ECONOMIC EFFECTS OF CEE COUNTRIES INTEGRATION INTO THE EUROPEAN UNION

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ABSTRACT: The integration of Central and Eastern Europe (CEE) countries into the European Union is supposed to bring them significant benefits. Along with the effects coming from changes in tariffs, accession to the EU internal market and free labor movement on GDP, consumption and terms of trade, the absorption of EU funds could help the process of convergence and catching up. Discussing the results of two "extreme" scenarios (full absorption of funds or non absorption at all, assumptions considered as not realistic) by the application of HEROM model for Romania, the study attempt to assess the impact of EU structural funds on foreign trade development, under the circumstances of different absorption rates, finding a stronger impact on exports compared with imports. However, adverse effects of the current international financial crisis could occur, affecting also the prospects for the Romanian economy.

1. Macroeconomic effects of EU integration

The research concerning the effects of European integration for sustaining the economic and social development of member countries, the process of convergence and of reducing disparities (catching up) between countries is an area of special interest, both for academics and practitioners.

Literature abounds in studies about the integration effects on the economic growth (among these Balassa, 1975 and Baldwin, 1989, 1992, 1996), and prospective estimates have become increasingly complex. For this purpose, at the beginning, general equilibrium models were used, subsequently researches expanding by incorporating factors of imperfect competition (Smith and Venables, 1988) and being supplemented with retrospective analysis on economic growth performance of member countries. By the 90s, special attention focused on researches concerning the integration effects on trade, and not on the income or economic growth. This theoretical and analytical priority has been influenced, in particular, by the studies of Viner (1950) on the creation and diverting of trade, the intensification of trade flows between nations being most easily observable.

The development through trade was a thesis of several United Nations "decades of development" that considered foreign trade, ipso facto, as one of the most important factors of economic growth.

Subsequently, there has been a change in terms of integration effects research, in the sense that this process represents a way to achieve objectives such as increasing income, population consumption rise, improving the quality of life. In this new context, of integration and trade as leading factors of economic growth, measured according to appropriate outcome indicators, the models WorldScan for CEECs (Central and Eastern Europe Countries) assessed the effects of changes in tariffs, internal market and migration on consumption, GDP and terms of trade. Other

effects of integration arise from the impact on member countries of the Common Agricultural Policy changes and of joining the Monetary Union. It is considered that they have a greater degree of uncertainty due to their political dimension, being more difficult to assess in perspective.

The models mentioned above take into account the possibility of accessing community structural funds by the CEECs which are EU Member States, based on several scenarios that adopt different assumptions on the rules of allocation and accession to these funds. According to estimates using these models for the period 2004-2020, the contribution of structural funds to the economic growth in CEECs would be around 0.1-0.2 percent per year.

Lejour and Nahuis (2004) believe that EU enlargement brings more benefits to new entry Member States and only a modest improvement of welfare for the old EU Member States. This conclusion is shared by many experts. On the other hand, we cannot overlook that, into an integrated economic group of countries with different levels of economic and social development, those more advanced benefit to a greater extent of the integration effects compared with the less developed ones. This latter view takes into consideration the positive effects of repatriated profits generated by the large volume of foreign direct investments in CEE countries, by the earnings in the developed countries on the account of the foreign labor which is paid less compared with local workers, by the opportunities for increased production in these countries as a result of new markets opening in the new Member States, etc.

In the work of Brown et al. (1997), it is estimated that the CEECs are gaining through integration 3.9-7.3 percent in welfare growth, while in the old member states the gain would be only 0.1 percent. Similar results are found by the research of Baldwin, François and Portes (1997), which is showing a gain through integration of 1.5 percent in terms of real income for CEECs and a much more modest increase for older EU Member States. Subsequent studies (Brussa, 2001) regarding the effects of CEECs integration into the EU have reached results of more than 4-9 percent in terms of GDP growth for these countries and only around 0.1 percent for other member countries. If these relative numbers would be assessed in absolute terms, this could indicate greater values (earnings) for the largest old EU members, which would lead to a change in conclusion regarding the greatest beneficiaries of European integration.

Research undertaken by Lejour and Nahuis (2004) concerning the effects of EU enlargement upon the member countries economies, unlike previous studies, tries to cover a wider range of effects, as the authors find that the customs union and removing bilateral tarrifs, the accession to the internal market and the free movement of labor are combining with the effects generated by structural funds. Thus, it concludes that the GDP per capita in new member countries will record an increase by more than 8% in the long run. Compared with the EU-15, the average annual growth of consumption per capita in CEECs would be 5 percent, a relatively high pace, but which will not ensure however, in a short period of time, the recovery of the gap separating these from the developed countries of the European Union.

To reach the average level of EU-15 in a relatively short period of time, the average annual growth of the new member countries should be more than 5 percent, considering that the EU-15 would record annual growth rates of 2-2.5 percent. If the annual differences of GDP growth between the CEECs and the EU-15 will remain around 1.5 - 2.5 percent, as was the situation until now, would be needed over 80 years for CEE countries to reach the level of EU-15 average. In a situation where, for 20 years, CEECs would record an annual growth average of at least 7 percent, it would be possible to achieve in the new member countries a GDP per capita representing 50 percent of the average level of EU - 15. But an annual growth of 7 percent requires a great effort from the CEECs, in the following directions: the effective integration into EU market and policies; the promotion of radical reforms in economic and social fields; the extend of modern technologies transfers, through trade and FDI; the increase of labor mobility, including the highly skilled; the administrative and institutional reform; the creation of a proactive civil society, with appropriate mechanisms of coordination.

2. Economic factors of integration and the impact of EU Funds

The purpose of cohesion policy, implicitly of structural funds implementation, lies in the transformation and upgrading of EU regions/countries economies lagging behind, in order to their preparation for the competition into the single market and, respectively, into Euro Area. The EU cohesion economic and social policy has two main pillars:

a) The Cohesion Fund, introduced by the Maastricht Treaty, as support for member countries with per capita income of less than 90% than the EU average, focusing the transport and environment sectors;

b) Structural Funds, much higher as EU budgetary allocation and more complicated in terms of institutional support focusing the regions lagging behind, economic and social conversion of areas facing structural difficulties and modernization of policies concerning the systems of education, training and employment.

NUTS regions whose GDP per capita is less than 75% of the EU average are eligible to receive funding from the EU. This means that, theoretically, the whole Romania is eligible for funding and structural cohesion. Transforming into reality the potential of Structural Funds financing for Romania remains a complex issue, solvable efficiently only based on the eligibility, quality and attractiveness of projects proposals (having in view both national and community levels), the absorption capacity and the effective monitoring of funds.

For achieving convergence and reducing economic and social disparities between EU Member States, problems still remain in a situation where rich countries will receive greater EU funds than the least developed. This would diminish the allocation effectiveness, even if efficiency is growing in the production and services sectors, generating a series of adverse distributive effects of cohesion support.

Reforming the allocation of EU structural and cohesion funds is trying to reduce the adverse effects on over-concentration (congestion), rent seeking, inefficient and inadequate funds spending. The possible economic effects of structural funds, presented in various impact studies, based on econometric models, reveals a picture quite "ambiguous" in the sense that "some studies report a positive impact, others a non-significant or even a negative one" (Deardorff, 2004). According to certain studies, the structural funds could boost GDP growth in the CEE countries by 0.7 percent annually, while some econometric models do not indicate more than 0.1 percent.

Among the causes for which structural funds can not be effectively utilized by the beneficiary countries in order to reduce disparities and achieve convergence are:

- An important part of structural funds are allocated, in fact, to the rich countries of the EU;
- Concentration of funds for economic growth under the impact generated by internal taxation in various countries;
- Failures of government policies that lead to improper spending of funds and unjustified personal or group earnings.

Thus, a high efficiency of structural funds is conditioned by the quality of governance in general and of public administration institutions in particular. But their inability to remove or minimize corruption makes that economic and social benefits coming from structural funds absorption be rather modest.

Furthermore, we will refer to a number of other integration factors that generates economic and social effects that can be taken into account when considering the impact of structural funds. CEECs integration into the EU means, in terms of the custom union on the one hand, removing bilateral custom barriers (tariffs), on the other, applying common external tariff (CET) of EU for imports from outside the EU-27.

The economic growth can be achieved also by fostering exports through subsidies and state aids, covered by documents and special procedures according to the community legislation. Subsidies are allowed in the EU if they meet certain conditions including: non-distorting the free

and fair competition on the market; the financial possibility of granting subsidies; efficiency and targeting, in which the determining factors are the external marginal earnings and the net social benefit at local, regional and community level. The main areas benefiting of subsidies are: agriculture, research & development, environmental protection etc. It is worth mentioning in this context that subsidies for agricultural products exported from the EU-15 were higher than subsidies granted in the new member countries (Dimaranan and McDougall, 2002). This is showing that stimulating the economic growth through exports sustaining was stronger in the old EU members, compared with the new ones.

The EU internal market is another factor generating economic effects in new member countries among these, fostering both domestic and foreign investments, which directly or indirectly are affecting the incomes. The EU accession is contributing to the increase of intra-trade as a result of the following influence factors:
- Removing of administrative barriers (low costs of border crossing, fewer formalities required and less time spent);
- Mutual reducing of technical barriers concerning different technical regulations, minimum requirements and harmonization as regards the rules and regulations (Brenton et al, 2001)
- Decreasing risks and uncertainty (guaranteeing export credits, low political risks, alignment with the standards of environmental and health rules, etc.).

According to certain specialists (Frankel and Rose, 2000), joining a custom union is leading to double the intra-union trade on medium term and a monetary integration is generating an additional tripling it. Since the CEECs are to become, in a horizon more or less far in time, members of EMU also, it is expected that intra-trade to grow in the future as a result of the impact given by the monetary union potential.

The enlargement of the EU-15 to EU-25 and then to EU-27 is providing additional incentives to intra-community movement of labor. According to specific researches, after the EU enlargement in 2004 and 2007, migration of workers from the CEEC to the EU-15 has been significant in the first year post-accession (about 300,000 immigrants), decreasing gradually in subsequent years. Thus, at the horizon of 2020, the number of immigrants in EU countries could reach 2.4 million people, representing 2.6 percent of the CEECs population. According to studies of Boeri and Brucher (2000), most of immigrants would originate from Poland (30 percent), followed by Hungary and other new EU member countries, their destination being as follows: Germany (65 percent), United Kingdom (4 percent), France (2.5 percent), Netherlands (1 percent) and the remaining 27.5 percent to other European countries.

The absence of import and export tariffs and the adoption of CET will bring a certain influence on intermediate and final goods prices, inducing effects of trade creation and trade diversion. Trade creation is meaning an intensification of trade exchanges between the EU-27, which will lead to the reallocation of resources, the increase of production and of its efficiency, with implications for the terms of trade as a result of changes in exports and imports prices. Despite some possible adverse effects of terms of trade improvement on the volume and structure of goods and services, it will influence people's welfare, contributing to the rise of population consumption, due to the increase of produced / exported goods value, compared with that of imported goods. Removing non-tariff barriers is inducing changes in relative prices, with effects of trade creation and trade diversion, modifying terms of trade, which will favorably influence the investment process.

The removal of non-tariff barriers which is implying effects on incomes will lead to the reduction of external transactions real costs (waiting time at the border, fulfillment of customs formalities), which will induce an improvement in the terms of trade to all trading partners. In foreign trade models, the impact of non-tariff barriers is defined as "Samuelson iceberg trade-cost equivalents". Unlike import tariffs, the non-tariff barriers are symmetrical between the EU member

countries which are leading to a greater competition on internal market because of the decline in relative prices of foreign goods, providing them a better position on foreign markets.

According to certain estimates, by 2020, the economic impact of enlargement on the CEECs will be the increase in consumption per capita by 12.9 percent and in GDP per capita by 10.6 percent, the favorably influence of the terms of trade being 6.7 percent (Lejour and Nahuis, 2004). A breakdown of GDP and consumption growth is revealing that accession to the internal market has a higher favorable impact compared to other factors as custom union or free movement of labor. Thus, it is considered that, because of the accession to the EU internal market, GDP and consumption will increase by 5.3 percent and 9.3 percent respectively, the higher growth in consumption compared to GDP being due to the improvement in terms of trade.

Increased accession to the EU internal market, as the main factor of per capita GDP and consumption growth is directly linked, on the one hand, to the improvement of economic efficiency in production and investment, boost by the higher competition, and, on the other hand, to the decline in investment costs and the increase in the quality of work technical endowment.

Some dilemma concerning the effects of EU enlargement on the newly integrated economies remains. Among these, one is the regarding trade and FDI effects magnitude, as compared with those resulting from EU financial instruments transferred to CEECs. In some authors view, the human and financial efforts of member countries them selves have a greater influence than the EU funds transfer (Lejour and Nahuis, 2004). We appreciate this conclusion as correct, given on the one hand, the uncertainty and vulnerability of these funds use, in terms of the interests more or less transparent of stakeholders, and, on the other hand, their undersize in relation to financial needs of CEECs for recovering, reforming and modernizing their economies. It is expected also that the international financial crisis triggered in October 2008, which distorted the financial systems of EU countries and generated crisis and recession, to have negative effects on the size of EU structural funds and on the performance of convergence indicators.

3. A strategic approach for Romania: the HEROM model

The effectiveness of Romania's integration into the EU implies attraction of net benefits that the European single market offers under the circumstances of a member country status, taking into account the commitments and obligations on short, medium and long run. In the new context of integration, the issue of increasing absorption capacity of structural funds by Romania during the period 2008-2013 is representing a primary prerequisite for increasing economic competitiveness and for the sustainable development of the country.

Reality shows that in the first years of integration the new EU member states had a low absorption rate of structural funds, due to lack of experience, to difficulties in developing eligible projects and to non-compliance with community requirements in terms of financing procedures. Romania is no exception in this regard. More than that, it could be noted that, in 2007 and 2008, the first years of integration, the absorption capacity of Romania was much lower compared with the new EU member countries of the wave from 2004.

To determine the growth potential provided by structural funds, on the one hand, and to mobilize efforts to effectively accessing financial instruments, on the other, a series of studies (see "The impact of structural funds - Assessment with the model HEROM "), have tried to assess, quantitatively and qualitatively, the macroeconomic impact of the Community Support Framework 2007-2013, based on HERMIN model type for the Romanian economy, respectively the HEROM model. This type of model has been used practically in all EU member countries. It is worth mentioning that HEROM model has two basic scenarios, assuming Romania's economic growth "with structural funds" and "without structural funds". The scenario "without structural funds" does not take into account the EU structural funds provided to Romania during 2007-2013, being limited only to the pre-accession funds. The second scenario "with structural funds" is based

on the assumption that the structural funds, scheduled in the National Development Plan 2007-2013, are being absorbed at a rate of 100%. The HEROM model adopted also the assumption that, after 2013, the structural funds would be reduced to zero, which will generate a "shock" for the Romanian economy, with adverse effects over a period of several years.

According to the results of HEROM model testing, recognized by Romania and the EU, as effect of the financial support granted by structural funds, the GDP will be higher by 15-20 percent in 2013, representing a supplementary increase of the annual rate average of more than 2 percent, compared to the scenario without funds.

As a result of the halt in structural funds financing since 2014, in the case of scenario "with structural funds", the GDP growth is slowing over a period of 2-3 years, after which it will be resumed, so that the "differential" of annual growth rate average between these two scenarios will be reduced to less than 1 percent during the 2007-2020 forecast.

In conclusion, according to final results of the model, in 2020, Romania's GDP per capita would represent 60-65 percent of the EU-27 average in the case of scenario "without structural funds", and 75-80 percent in the case of scenario " with structural funds ".

The macroeconomic impact of structural funds on imports and exports growth of Romania was assessed as the percentage difference between values obtained in the scenario "with structural funds" and "without structural funds".

The period 2014-2016 record negative growth differences or reductions of it, as a result of the halt in financing from structural and cohesion funds. On the other hand, is resulting that structural funds have a stronger impact on growth of exports than imports, which is a positive phenomenon for growth enhancing in Romania.

The brief presentation of the HEROM model assumptions and results aims to open room for refining its analytical and predictive capacity in order to continue the research on this problematic area. Undoubtedly, the HEROM model showed its usefulness as a benchmark and prospective argument. It stood in fact at the basis of certain forecasts of the Reference National Strategic Framework, agreed between Romania and the EU. But we still want to make some outlines in order to increase the analytical capacity and the predictive accuracy of the results, starting from the wish to stand closer to the realities of the integration process, taking into account the experience of other countries, old and new EU members, in accessing the structural funds and also the need for a greater ability into the use of extrapolation method.

Table no. 1.

Difference between Romania's imports and exports growth rates in the scenarios "with structural funds" and "without structural funds"

Years	Imports	Exports
2007	-0,20	0,65
2008	0,20	0,51
2009	6,18	0,29
2010	6,49	0,15
2011	8,67	0,88
2012	7,94	1,75
2013	5,66	2,34
2014	-6,96	2,64
2015	-3,96	3,53
2016	-0,85	3,53
2017	1,11	4,67
2018	1,59	6,20
2019	2,20	6,90
2020	2,44	6,74

We believe that the assumptions of scenarios "without structural funds" (EU funds zero) and "with structural funds" (their absorption rate of 100%) are useful to the idea of emphasizing the importance of EU financing for the economic growth of Romania. However, the lack of verisimilarly of favorable macroeconomic effects magnitude upon Romania, as a result of structural funds, must take into consideration the following:

- Not the assumption "without structural funds" nor that of "structural funds absorbed 100%" is realistic or even probable with a high degree of certainty, whereas the experience of other countries has shown that the absorption rate varies from one period to another, so that the two "extreme" alternatives have not verified in any situation;

- Starting from previous experience of other countries, we think that, rather, it would be more close to reality the scenarios with different degrees of absorption rates during the period 2007-2013, or with an average of the absorption rate for the entire period.

Starting from the results of the two "extreme" scenarios (full absorption of funds or non absorption at all), we will attempt to assess the impact of EU financial assistance on imports and exports, under the circumstances of growing differences of absorption rate from one year to another (in the version 1- pessimistic and version 2 - optimistic).

After 2013, the scenarios with and without structural funds reveal the stronger impact on exports compared with imports, but the magnitude of impact is difficult to forecast under the conditions in which it is possible to adopt another two scenarios i.e. "with" or "without" integration into Monetary Union. This obviously complicates the way to identify various factors of influence and to assess their direct and propagated impact (spillovers) on different time horizons. In addition, the international financial crisis triggered in 2008, could have a severe impact in the sense of reducing the EU budget, implicitly of structural funds. Countries that joined the single currency Euro, for example, in the first two years witnessed an inflationary pressure.

Table no. 2.

**Percent difference between imports and exports values
resulted following different absorption rates of structural funds**

Years	Version 1, pessimistic			Version 2, optimistic		
	Absorption rate (%)	Imports (%)	Exports (%)	Absorption rate (%)	Imports (%)	Exports (%)
2008	30	1,86	0,15	35	2,17	0,18
2009	40	2,47	0,12	48	2,96	0,14
2010	45	2,92	0,07	59	3,83	0,09
2011	60	5,20	0,52	79	6,84	0,69
2012	70	5,55	1,22	89	7,06	1,56
2013	80	4,53	1,87	95	5,38	2,22

Source: Calculation based on Table 2 data.

Another factor of influence which could have an impact on efficiency of using structural funds and on their absorption capacity is the portfolio and foreign direct investment, taking into account the significant decrease of foreign currency receipts from privatization and the increasing importance of "green field" investment, with the participation of foreign capital.

As reference point concerning the structural funds effectiveness during the period 2008-2020, the sustainability of external debt over the medium and long term, and also of the trade and current account balances should be considered. Their forecasted projections by the year 2013 reveals an accumulation of serious lack of sustainability, which was already sanctioned by the international rating agencies (see the country rating of Romania, downgraded by Standard & Poor's

and Fitch in October and November 2008, just as a result of accelerate growth of trade and current account deficits, which will make more difficult the access of our country on the international capital markets and will considerably raise the borrowing costs, affecting the amount of external debt).

Last but not least, the macroeconomic impact of structural funds should be correlated with the efficiency of investments and the ICOR (incremental capital output ratio) coefficient, whereas injection of these funds can be considered clearly as an investment. Until now (but also for the years 2008-2013, according to projections of National Commission for Prognosis), the ICOR coefficient has been recording an upward trend, which means a higher investment effort for achieving an additional production unit.

The development of HEROM model regarding the Foreign Trade block should consider also specific variables of different categories of goods imported and exported, the issue of import competition and particularly of immisering exports - with low value added, which usually means exports of primary resources - having a disruptive impact on the environment, implying a low eco-efficiency on medium and long term.

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