronger both economically and politically. For instance, part of renewable energy in Lithuania is nearly 37 %. [2] This is the second high figure in Europe, after Sweden (54 %). And probably this is the crucial factor to their energy safety which gave them political and economical freedom.

#### **Problem statement**

One of the leading role in energy producing in Ukraine belongs to fossil fuel power stations (nearly 42 % in 2013), on the first place is Nuclear Power Plants with the share of 52 %. [3] It is evident that this type of Power Stations has such negative aspects as greenhouse gas emission, low degree of efficiency (less than 30 %) and typically for Ukraine depreciation of equipment. And probably the most significant problem for us nowadays is dependence on gas and coal supplies, which Ukraine have to import from Russia and occupied territories of Eastern Ukraine. Such energetic dependence on fuel suppliers is evident not only for Ukrainian economic but for Ukrainian policy as well.

#### Results

Recently Ukrainian Minister of Energy Volodymyr Demcheshyn stated about intention of Ukrainian Ministry of Energy and Coal Mining to change fuel type in some Power Plants from anthracite (coal grade) to gas coal. Obviously, it means change of equipment into stations. Experts have already estimated that such change for one power-energy unit will cost 100 million UAH. [4]Such plans of Ministry have already cause debates among scientists, economists and politicians. For instance, vice-chairman of Head of the council of Ukrainian Energy Assembly Yurii Sakwa stated that we need not to reconstruct outdated equipment, but to look for ways how to change it on a new one. [4]

The worldwide trend in the area of energy policy is an increasing part of renewable energy sources such as solar, wind, biomass and others. For instance, Denmark is planning to receive all its energy from renewable sources till 2035. [5] And Ukraine has joined so called Strategy 20-20-20 as well. This strategy implies achieving such main points 1) 20% cut in greenhouse gas emissions (from 1990 levels) 2) 20% of EU energy from renewables 3) 20% improvement in energy efficiency. [6] It should be said that demands for Ukraine is lower - our aim is to reach figure 11 % to 2020. For instance part of renewable energy in Ukraine in 2012 was only 2 %.

In such situation partial decision for the Ukrainian energetic problems could be following the example of the EU countries, which means transition into renewable energy sources such as solar, wind, biomass etc. An alternative thing for gas and coal could be a biomass which is possible fuel for power stations. What is more, taking into account our relationship with suppliers of these sources we just must consider alternative energy sources.

Such transition has already begun worldwide and in many European countries as well. As the EU Commission writes on its website, "increasing the use of biomass in the EU can help diversify Europe's energy supply, create growth and jobs and lower greenhouse gas emissions."

A good example of it could be Poland which makes serious steps in order to reach goals of Strategy 20-20-20. In neighboring to Ukraine country was built the largest in the world Power plant which runs on biomass. 80% of fuel for this station is green wastes and another 20 % is agriculture wastes. Such plant can satisfy needs in energy of more then 500 thousand households. Poland also is going to build such plants in each region in their country in a few years. [7]

In Germany 5,6% of all energy is received with the help of power plants which run on biomass.[8]

In Denmark, optimizing existing coal-fired power plants is one solution that significantly improves efficiency rates. The efficiency rate of the average power plant is below 40%. And from 2016 most ships docking at Avedøre Power Station will no longer carry coal but wood pellets instead and the efficiency rate of this plant will be 94%, which is the highest rate in the world. This supplies district heating to more than 200,000 households in the Greater Copenhagen area and power to meet the annual consumption of 1.3 million households. The plant is making the transition to biomass, a move that will reduce its CO2 emissions by about one million tones per year. [9]

Another good example for Ukraine could be using of energetic willow which is widely used in Swiss for 40 years time past. This tree is more effective than others for producing energy. And in this country 30 % of energy is produced with the help of biomass. The Mrs Annika Genrikson who works with renewable energy in Swiss stated that using of this willow could be a way to energetic independency for Ukraine.

It is worth to say that the EU actively supports renewable energy projects. One of such projects is successfully implemented in Kyiv region. Eco Power Plant which can satisfy energetic needs of more then 32 thousand people and 185 state-funded organizations cost nearly 21 million Euros; 15 million Euros were invested into this project by European Bank for Reconstruction and Development. [10] It is worth to say that such plants have significant prospects in agriculture region of Ukraine, where as a biomass could be used not only green wastes, but straw as well.

The Ukrainian law in sphere of renewable enegy today is one of the best in Europe. In Ukraine there exists system of Green Tariffs. This law implies a special tariff for producers of green energy and guarantee that their energy will be baught by state. Of course this system implies some «discounts» for instanse tax exemption for renewable energy producers etc.[5] This factor makes Ukraine attractive for investors in "green energy". Ernst and Young include Ukraine in their annual report Renewable energy country attractiveness index and Ukraine was on the 36 place (2014) [11].

But the main obstacles for investors still remain two factors high level of corruption and burocracy which make serious investors reluctant to invest into Ukrainian renewable energy.

#### Conclusions

Wise policy in sphere of Energetic diplomacy can provide Ukraine better future in all spheres. Increasing share of renewable energy could be a turning point in history of modern Ukraine. And the main benefits from such transition are the next

- 1. Reduction of dependency on Rusian federation and other suppliers (Diversification of energy sources).
- 2. Modernization of Fossil fuel plants (improvement of efficiency rates in our Fuel Power Plants)
- 3. Reduction emmision of CO2, improvement of ecological factor of living.

Successful implementation of such energetic reforms will be a milestone for Ukraine in its attempts to leave the post-Soviet paradigm of how the state, and became a modern European country.

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#### Наукове видання

## ЕКОЛОГО-ЕКОНОМІЧНІ ПРОБЛЕМИ У МІЖНАРОДНІЙ ТОРГІВЛІ ТА ІНВЕСТИЦІЯХ

Тези доповідей III міжнародної наукової конференції м. Львів, 20-21 жовтня 2015 р.

Частина 2

За ред. д-ра екон. наук, проф. Ігоря Грабинського

До друку рекомендувала Вчена рада факультету міжнародних відносин Львівського національного університету імені Івана Франка. Протокол №5 від 23.11.2015 р.

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