SPECIFICS OF INDUSTRIALIZATION IN CENTRAL AND EASTERN EUROPEAN COUNTRIES WITH SMALL ECONOMY

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Abstract
The paper presents in a specific way the issue of increasing interdependence between countries, which is an important feature of the contemporary stage of development in the world and in European economy. The article argues that these interdependencies are adjusting and moving in relation with changes in the production factors in each country. Most vulnerable to these adjustments are small economies, the development model of which is "marked" among other things by European leadership crisis, increasing the gap between rich and poor countries, slowing integration processes, etc. To solve these issues, the article proposes and argues a development concept for countries with small economies of Central and Eastern Europe (CEE) based on a comprehensive process of industrialization resulting in an export-oriented economy. The paper highlights that industrialization, from the beginning of the process, must be export oriented. The knowledge and information society establishment, as well as the transition from an economy based on inputs to one based on investment and innovation, requires an extensive process of industrialization based on low-cost manufacturing value added. The concept of economic growth for small European countries, proposed in this article, is attempting to combine the pressing need of industrialization and social security of citizens so characteristic for European model.

Keywords: *EU economic development, Industrialization, export-oriented economy, model of economic growth.*

JEL classification: *F43, O14, O40*

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Introduction

At this stage of development, the contemporary world economy faces an increasing number of problems: the crisis of economic development models; the growing gap between poverty and wealth ...; the crisis of world leadership; the slowdown in the integration processes ... All this is happening with increasing economic interdependence among countries of the world. Is this a legitimacy or rather an exception to general law? Is globalization still a solution or has it already exhausted its positive energy and only generates problems? Questions are waiting for an answer. As well as the question, what small-economies should undertake to meet all these challenges? Are the implemented economic growth strategies for many countries (export-led growth for example) valid for other country? At the contemporary stage of the world economy, there is an erosion of general human values and the democratic way of development of society is challenged. It is logical to analyze in what extent this erosion, deviation from normality, would affect economic growth, also taking into account the growing degree of interdependence among countries in the world.

1. Literature review

In terms of economic development, the last 40-50 years have been dominated by such theories as export- oriented growth and, respectively, export-oriented industrialization. The latter comes to replace the strategy of import substitution, which many considered as a failed one. The export-oriented industrialization strategy successfully implemented by Germany, Japan, the "Asian Draconians", returns to force after the crisis of 2008-2009 with a new paradigm of development as a result of the growing interdependencies among the countries of the world and the convergence of the known economic development models.

The strategy of export-oriented industrialization, which has become a topic of debate since the 1960s, is based on several known theories, such as the theory of comparative advantages of D.Ricardo and A.Smith, Hekscher-Ohlin-Samuelsson, Vernon, "Flying geese", etc. Important research on the impact of exports on economic growth was made by Balassa (1978), Tyler (1981), Dodaro (1991), Wacziarg (2000). Important quotes of that theory were made by Sachs & Warner (1995); Giles and Williams (2000), Wernerheim

(2000), Panas and Vamvoukas (2002), Konya (2006), Herzer (2007), Parba and Sahoo Mutenyo (2011), Azam et al. (2013), Imai et al. (2014).

2. The growth of interdependencies

The growth of interdependencies is manifested primarily by the transition from extensive-type relationships to intensive type relationships. Expanding the integration process is an extensive process and moving to a more advanced stage of integration is an intensive one. Moving to a more advanced export structure would result in increase of interdependencies due to intensification. Indicators of interdependencies are: increase of investment flows (direct and portfolio), information and knowledge, international labor migration, globalization of technologies, internet networks, financial markets, etc.

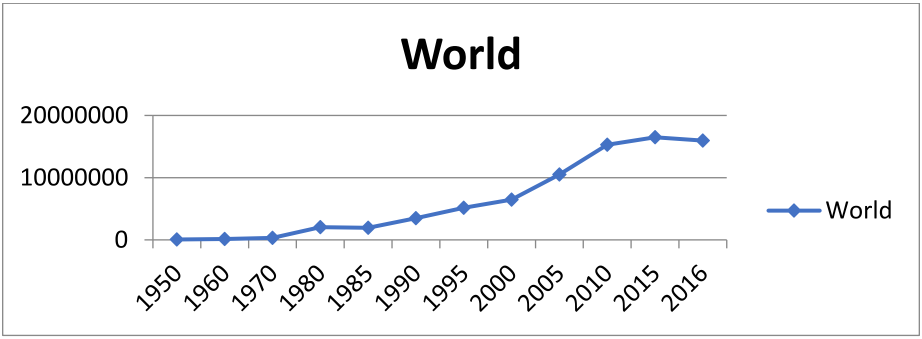

Figure 1. Total volume of global exports of goods, 1950-2016
Source: *Based on WTO data*

The trend reflected in Figure 1 shows a strong increase in trade links between countries, which is further confirmed also by liberalization (see Figure 1 and 2). Based on the evolution of the trade freedom index (Figure 2) it can be observed that the level of liberalization of the international trade, since the end of the 90s, has increased by almost 20%.

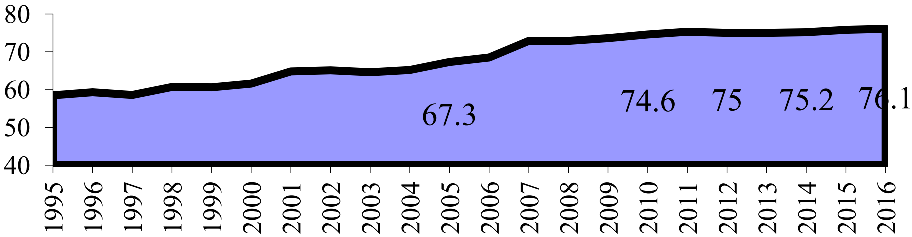

Figure 2. Evolution of world trade freedom since 1995, %
Source: *based on 2016 Index of Economic freedom, Heritage Foundation*

The same trend, only to a lesser extent, is also confirmed by the development of foreign direct investment. Investment flows further intensify interdependencies among world countries through capital allocations and reallocations, mergers and acquisitions, etc. The participation of foreign capital in the process of industrialization of the economies of small countries could considerably contribute to the reduction of poverty in the world economy, would ensure sustainable economic growth. The fact that investment flows have slowed in recent years, including in emerging and developing economies (investment growth slowed from 10.2% in 2010 to 3.4% in 2015, likely slowed further in the coming years) requires a rethink of economic development patterns, but also of the world economic order in general.

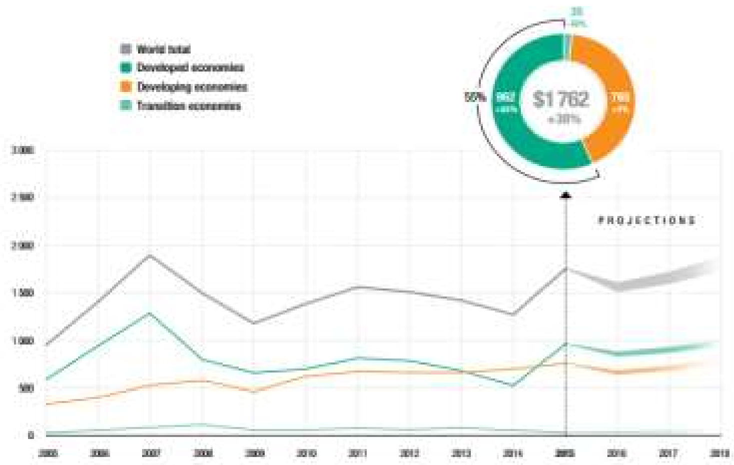

Figure 3. Global FDI inflows by group of economies, 2005-2015, and projections, 2016-2018 (Billions of dollars and percentage)
Source: UNCTAD, *World Investment Report 2016*

These are just a few examples of increasing international economic interdependencies. Obviously, each country has to adjust its economic policies in such way that they can face the new requirements on the world market. The result of these adjustments can be judged by the extent to which sustainable economic growth, a certain level of prosperity for the citizens of these countries, is ensured. The most vulnerable to these adjustments are small economies, the development model of which is "marked", by the global (European) leadership crisis, increasing disparities between poor and rich countries, slowing down processes of integration, etc. Sensitivity and vulnerability are two main attributes of economic interdependence.

3. Convergence of economic development models

The crisis and the growth of interdependences, that seems to continue till today implies the need to rethink the country-wide model of economic development. Each of the three world-known models (liberal, social-democratic, non-merchantilist one) no longer responds to the aspirations of nations and practically no longer can be found in their classical form. It is becoming increasingly obvious that at the moment a convergent development model is developed taking into account specific features of each country depending on the objectives they pursue and the mechanisms they use to implement them. Only the direction (vector) of development remains. For developed countries - maintaining positions in the world economy hierarchy, which would also mean strengthening the post-industrial society ... For developing countries - consolidating the industrial society for most of the countries in this group and the transition to a postindustrial society for countries with emerging economies. In turn, each of these types of society is in absolute dependence on the degree of efficiency of the exploitation (use) of the factors of production. Thus, we distinguish a model based on factors of production, investment, innovation, well-being. This process, quite contradictory and complicated in the world economy, can be illustrated by the scheme outlined in Figure 3.

Undoubtedly, the free market is based on these models. Only the mechanism of the market is changing. Without going into detail, what could be done in another article, we will just mention that any type of market passes through its formation through several stages: the free market, the regulated or regulated market and the stage of the organized market. Each of them has its own operating mechanism. Significantly, the more advanced market mechanism does not liquidate previous routing, but adds to the existing one some new features. So, the organized market economy mechanism of the highly-developed countries is currently formed on three economic subsystems: free competition, guided market and organized market. All three subsystems are in the focus of the state, but in a different way.

Public monitoring of economic processes through its leverage is an important attribute of the organized market. State regulation extends not only to existing circumstances, but also to perspective structural changes. As a result, there are essential changes in the functioning of the market. Much of the supply is formed on the basis of government projects and orders, various government programs. It regulates not only the goods market but also the factors of production and financial assets.

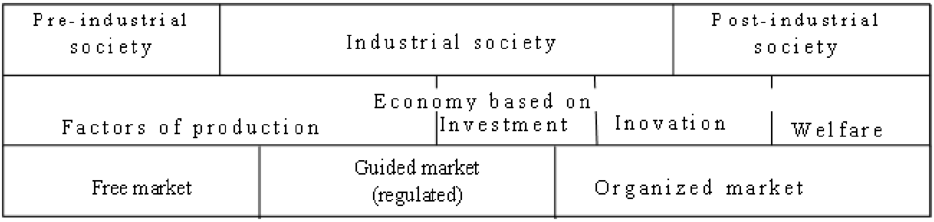

Figure 3. Intercalation of types of society, economies and market
Source: *Developed by author*

The market types mentioned above intertwine with the types of society proposed by D. Bell, and the types of economy proposed by M. Porter. The analysis presented allows us to formulate a main conclusion. There is a transition period between industrial and post-industrial societies, during which these countries must ensure the functioning of the organized market mechanism and the economy to be based on investment and innovation. This trend can be ensured in the framework of an organized market economy, socially-oriented (EPOSO). The phrase "socially-oriented" is used in the following sense: the investment and innovation based economy must be directed towards achieving the social aspect of production. More concretely, social requires an organized market mechanism, putting creativity at the foreground of people's needs. The aim of these changes and, respectively, the establishment of an organized market economy, socially-oriented, is to create the necessary conditions for training the post-industrial society. The export-oriented industrialization process, which is part of several models of economic growth (primarily the non-mercantilist one), presents the essence of an organized market economy, socially oriented.

The non-mercantilist model, based on accelerating industrialization and export-oriented economy growth, since the 1950s, has achieved remarkable success in Asian countries and beyond. Japan was noted immediately after World War II followed by the "four tigers" in the 1970s and 1980s. Their example was followed by another group of countries in the region, but not with the same success (Malaysia, Thailand, Indonesia and Philippines). Nowadays, and other countries also try to repeat the success for example Vietnam from Asia, Mexico from North America. Examples of this are also in Europe - Belgium, Netherland, Luxembourg, Sweden, Denmark, Switzerland. Since the 1990s, countries such as Ireland and Finland have been highlighted ... The most eloquent example of an export-oriented industrialization strategy is China, which has surpassed all countries of the world by the volume of exports including the US.

According to this strategy, industrial society can be constituted on the basis of increasing the accumulation rate and suitable state regulations. However, post-industrial society cannot be constituted only with the help of economic incentives and administrative regulations. It is an evolutionary development - based on realizing the maximum of the creative potential of man and, at the same time, assuring a high level of material welfare. A deprived economy cannot contribute to the formation of post-industrial society, as well as the subordination of post-industrial values to industrial development.

4. Industrialization oriented towards export

There are several factors that indicate the need to implement export-oriented industrialization strategies. This thesis is primarily valid for small economies. Accelerating the path from a factor-based economy to the one based on innovation can be achieved only having a competitive production. The comparative and competitive advantages can only be exploited in the case of active participation in international trade flows, the specialization of the economy creating a positive impact on competitive imports as inputs for production for export. Export-oriented industrialization is precisely what would allow a developing country to do this within the EPOSO model mentioned above. Internal market orientation, which is usually small, cannot ensure increased prosperity. In this context, the change in the pattern of world exports reflected in Figure 4 is quite eloquent.

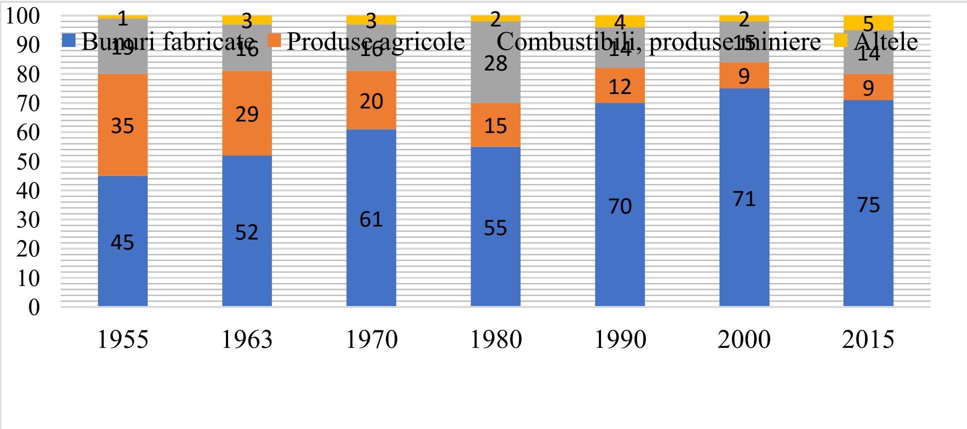

Figure 4. The structure of world exports, 1955-2015, %
Source: *Developed by author based on WTO data*

The considerable increase in total manufacturing exports over the last 60 years is evidence of a massive industrialization of the globalized economy. This in turn has taken place based on substantial changes in the production structure of many countries. Only in 2011-2014 the share of manufactured goods in international commodity trade increased from 64.6% to 66.2% reaching 12243 billion USD. The share of agricultural products remained roughly the same level (9.3 and 9.5%) during the same period, and fuels and mining products declined from 22.5% to 20.5%.

At the same time, it is worth noting that the change in the world export structure in favor of manufactured goods is due to a massive process of industrializing exports in developing countries and, above all, emerging countries. The data in Table 1 confirms this trend. If exports of manufactured goods to developed countries grew almost 4-fold in 1995-2015, then in emerging and developing countries they increased 9-fold. If in 1995 exports of these goods from industrialized countries exceeded those of emerging and developing countries by 4.7 times, then in 2015 only 1.5 times.

Table 1. World manufacturing exports by development group, selected years, 1995–2015. (billions, current $)

	1995	2000	2005	2010	2013	2015 (estim.)
World	3,901	5,079	8,130	11,409	13,866	15,140
Industrialized countries	3,218	4,015	5,967	7,579	8,929	9,093
Developing and emerging industrial economies	683	1,064	2,163	3,831	4,937	6,047

Source: *United Nations Industrial Development Organization. Industrial Development Report 2016. The Role of Technology and Innovation in Inclusive and Sustainable Industrial Development. Vienna, 2015. pag.184.*

Significant is also the change in the technological structure of exports of manufacturing goods to emerging and developing countries. In 1990, exports of Medium and High tech products to this developing and emerging industrial economy constituted 29%, and low-tech products - 38% and resource based (33%) respectively in 2013 - 52% , 26% and 22%. It is an impressive performance for emerging and developing countries.

This impressive change was due, first of all, to the fact that emerging and developing countries relied on changing the structure of export-oriented production and the considerable increase in the competitiveness of exported products. Added value of manufactured products has increased considerably in this group of countries (see Table 2). The share of the Asia Pacific region in the world-wide added value of manufactured goods increased from 27.8% in 1990 to 44.6% in 2014. The share of North and South America declined during this period, but not essential, 21% and 5.5% respectively. While the share of European countries dropped dramatically from 40.7% to 27.5%. It is worth mentioning that the increase in the share of the Asia-Pacific area in the world-wide added value of manufactured goods is primarily due to China. If in 1990 China accounted for 15.8% of the added value of manufactured goods in emerging and developing countries, 32.1% in 2000 and 51.1% in 2014.

Table 2. Manufacturing value added in developing and emerging industrial economies, 1990-2014

	Manufacturing value added (billions, constant $ 2005)			Percentage of Manufacturing value added		
	1990	2000	2014	1990	2000	2014
World	4753	6295	9228	100	100	100
Industrialized countries	3907	4902	5914	82	78	64
Developing and emerging industrial economies	846	1393	3314	18	22	36

Sursa: *United Nations Industrial Development Organization. Industrial Development Report 2016. The Role of Technology and Innovation in Inclusive and Sustainable Industrial Development. Vienna, 2015. pag.182*

China's impressive results are largely due to the export-oriented industrialization strategy, a model that has been taken over and continued with great success by "Asian tigers." China, as mentioned above, like those countries have paid particular attention to the export of manufactured goods. Although the early implementation of this strategy in Asian countries has been subject to fierce criticism. The "catching up" model has been subject to criticism and, quite rightly, in countless ways. The result of this strategy could be biased economic growth, which would cause an asymmetric and excessive specialization of some economic sectors, which would undermine the country's prosperity over the long term. Excessive specialization could cause a low diversity of production structure and, therefore, exports. It is very important, to follow changes in the terms of trade, to allow situations where export prices are lower than import costs.

The example of the "Four Asian Tigers" economies, namely Hong Kong, Singapore, South Korea and Taiwan, demonstrates that the aforementioned negative moments could be overcome when promoting well-thought-out economic policies. True, they have benefited from special conditions that Japan has given. These countries have gained a modest place in the international production and distribution networks from the beginning, being part of the Japanese manufacturing chain, along with Japan, which has gained preferential access to European and American markets. At the same time, governments in countries that promote these strategies allocate substantial subsidies to priority development industries. However, today, these countries, including China, have a rather diversified export structure that competes successfully with industrialized economies. The competitiveness of the Japan, China, Asian tigers' economies is demonstrated and requires no further confirmation. Their biggest advantage is the competitive price of products exported to the world markets.

The fact that these countries have managed to reach and sometimes surpass the high performance structure of the industrialized countries' exports shows that they have passed the stage of production-driven, investment-driven economies and are easily passed on to the innovation-based economy (see Figure 3). The pattern of exports characteristic of a country at the input of the input model is based predominantly on resource-based raw materials. At this stage is the majority of developing countries including Romania and Republic of Moldova, etc.

Another factor that characterizes export orientation is the degree of openness of the economy. The highest export opening (calculated as a share of the volume of exports of goods and services in GDP expressed in%) in 2016 was Luxembourg by 228%. Hong Kong is about 190%, Singapore with 172%, and so on. It is worth mentioning that all of these countries have the spearhead of exports manufactured products. Electronic equipment for Hong Kong and Singapore, and Luxembourg - financial services. In the European Union, the highest opening for exports in 2016 was made by Ireland with about 120% of GDP with exports of machinery, computers, chemicals. Slovakia, Hungary and Estonia with just over 90% exports of machinery, electrical and electronic equipment, chemicals and vehicles, furniture, etc. The Czech Republic with about 80% exporting cars, transport equipment, etc. For all these countries, producing goods and services for external consumers means promoting prosperity for their own citizens. This is true because export-oriented economies generate profits on the basis of increased competitiveness and productivity in the respective sectors, which in turn supports even more exports.

It is also worth mentioning that almost half of the EU countries have a degree of trade opening above 100% (Slovakia - 184%, Hungary - 175%, Belgium - 167%, Estonia - 155%, Czech Republic - 153%, The Netherlands - 151%, Slovenia - 148%, etc.). At the same time, countries such as Germany, France, Italy, the UK, Spain, the largest economies in the EU, have a trade opening of about 40-60%. It should be stressed that trade opening data are the result of the combined share of exports and imports in GDP. From the point of view of export orientation and international competitiveness, it is important to separate these two indicators. Namely, for many countries, imports were the key factor in "opening up trade" rather than exports. This is true for the countries of Latin America for which the import substitution strategy is rather characteristic. While the Asian-Pacific countries, most of the countries in the European Union rely on export-led growth.

The structure of each country's exports is in direct correlation with the level of development of the productive forces in that country. In order to advance towards an industrialized economy, thus forming the material premises for building a knowledge-based society and information as the initial stage of the post-industrial society, it is necessary to capitalize on the possibilities offered by a factor-based economy, then investment- and only after that would it be possible to pass to an innovation-based economy (see Figure 1). Each stage mentioned corresponds to a certain export structure. A country based on factors of production could not dominate the world market of high-tech products. Similarly, an innovation-based economy cannot have resource-based products as the main export items. Continuing trade, but also capital flows, international labor migration in that structure would mean, on the one hand, the intensification of interdependencies in the world economy, but also the increase in the gap between poor and rich countries, on the other hand. Escape form the situation can only be one. The intensive industrialization of the priority economic sectors in the poorer countries, which would ensure the growth of exports and the change of the export structure towards goods that are characteristic for investment and innovations based models.

5. Conclusion

The establishment of a knowledge and information society (the first phase of the post-industrial society), as well as the transition from a resource-based economy to an investment and innovation-based economy, requires the implementation of a large industrialization process based on economies of scale. The concept of economic growth (organized market economy, socially oriented) for small economies proposed in this article attempts to combine the pressing need for export-oriented industrialization based on the production factors available in each country and the social security of citizens both characteristics of the European model.

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