

ONE EUROPE, BUT DIFFERENT PATHS: TYPOLOGY OF THE COUNTRIES FROM THE VIEWPOINT OF SUSTAINABLE DEVELOPMENT

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Abstract. *The current positions of 37 European countries, including Ukraine, in the space of four categories, which describe their development, are analyzed. Among these categories: economic competitiveness, social welfare, environmental performance and entry of postmodern tendencies. The multidimensional typology of European countries by the specifics of their position in the amplitude of four integral indices.*

Гукалова І.В. *Одна Європа, а які різні долі: типологія країн у координатах сталого розвитку. Аналізується сучасне положення 37 європейських країн, у т.ч. України, у просторі чотирьох категорій, що характеризують їх розвиток: конкурентоспроможності економіки, соціального благополуччя, екологічних досягнень і проникнення постіндустріальних тенденцій. Увазі пропонується багатомірна типізація європейських країн за особливостями їх розташування у просторі чотирьох інтегральних індексів.*

During last decades, the world witnessed an unprecedented growth of material well-being. Behind the average statistic data on income, environmental performance and social changes, there is a large inequity gap among the countries. Modern Europe is dynamic and multi-dimensional: its countries, especially in different geographic sub-regions, differ substantially by the degree of territorial exploration and human potential. The above mentioned differences are indicated in a variety of typologies, based on integral indexes and international estimates of the countries' position in various directions of economic, environmental and social sustainability. Despite a somewhat 'spoiled' reputation of many international ratings and indexes, often perceived as tools of manipulation of vested interest holders and corporate community, they still remain an important benchmark for visual profile assessment of current development of the countries. Analysis of some ratings shows Ukraine is coming down in assessments of its environment and development. Sustainable development is a multi-dimensional and controversial process that cannot be described within single-dimension schemes and concepts. Countries of the European region have developed within different socio-cultural dimensions – inside a broader civilization system of coordinates, which defined priorities, values, mechanisms and standards of constructing the economy and social sphere. These systems have manifested themselves in environmental policies, in understanding the mission and goals for development of individual countries. If one of the dimensions would acquire prominence due to peculiar conditions or historic circumstances, other dimensions may become less developed. In order to uncover the essence of sustainable development, researchers first of all pay attention at the system's ability to develop within a long-term perspective [1, p.14].

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Let's consider the situation in European countries within a framework of *four integral indexes*: Global Competitiveness Index, calculated by the World Economic Forum methods; index of social well-being, calculated by the author's own method; Environmental Performance Index, developed by experts at Yale and Columbia Universities; and index of 'penetration' of post-industrial tendencies, calculated with the use of the author's method.

Competitiveness of national economies can be defined as a combined indicator that shows the degree of effectiveness of the national production in attracting investment resources and competitive investors, as well as the ability of innovation and drawing qualified work-force. One of the recognized indicators is a Global Competitiveness Index developed by experts of the World Economic Forum that is calculated annually for more than 140 national economies. In 'Global Competitiveness Report for 2011-2012' [2], the global competitiveness index is formed by the three groups of indicators: 1 – Basic requirements indicators, 2 – Efficiency enhancers; and 3 – Innovation and sophistication factors.

According to the competitiveness rating, three top places went to Switzerland, Sweden and Finland in 2011-2012. In the same years, Ukraine was ranked 82nd in a global competitiveness among 142 world countries and 33rd out of 37 countries in Europe. Among the leading factors, that impeded successful business development in Ukraine, respondents mentioned: corruption, misbalanced tax systems, growing costs of the work-force, and several financial components, that can only partially be caused by general crisis in its economy. Ukraine's competitiveness rankings are largely influenced by political and, to a less extent, by social factors, which reveal weak and short-sighted nature of the country's economic policy, and impact negatively on the country's image abroad. Despite going up by 9 positions in 2012-2013 ratings [3], ahead of Romania, Greece and some other Balkan states, this was achieved only at the expense of progress in innovations, but not because of reforms in spheres where country competitiveness is formed and which require change.

Assessment of the *social well-being* of the countries' development may be obtained by integrating five main components that characterize the state of development and use of human potential. The resulting indicator (index of social well-being) differs from a known human development index, in the view of the author, because it incorporates at least the following indexes: I_{pop} – index of provision of population by territorial resources; I_{vc} – vital capacity of the nation (calculated by multiplying the birth rate by the average life expectancy); I_{GDP} – index of GDP per population person according to the parity of purchasing capacity; I_{life} – index of life conditions of the population; I_{saf} – index of social safety. Index of social well-being is calculated as an arithmetical mean of five component indexes (accordingly by eight indicators of social development of countries):

$$I_{SOC.WELL-BEING} = 1/5 (I_{pop} + I_{vc} + I_{GDP} + I_{life} + I_{saf}) \quad (1)$$

Among 37 countries of Europe under consideration, Ukraine has moved up by social well-being index in 2011 and was placed on a higher (compared to its place in competitiveness rating) 26th position, which went ahead even of some EU members – Hungary, Romania, Poland, Lithuania and Latvia, that in recent years registered

very low even for Europe birth-rates. First places were predictably taken by Island, Norway and Luxemburg.

Environmental dimension of countries development is quite adequately described by index of *environmental "achievements"* or EPI – Environmental Performance Index, compiled by scientists from Yale and Columbia universities [4]. For calculation of this index, 25 representative indicators are being used, that comprehensively characterize the state of the environment and vitality of ecosystems of countries. EPI in fact determines the ability of a given country to protect its environment today and in the perspective, coming from institutional, social and other possibilities and efforts of national and global resistance to environmental violations. Among the analyzed countries in Europe, first positions are occupied by Switzerland, Latvia, and Norway. In these countries the issues of rational use of the nature environment are made social and government priority, which reflects these nations' responsibility of the state of the environment. Ukraine holds 33rd place among 37 European countries and is not included into first one hundred "clean" countries of the world, having only 102nd place in the world rating.

One more important aspect of contemporary development of societies is the degree of *'penetration' of post-industrial tendencies and Internetisation of society*. These processes may be adequately described by data of population employed in service sector, which is a recognized indicator to identify post-industrial tendencies, and by proportion of Internet users in the whole population. It is clear that domination of the service sector is not a sufficient criterion to indicate progress in post-industrial development, because not all service sectors create economic or political advantages for a country, and can be directed into the needs of production or tourism. But higher employment in service sphere definitely requires more effort to improve institutional structures, mechanisms of organization that facilitate market activities, promote division of labour and enhance economic development. Service sector involves types of activity that are more connected with innovations and cost reduction of social benefits.

Regarding 'Internetisation' of society, this factor is also important because it means faster and better access to information and technologies that relate to all spheres of social life – from employment to choosing vacation destination, shopping and people's private lives. According to our calculations, from the European countries analyzed, the first three places are taken by Luxemburg, Island and Denmark which occupy especially high levels of Internet development and coverage of the population. Ukraine occupies one of the last places in this indicator among European countries analyzed, having the smallest proportion of employed in service sector and lowest Internet population coverage rates [5]. Only one third of Ukraine's population currently uses the Internet.

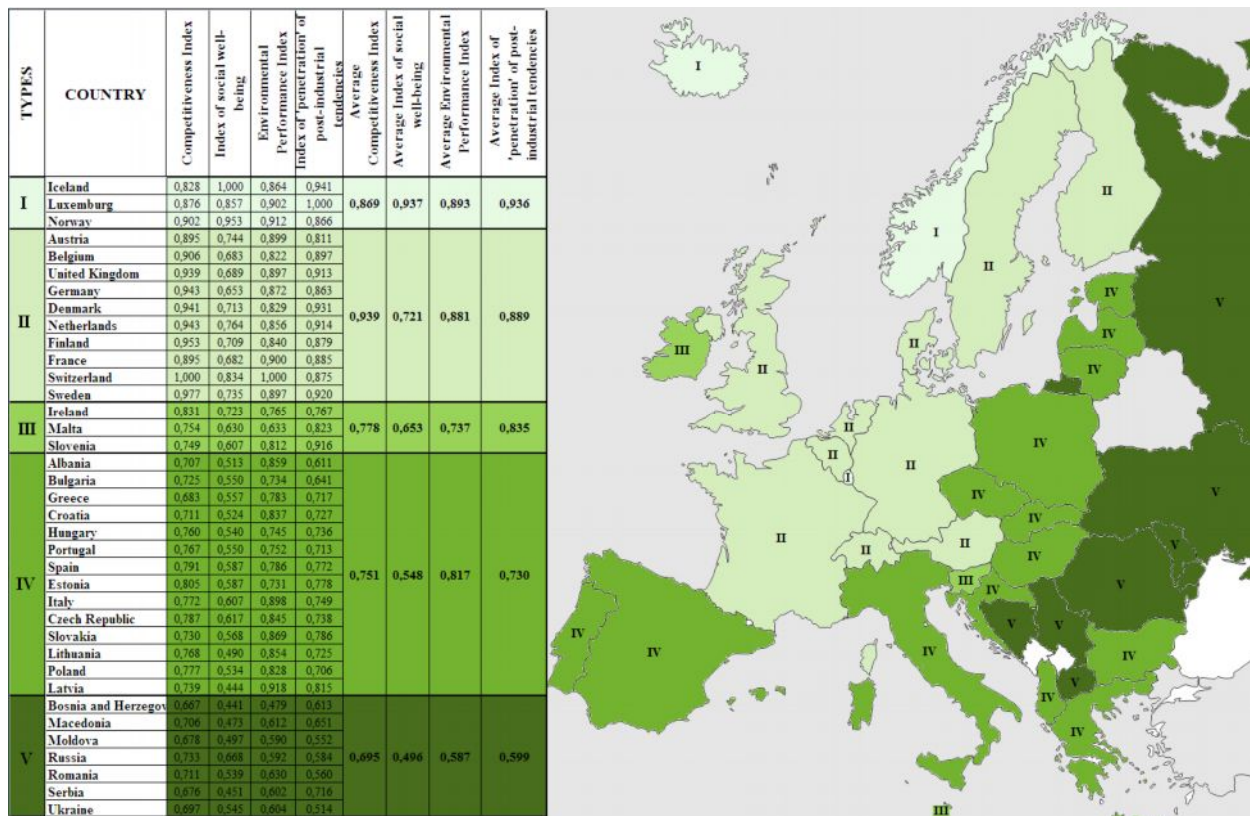


Figure 1 – Types of European countries within the coordinates of four “development” components

Thus, for different European countries, within the four dimensions described above, the corresponding indexes were calculated with the maximum (best) value, equaling 1. In countries with predominantly liberal political systems and strong economic base higher indexes mean free economic competition, sufficient social well-being, healthy environment and progress of post-industrial tendencies. The cluster analysis that was undertaken by the multi-dimension clusterisation algorithm, allowed to identify five types of European countries according to their development within the coordinates of four components (*fig. 1*).

I type of countries includes three stable European countries – Island, Norway and Luxemburg. These countries are characterized by high index values and balanced development in all dimensions.

II type of countries covers ten developed countries situated mainly in Western Europe, all of which, except for Switzerland, are EU members. Calculated indexes indicate the competitive development of this type of countries, combined with moderate deficit in social well-being. The social deficits of these countries are determined by lower on the average GDP per capita, in comparison to I type countries, and by lower provision of territory, as population density in these ten countries is very high. The latter regards Luxemburg, which got included into I type because of high for Europe indicator of GDP per capita. This is related to a higher number of employed populations in the economy of Luxemburg, daily contributing to the country's economy, who are not always reside in Luxemburg and come to work from closely situated countries with similar linguistic background. All other indicators, characterizing, for instance, high vital capacity of society and relatively

low unemployment level, are compatible for both types of countries. The main part of Type I and II countries includes countries with high level of environmental health and low greenhouse gas emissions per capita [6, p.80].

III type of countries (Ireland, Malta, Slovenia) – are countries with strong post-industrial tendencies of societal development, but with stronger social and environmental deficit. These smaller countries also lack living space, have less GDP per capita levels, and higher official unemployment levels. This type of countries also has lower, in comparison with the first two types, indexes of environmental performance.

IV type covers the remaining 14 EU countries, situated in Southern, Eastern and South-Eastern Europe. They are characterized as countries with misbalanced development and significant deficit of social well-being. These countries are quite different in the level of their economic development, but all of them demonstrate a visibly lower vitality of society (related to lower life expectancy), high levels of unemployment and relatively low GDP per capita. In 2011, several years after the onset of the world economic crisis, the economic recession became especially acute in Greece, Latvia, Spain, Italy and others.

V type includes the most problematic countries of Europe that form a symbolic European “Anti-seven”: Bosnia and Herzegovina, Macedonia, Serbia, Moldova, Romania, Ukraine and Russia (Belarus, which is characterized in some UN reports as a country with high social well-being indicators, was not analyzed due to lack of other indicators). The above countries are characterized as countries with misbalanced development, weak penetration of post-industrial tendencies, presence of several social and environmental threats. The latter are determined by high level of anthropogenic pressure on the environment and the highest in Europe contamination of atmospheric air.

Our analysis has shown that in Europe majority of countries belong to the epoch of the ‘second’ wave of industrial society with a weak penetration of post-industrial tendencies, and focus mainly on overcoming economic and financial deficits, environmental overload, social problems, or territorial development imbalances. And only a small number of countries is on the rise of the ‘third’ wave. Among them are countries with biggest and longest investment into social sphere and human capital, and into environmental projects. The largest divisions among the countries are in the social dimension of development.

Based on the results of Ukraine’s position in hierarchy of international and author’s own assessment of achievements of environmental-economic and social sustainability, we can conclude about a low-level of country’s effort towards progress in different spheres of social life. The sphere of penetration of post-industrial tendencies and social and environmental components are at especially low level. Despite of the above, Ukraine possesses some prerequisites that are sufficient to overcome environmental, social and economic challenges and building up resistance mechanisms to global challenges. These prerequisites may be defined using the above presented interpretation of a sustainable development as a system of multiple dimensions. Its material wealth and intellectual human potential need to be preserved for new generations of Ukrainian people as a basis for its development.

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DEVELOPMENT OF GREEN ECONOMY IN UKRAINE AS A DISPLAY OF TRANSFORMATION PROCESSES

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Abstract. *The essence and factors of formation of the Green economy are discovered. The opportunities and prospects of Ukraine relative to Green Economy as a new paradigm of economic growth are defined. The indicators of greening of economic activity are offered. The obstacles to attraction of Ukraine into the European movement of greening of social activities are detected.*

Кононенко О.Ю. *Розвиток зеленої економіки в Україні як прояв трансформаційних процесів. Розкрито сутність і фактори формування „зеленої” економіки. Визначено можливості та перспективи України щодо розвитку „зеленої” економіки, як нової парадигми економічного зростання. Запропоновано показники «озеленення» економічної діяльності. Визначено перешкоди на шляху залучення України до Європейського руху „озеленення” соціальної діяльності.*

Ukraine announced its willingness to join the process of the sustainable development in 1990th. But the analysis of the experience of Ukraine on passing to the sustainable development model, over a period of 1992–2012, has shown a slow pace and low efficiency of this movement. Five years were needed after subscription of Rio Declaration on environment and development to form the National committee of sustainable development of Ukraine. The concept of the sustainable development of Ukraine is not adopted yet, and the complex program to realize on the national level the resolutions approved by Worldwide summit of sustainable development has been adopted in 2003.