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Some characteristics of the absorption of EU development funds

Thesis of Doctoral Dissertation

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Contents

Justification for the subject

In the current budget of the European Union non-reimbursable investment funds are typical forms of development interventions. A significant part of domestic and international literature takes it for granted that the assessment of the utilisation EU funds can be carried out within the framework of economic analysis in a sufficient manner, relying on the conceptual basis we normally use. However, these assessments fail to take into account a number of factors that, instead of a success, may lead to the failure of the development schemes.

The objective and hypotheses of the research

The objective of the research is to present those theoretical directions and practical experiences that can help understand the modes of action of EU funded investment schemes. In addition to giving a detailed account of the traditional economic approach, the thesis also attempts to take into account other facts affecting the modes of actions and give a more complete picture of the implications of investment funds.

The body of arguments presented in the thesis attempts to confirm the following hypotheses:

Hypothesis 1: The development of Eastern European member countries mainly took place not because of the effectiveness of cohesion policy, but rather that they joined the single market and as a result of the rapid inflow of foreign direct investment into this region.

Hypothesis 2: Despite its complex rules, cohesion policy is unable to achieve the same rate of return on investments that of private ones. In addition, certain factors prevailing in the subsidization process impair efficiency and can divert projects' implementation from the initial objectives (deadweight losses, rent seeking, crowding out).

Hypothesis 3: The magnitude of absorption of cohesion funds in the new member states is such that it can significantly impact the rate of economic growth even in the short run. All this offers an opportunity for these countries to use funds as a tool designed to stimulate business cycle, even if the effective utilisation is not justifiable.

The structure of the thesis and the methods used

The thesis is structured in the following manner. First I outline the theoretical frameworks within which investment funds as the tools of development can be interpreted. Theories that describe a self-regulatory system (classical-neoclassical schools and monetarism) are addressed only briefly as these approaches leave only little room for state intervention. My attention will rather be paid to activist approaches believing that state interventions with development purposes may be successful. These include Keynesian approaches (concerned mostly with regulating economic cycles), the analyses of welfare economics on the ability to reconcile economic efficiency and social justice, the statements made by the endogenous growth theory and some other statements made by institutional and development economics, including in particular those that stress the path dependency of growth and the importance of individual institutional conditions.

In the second chapter I closely examine the instances of so called market failures serving as one of the most important conceptual framework for development purpose intervention and the types of fiascos that development policy may be able to cure by providing funds.

In the third chapter I focus on the issue claiming that due to not totally clear theoretical frameworks, the EU's development practice consists of eclectic components.

In the dissertation I attempt to place the analysis in a broader development economics context and also outline the instances where in recent decades activist economic policies were able to accelerate the economic growth of certain countries. Regarding the cohesion of new member countries, the EU's development policy is less successful. Therefore, in the course of the analysis I endeavour to shed some light on the possible reasons for the limitations of success and elaborate on the assumption that European convergence countries would need to adopt significantly different methods over the ones currently followed. In my line of argumentation I make a special reference to one of the reasons preventing the fully-fledged cohesion, namely to the fact that cohesion policy fails to properly adapt to new production management procedures and value chains that emerged as a result of globalisation. Other issues focused on include structuralist ideas that are increasingly gaining ground in the aftermath of the 2007-2009 crises, together with the issues of reindustrialisation.

The next two chapters outline relevant foreign and Hungarian empirical research that attempt to assess the impacts of development funds on both micro and (by considering the implications of public investments) macro levels. The test I carried out on my own database fits into micro level ones. By performing a multi-variate regression analysis, I aimed to answer the following question: what is the connection between corporate staff increases, capital expenditure subsidies and corporate revenues, profitability and exportability.

In addition to the statistical approach, the conclusions were drawn using both inductive and deductive processes while analysing EU and Hungarian governmental documents and related professional literature. It cannot be denied that the ability to run analyses beyond economic approaches is limited as facts available on the related fields of scientific disciplines are relatively scarce making it problematic to systemize analytical results.

The main findings of the dissertation

1. In order to judge the role of cohesion policy funds played in the economic growth and cohesion of new member countries, we can rely on several theoretical frameworks. In endogenous models R&D&I and the supporting of the accumulation of human capital can influence the long-term growth rate of the economy (Romer, 1986). According to the theory of market failures, development funds most capable of reducing the scale of such failures are the ones that are designed to generate services of general interest and pure public goods, to eliminate negative externalities (e.g. environmental pollution) and, in line with the endogenous theory, the ones that can help create positive externalities (e.g. R&D&I funds) and mitigate information asymmetry (Stiglitz, 2000).

Regarding economic policy the development of South Asian countries was a typical example of how even groups of countries can catch up with active public intervention. These countries succeeded in linking the relatively low inequality of income distribution with a high savings ratio that, in turn, served as a basis for their ability to finance economic growth without over-indebtedness.

However, due to external (globalisation) and internal reasons (excessive lending to selected sectors), after decades of catching up, the success of the traditional developing state could no longer be sustained. Two key factors stopped exerting impact: one of them is the so called ‘embedded autonomy’ that made it possible for state institutions participating in development policy independently of the influence of companies; then going forward, ‘shared growth’ and the dispersion of incomes to the majority of society also ceased to have effect when the costs of bankruptcies in the banking sector (arising from lending to non-profitable firms) were passed on to the society.

This, however, does not mean that a more modern concept of the developmental state could not make structural policy successful. According to the concept of the modern developmental state, the state’s role primarily extends to the provision of information on new industries, the coordination among companies of investment opportunities and the encouragement of incubation and foreign direct investments. It also makes sense for the state to assume a leading role in infrastructure development and, in order to improve the quality of human resources, to put the focus on investments in the educational and healthcare sectors (Lin, 2010).

This policy also builds on the fact that during the course of globalisation a lot of multinational companies have relocated their production to companies in countries wishing to catch up. Thus, through the ability to join the global value chains, to these countries an opportunity were offered to learn and catch up with new technology. However, nowadays the value added by producers of finished goods is limited. The ability to provide modern, product related services is that can mainly accelerate development. Without high value added services catching-up is not possible for countries with middle income (Cheng - Rehman - Seneviratne - Zhang S, 2015). These modern development policy approaches, however, are not emphasized enough in EU and Hungarian development policy documents and in the funding practice.

Nevertheless, the governments of countries showing fast economic growth shaped the market actively not only in Asia. For instance, all high impact IT technologies currently in use in the developed world were set up and spread with state support (Mazzucato, 2011). It is also a fact, that in competition private businesses, on their own, are less able to permanently finance their innovation projects. Innovation, promising return only in the long run can mostly be expected only by state help.

In addition to the success of Asian developmental states, we can point to some successful, state intervention driven economic policies in Europe, too. (E.g. the catch-up processes that Gerschenkron analysed, or the initial, relatively good results of the first – Mediterranean – cohesion round in the EU. Finland or Ireland became also successful through their ability to catch the potential inherent in certain industries. In general, the so-called Scandinavian model also proved to be successful: in addition to flexibility of labour markets, this model can also boast social solidarity and environmental sustainability.

According to my first hypothesis, moderate catch-up in the Central Eastern European countries primarily occurred not owing to the effectiveness of their cohesion policy but rather that the volume and ratio of foreign trade to GDP as well as the scale of foreign direct investments increased significantly since accession. However, these countries got closer to the development level of southern member states. In order to catch up with developed Northern and Western areas, further qualitative changes would be necessary (Farkas, 2016).

The previous versions of the successful recipes of the developmental state can hardly be applied to new Eastern European member states. As in general the starting economic-historic-cultural situation is different, therefore successful economic policy solutions may also be different to a significant extent. Nevertheless, economic history examples make it possible for us to draw one important lesson, almost regardless of age and location. Economic policies employing various methods of state development interventions were able to operate successfully as long as politics and administration directing the development were able to keep adequate distance from the corporate sector, i.e. until no distortions were created because of the symbiotic relationship between them.

In the course of proving hypothesis 1 it was also worth considering that when the Mediterranean countries acceded, foreign direct investments boosted growth, created new jobs and also had a beneficial effect on the productivity of labour. Transfers received from the EU were mostly spent on the upgrading of physical infrastructure, education and vocational training. The EU's share within the region's foreign trade increased significantly. The emerging foreign trade deficit of member states in the Mediterranean region was related to the import of goods and equipment necessary to modernise the production side of the economy. Regarding the balance of payments, however, the inflow of foreign capital and financial transfers from the EU were able to compensate for the high foreign trade deficit.

During the accession of Central Eastern European countries, this scenario repeated itself: membership and accession to the single market also significantly helped attract foreign capital. Borrowing would have been an alternative to finance these countries, but for more indebted countries this was not a viable option, as this was unsustainable even in the short run.

The net beneficiary position of catching up countries is beneficial to more developed EU countries, too. For them the trade generating effect of Eastern enlargement increased the demand for their products and services. Thus, as a compensation for the Central Eastern European import of capital goods, a part of funding received from the structural funds are returning to more developed member states.

The role of structural funds in integration is a subject to debate in professional literature. The EU’s Sixth Cohesion Report also concludes that regarding the period before the 2007-2009 crises, only approx. half of the papers could identify substantive cohesion. According to my calculations, it is detectable that the role cohesion policy itself played in the catching up of the Central Eastern European is much less important than the inflow of foreign direct investments. Regarding the GDP of countries (measured at purchasing power parity) acceding in or after 2004, detectable catching up in Central Eastern Europe did take place, but its speed was different in different periods. Following the economic downturn of countries in Eastern-Europe in the 1990s after the transition to market economies, catch up until the early 2000s was only marginal. During the period from 2002 to 2007 catch up was robust but during the financial crisis its pace slowed down and never managed to regain its previous dynamics in the subsequent period.

During the 2002-2004 period, Central Eastern European countries already received pre-accession funds. Following accession, EU funds from the 2000-2006 budgetary period were received on a time proportional basis, but these amounts would not have been sufficient to finance a significant catch-up period. Relationship with the inflow of foreign direct investment is much stronger: there is strong correlation between the magnitude of foreign direct investment flowing into the region and the catching up of the region measured in GDP at purchasing power parity.

2. Although simulation models predict that cohesion policy would exert positive effects on growth, ex-post reviews confirm this only partially. Therefore, in an effort to prove the second hypothesis of the dissertation, I attempted to take account of efficiency impairing factors prevailing in the subsidization process

and also the ones that can divert the projects' implementation from the initial objectives. In addition, I also assessed if target setting was in line with or adequate for current production organisation trends prevailing in the world economy.

In general, EU analysts also agree that it is the supporting of public investments that can lead to the greatest permanent convergence impact. As these investments are mostly focused on infrastructure development, the resulting improvement in the business environment may stimulate private businesses to also make investments. Direct support for private investments leads to lower impact as, in comparison with assets generated by public investments, assets (e.g. machines) in which private capital generally invests depreciate at a quicker pace.

In the absence of sufficient reliable data one can only assume but not fully demonstrate that political processes also strongly influence the effectiveness of funds utilisation. The primary objectives for politicians are to maximize the time they spend in office. Therefore, it is not sure that they make their decisions on the basis of efficiency or welfare considerations but, rather, in the interest of forces that can convey their interests to politics and politicians. As we could see in the case of the traditional developmental state, policies applied were acceptable as long as the income growth generated was dispersed across the society. In this case, society bothers less that funds are also suitable for the political rewarding of interest groups and for building patron-client relations.

In addition to political decision-making, because of the complex rules applicable to the utilization of funds, bureaucrats also play an important role in the funding process. When making funding decisions they mainly follow procedural rules, their interest lies in compliance with these rules. So, they should be specifically encouraged to consider economic efficiency aspects of subsidization. This can also be observed in the Hungarian practice of disbursing

EU funds: the bonus of the employees of institutions managing the funds is tied to the maximisation of disbursed funds and not to the economic effectiveness of investments.

My paper attempts to give a detailed account of the mechanism of use of non-reimbursable *corporate* investment subsidies. Based on relevant empirical literature it can be concluded that such funds have a number of drawbacks. It often happens that public money to support corporate investments becomes private profit without social benefits.

Another factor to consider is that investment subsidies decrease the cost of capital necessary for corporate investments. As a result, opportunities open up for implementing less efficient investments the yield requirements of which are lower than those imposed under market conditions.

The negative impacts exerted by corporate subsidies could, at least theoretically, be mitigated. For instance, by making sure that development policy only supports new, starting SMEs, companies implementing technological change, engaging in R+D activities or supporting the training of human resources, the crowding out effect could be mitigated. However, experiences gained through practical implementation show that it is very difficult to pursue such a consistent development policy and reach objectives without efficiency losses.

In the course of writing the dissertation, I endeavoured to point out that the EU – while attempting to operate funds that are designed to improve the competitiveness of the integration as a whole and the cohesion of its regions – also distorts microstructures in the member states through unwanted side-effects (the most typical are crowding out effect, deadweight loss and rent seeking).

My calculations also show that the ways, through funds enter the economy is different from those expected. For instance large companies in Hungary were able to absorb funds in a way that helped them increase sales revenues.

However, this can only be concluded for those not exporting. In case of exporting companies, their export revenues do not depend on their subsidized investments and non-reimbursable investment subsidies could not exert a positive impact on their competitiveness.

In a sense my empirical research can even be regarded a novel approach as it introduces a subsidy intensity variable (defined as a ratio of subsidy to total corporate liabilities); and it proves to be a good explanatory variable of the impact of subsidies on the sales revenues of larger companies.

While analysing the macroeconomic impacts of funds utilisation, it can be concluded that among new member states in the 2007-2017 period Hungary's funds utilisation ratio to GDP was the highest. Yet, compared to other Eastern European member, the growth performance of the Hungarian economy was still moderate. One of the reasons for this is the high ratio of debt service to GDP. However, another part of the reasons is endogenous. Institutional weaknesses concerning the fund management system also contributed to the moderate economic growth. (ÁSZ, 2015).

According to a recent analysis (ECB, 2017), failure of catching up lies in country specific factors. These factors include political stability, accountability, transparency, the efficiency of governance, the quality of the regulatory environment.

(Németh, 2017) underlines the importance of fiscal factors in explanation of growth differences among new member states. For the period preceding the 2007-2009 financial crisis he finds a negative correlation between the rate of redistribution and the rate of growth, whilst a better budgetary position was accompanied by a faster average growth rate. The link between 2002 total debt values and the growth rates of EU member states during the 2002-2015 period is also negative.

When assessing the catching up process it is also expedient to consider that in the course of globalisation new solutions, the so called global value chains emerged in the international arena of production management. These offer opportunities for catching up countries for growth at a quicker pace. As in the globalised world, inter-country competition is increasingly about the ability of individual countries to link up their companies with value chains developed by multinational companies. That is why it would also make sense to assess corporate capital expenditure subsidies from this perspective, namely to identify the efficient subsidies that are worth granting to the corporate sector to help it grow faster through such value chains.

Based on my research in addition to high quality infrastructure, the sector most worthy of investment support is the service sector. Current trends in the world economy show that here a higher value added output can be achieved than by mere production. In a number of emerging countries the majority of growth already derives from financial, business and telecommunication services, overtaking the dynamics of the manufacturing industry.

The quality of institutions and governance are also important factors in the companies' investment decisions, that is the improvement of the business environment can also be regarded as an activity that is worth supporting.

In recent decades industrial production was relocated from more developed economies to less developed countries where production could be pursued with lower labour cost. The 2007-2009 financial crises hit hard the performance of European industry. Accordingly, industrial policy and some level of reindustrialisation prompted and attracted renewed interest in a number of countries. Industry 4.0 that is the digitisation of industry became the basis of the European Union's industrial development strategy.

The digitisation of industry can result in new types of global value chains in which goods, parts and services may change hands on a common platform. Cyber-physical systems can be managed in real time and it becomes possible to produce personalised, tailor-made products. The application of artificial intelligence (AI) goes even beyond digitisation: by analysing large quantity of data it opens up new horizons for strategic planning. By relying on artificial intelligence, in the course of intelligent automation data generated by currently separated systems can be analysed via neural networks whereby solutions fundamentally changing the specific technology or organisation may be born. It is also probable that AI will make it possible for market players to foresee the so called disruptive innovation that may jeopardise their markets.

As a result of digital transformation industrial productivity will increase, but more jobs will be eliminated than created. Emerging jobs will require different skills, so education policy will have great responsibility in training of a competitive industrial workforce. Therefore, countries that can maintain profitability of their industrial activity only through low wages are likely to suffer further setbacks.

According to models simulating the possible impacts of cohesion policy, the beneficial impacts on potential growth can be primarily expected from investments designed to improve infrastructure, enhance R+D+I activity and develop human resources.

In Hungary’s cohesion efforts for the 2014-2020 period, the government decided to apply the direct method of supporting corporate capital expenditures, primarily in the form of non-reimbursable funds, against which both economic theory and empiric surveys voice the most doubts and which can be expected to exert the least permanent impact.

This turning point in the Hungarian development policy is closely related to the government's objective, namely that the industry's share within the GDP should be the highest within the EU. However, beyond the trend previously mentioned that a number of emerging countries managed to successfully climb up in the value chains by developing not industry but services, international experiences have also shown that low barriers to entry and exit, simplified procedures in public administration, the improvement of professional capabilities and the attraction of venture capital are the efficient methods to accelerate innovation and strengthen economic potential. Set as a target for Hungary, reindustrialisation may bring some development only to least developed regions, where the „assembly" type production may (although by only creating relatively low value added) bring about some positive effects in employment.

3. The scale of cohesion funds in Central Eastern European countries is such that it can significantly affect the rate of economic growth. This makes it possible for these member states to use subsidies as a policy tool to stimulate economic upsurge even in the short run. At the end of the seven year budgetary period, the fear of loosing not yet utilised funds may also stimulate some upsurge effect in utilization. There is a strong pressure on fund disbursing institutions to effect payments to make sure that development funds are preferably fully absorbed irrespective of the efficiency of their utilisation. In the run-up to elections, governments may also bring forward the dates of announcing tenders with an objective to make sure that the short-term effects of investments improve their chances for re-election.

Regarding my third hypothesis my calculations support that in Hungary short run fluctuations in GDP and investment expenditures are very strongly correlate with changes in the annual amount of subsidies disbursed. This goes hand in hand with the low efficiency of funds utilisation as although in the last ten years we received high amounts (compared to the size of our economy); the rate of growth all this could generate was modest. Anyway without EU funds the Hungarian economy would be in recession (KPMG-GKI, 2017). This also suggests that after 2020, if funds available from the EU decrease, this will act as a brake on the growth of the Hungarian economy, even in the short run.

Regarding the future of cohesion policy, it is important for both Hungary and the other net beneficiary member states, that the EU's budget for the 2020-2026 period will be able to spend much less on the two biggest items of spending, agriculture and regional policy. Not only because the budget will loose a significant amount (as a result of Brexit) but also because more will have to be spent on border control, the treatment of the refugee crisis, internal security and the fight against terrorism.

Despite the dubious efficiency of cohesion policy and its sometimes detrimental structural effects, the rejection of these funds does not look to be a political alternative for Central Eastern European countries, as for the general public it is largely the ability to utilise these funds that gives legitimacy for EU membership. Cohesion is also important to donor countries, as the ability of Europe to remain competitive in the world economy also depends on the internal integration of the European economy.

The strong link and embedding of the supporting process with and to politics, the massive intertwined system of interests make it difficult to give recommendations that could improve efficiency substantively. In my view, at least logically, it would only make sense to move towards one specific direction. In addition to support corporate R+D+I, human capital and corporate environmental investments (as these have positive external effects) it would be preferable to redirect the rest of corporate support to public investments, as these could promise higher social benefits and a potentially higher rate of long term growth. By changing preferences more public objectives could be accomplished using public money, the deadweight and crowding-out effects could be mitigated.

This could not fully resolve the problem of low efficiency of the Hungarian practice – as the moderate achievements of the previous budgetary period can also demonstrate, when infrastructure was the key priority. The phenomenon of rent seeking, overpricing and corruption may also emerge while accomplishing public objectives which destroy the morale and ethics of economic agents. Fighting them would require governmental commitments, as by withdrawing political legitimisation, it takes a very long time for the general public to attain adjustment in economic policy.

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