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Assessing Territorial Impact Assessment: The Case of Services of General Interest

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Assessing Territorial Impact Assessment: The Case of Services of General Interest[‡]

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Abstract

There is no single or common definition or even understanding of Territorial Impact Assessment (TIA). Generally, the concept is described as a method based on a multi-criteria scenario and indicator approached analysis which will provide information about the territorial impact of a policy. The conceptual background of TIA is focused on Territorial Cohesion (TC), which, in turn, also lacks a single definition. TC has a strong connection to Services of General Interest (SGI) as these services are a crucial element of the Cohesion Policy. As the definition of SGI is wide and vague, a clear classification of these services is difficult to be set.

This paper is a spin-off of the ESPON SeGI project and aims at discussing the applicability of TIA on SGI. The following four research questions are proposed to be answered: (1) how does TIA relate with SGI? (2) To what extend can TIA be applied for assessing SGI? (3) Should the territorial impact be differently assessed for different SGI? (4) Are there any external factors that make TIA difficult to use for assessing the territorial impact of SGI?

Previous research and EU policy documents constitute the empirical material in this study. The analysis is focused on an ex ante evaluation of TIA and on the methodology of critical evaluation. The findings suggest a rather limited applicability as an undefined concept (TIA) is based on another undefined concept (TC) to measure the impact on a vaguely defined concept (SGI). Moreover, the particularities of each SGI may be related to economic and social changes that could be or not territorially reflected.

Keywords: regional development, Services of General Interest, Territorial Impact Assessment

JEL: R58, O21, B40, L97

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INTRODUCTION

The European Commission has set the aim to make a policy more effective and with an improved impact on the European added value. To achieve this aim, in the Europe 2020 framework three novelties have been lined out, as follows: (1) clear and measurable targets and outcome indicators should be established and they "must be clearly interpretable, statistically validated, truly responsive and directly linked to policy intervention, and promptly collected and publicised"; (2) making ex ante evaluations that allows monitoring and evaluating tools and incentives for achieving objectives during the implementation of a programme; and (3) developing evaluations by using "rigorous methods in line with international standards, including impact evaluation" (European Commission 2010:XXVII). This is striving in the direction towards the use of possible instruments that could lead to a better understanding and explanation of the impact of European policies on the territory.

Simultaneously the European Commission agrees on the fact that there are a lot of policies that could not be spatially positioned and, as a result, spatial impact is difficult to be determined (European Commission 2010:179). The solution adopted by the European Commission is referring to carrying out territorial impact assessment by concentrating its efforts on capturing the potential territorial impacts in order to obtain better policies and a well coordination between them. Zonneveld and Waterhout (2009:9) note that "territorial impact of EU policies is a relatively new field of research". Consequently, little research has been done on Territorial Impact Assessment (TIA), and a common definition or even understanding of this topic is still waiting to be outlined. The starting point is represented by Impact Assessment (IA) concept that is constituted by three main pillars, namely economic, social and environmental impacts.

The *concept of TIA* is called by Golobič and Marot (2008:1) as "one of the newest strategic assessment and evaluation tools". The same authors trace the roots of the TIA method back to the ESDP programme from 1999 where it was defined as a method for "better integration of territorial cohesion principals into sector policies" (Golobič and Marot 2008:1). The overall impression, according to Zonneveld and Waterhout (2009:1), is that "there is still little guidance on how a TIA might be done and on what it actually is or could be". Moreover, in order to have a clear picture on the content of IA, on the web site of the European Commission at the 'Impact Assessment' section (European Commission 2012) anyone could consult lists of Impact Assessments and initiatives requiring an Impact Assessment.

Few scientific literature regarding particular studies on TIA has been identified. Within a study on Slovenia only some particular sectors, such as environment, highways' construction or energy, are analysed (Golobič and Marot 2008:2). The designed model for TIA is a matrix formed by crossing three main axes, namely measures of sectorial policy, objectives of territorial cohesion and parameters of the spatial context, and external factors that may appear as trends of change (Golobič and Marot 2008:5).

Greiving *et al.* (2008) look at the TIA approach by focusing on the environmental policy areas for civil protection, water, nature and biodiversity. The methodology follows "TIA minimum requirements" of the ESPON Program, which can be considered as a checklist for all ESPON policy impact projects: (1) Scoping: Reference to policy interventions; hypothesis concerning cause-effect relationships; regional scale of observation; reference to past and future; (2) Analyzing: Interventions and effects measured; quantitative/qualitative appraisal; technique of analysis; and (3) Assessing: Goals referred to (polycentric spatial development, cohesion); applied meaning of spatial/ territorial; territorial coverage of outcome.

The TIA approach struggles with several limitations when assessing economic, social and environmental consequences of a policy implementation. The policies cannot always be directly linked to spatial dimension and, therefore, their consequences are almost impossible to be territorially delimited. Another limitation relates to the lack of common conceptual agreement when conducting the assessment as there is no consensus regarding the" level of evaluation, methods and scheme of relations in between the policies" (Golobič and Marot 2008:3). Furthermore, and this makes it more complicated, "there are no clear standards regarding territorial quality" (Zonneveld and Waterhout 2009:9) and a certain technique on TIA is still to be defined. Although, progress has been done and a technique called TEQUILA (Territorial Efficiency Quality Identity Layered Assessment) was developed. It consists of an econometric model composed of 30 spatial quality indicators. Simplified, the model can be described as a multi-criteria model where indicators of both qualitative and quantitative nature are summarized and given weights defined ad hoc by different methods (through an internal expert discussion; through a discussion with policy makers; through Delphi inquiries; or else). The purpose of this technique is to show the impact of the policy proposal on the territorial cohesion aims (Camagni 2009).

Regarding the methodology used when conducting TIA, Zonneveld and Waterhout (2009:9-10) are making an indirect recommendation by specifying that ex ante research compared to ex post research is more suitable. In this sense, a deeper knowledge could be accumulated by

meetings between experts, hypothetical ex ante case studies or scenario building that requires using a data bank consisting of an overview on the causality between EU policies and territorial impacts. IA represents a sum of logical steps that leads to exposing the advantages and disadvantages of a certain policy by pointing out its potential impacts. But, as Backlund (2009:1) sustains IA could be understood as a political instrument depending on the context where the negotiations are conducted.

Territorial cohesion is an important part of TIA. The concept of *territorial cohesion* was first mentioned by the European Commission in 2001 in relation to the Amsterdam Treaty, and then only in relation to Services of General Interest (Polverari *et al*. 2005), and by the European Spatial Development Perspective (ESDP) in 1999 (European Commission 2008b). "Cohesion" is not a scientific or technical concept, but a political one. Cohesion objectives require thinking about the tensions between economic, social and territorial goals, e.g. in the areas of accessibility, competitiveness, diversity and sustainability (ESPON 2010). Still today there is no uniform definition of territorial cohesion (Böhme *et al*. 2011:17). Several attempts to define Territorial Cohesion in a scientific way has been made by *e.g.* Davoudi (2005), Schön (2005), Faludi (2005), Waterhout (2007) and Camagni (2007). An operational issue concerns the indicators which are to be established for determining the presence and degree of cohesion in the relevant services of general interest. Difficulties exist more particularly in relation to the social dimension of cohesion (de Ruffray and Hamez 2008).

The term of *Services of General Interest* (SGI) is everything but clear-cut; on the contrary, it is vague and multifaceted. The term 'Services of General Interest' was coined within the EU policy process and does not reflect national terminologies or the conceptual world of the scientific literature (ESPON 2011). SGI is divided into *Social Services of General Interest* (SSGI) – *e.g.* education, labour market services, health services, health care, elderly care, child care and social housing – and *Services of General Economic Interest* (SGEI) – e.g. electricity, gas, water, waste management, ICT, transport and postal services (European Commission 2006, 2007, 2008a). Furthermore, SGI can be categorised as economic and non-economic (CEEP 2010:1). As the concept of SGI currently covers everything from e.g. the consumption of kindergartens to investment in nuclear power plants it is thus simply too vague and imprecise for analytical purposes (Rauhut and Ludlow 2012:5).

Policymakers need tools to assess the impact of policies and programs, and ideally, evaluations should not only be carried out after completion of a project, but also prior to its implementation. TIA claims to be such a tool. Therefore, this study aims at discussing the

applicability of TIA on SGI. This discussion will have the character of an ex ante evaluation that sets its basis on the methodology of critical evaluation. Four research questions are proposed to be answered: (1) how does TIA relate with SGI? (2) To what extend can TIA be applied for assessing SGI? (3) Should the territorial impact be differently assessed for different SGI? (4) Are there any external factors that make TIA difficult to use for assessing the territorial impact of SGI?

METHODOLOGICAL CONSIDERATIONS

McCloskey (1985:42) argues that 'the scientist's job is not to decide whether propositions are useful for understanding and changing the world but to classify them into one or the other half, scientific or non-scientific, and to bring as many as possible into the scientific half'. As science has to be demarcated from nonsense, testability to distinguish science from pseudoscience methodology plays a central role (table 1). A methodological individualism will only nourish the non-scientific stance, notes McCloskey (1985:39).

Table 1: The task of science is to move the line

Scientific		Humanistic
Fact		Value
Truth		Opinion
Objective		Subjective
Positive	The demarcation line	Normative
Rigorous		Intuitive
Precise		Vague
Things		Words
Cognition		Feeling
Hard		Soft
Yang		Yin

Source: McCloskey 1985, p. 42

In the economic sciences methodological individualism is widespread. Theories are based upon assumptions which are normative and non-testable, concludes Blaug (1994:93-95). Syll (2001:25-29) finds in his overview of how economists treat methodology in their studies that a general trait for many economists is that models and theories serve as examples; models and theories are not used to analyse how things are, but to describe how things should be. In line with McCloskey's reasoning, this methodological individualism can be devastating as political decisions are not based upon science, but pseudoscience.

In order to understand why an intervention has a desired effect when implemented in one contextual setting, but not in another, or changes over time, we have to look at three things: regularities, mechanisms and contexts. Regularity (*R*) is an outcome, results or pattern which we want to explain. While R is the dependent variable, mechanisms (*M*) and context (*C*) are independent variables. According to Pawson and Tilley (2010:71),

> *"Explanation takes the form of positing some underlying mechanisms (M) which generates the regularity and thus consists of propositions about how the interplay between structure and agency has constitutes the regularity. Within realist investigation there is also investigation of how the workings of such mechanisms are contingent and conditional, and thus only fired in particular local, historical or institutional context (C)".*

Furthermore, changes over time (*T*) may also have an impact on the result (Pawson & Tilley 2010:73).

An ex ante evaluation is now possible for all 14 SGI mentioned as examples in the classification of SGI by discussing the relevant *R*, *M*, *C* and *T* for each of them. In this study, *R* will be the assumed regularities of TIA; *M* contains information on how the interplay structure/agent has on the regularity and how this regularity is generated for each SGI; *C* relates to what particular local, historical or institutional traits found in the context have on the mechanisms of the studied SGI; and, finally, *T* relates changes over time.

One further useful methodological instrument is found in the philosophy of science. The phenomenon which is to be explained is called *explanandum*. It is a pattern of regularities showing that the outcome or result or effect was expected due to a number of known conditions and scientific theories. The propositions used for explaining a phenomenon will, all together, be called *explanans*. This reasoning is a kind of deduction, in which the conclusion is then *explanandum*, E; its premises, *explanans*, is based on scientific laws – L_1, L_2, ..., L_n – and other premises – B_1, B_2, ..., B_n constituting declarative sentences of known facts (Hempel 1969:57f.). According to Hempel, such scientific conclusions can be illustrated by the following scheme:

$$\left.\begin{array}{l} L_1, L_2, \ldots, L_n \\ \underline{B_1, B_2, \ldots, B_n} \end{array}\right\} \quad \textit{Explanans}$$

$$E \qquad \textit{Explanandum}$$

Hempel (1969:65f.) also argues that all scientific explanations are not deduced from universal laws. Scientific conclusions can also be made from the calculus of probability. When *explanandum* can be concluded implicitly from the premises of *explanans*, we have to consider the degree of probability that the conclusion is true. In the deductive method the *explanandum* is always true given that the premises of *explanans* are true, but the conclusions (*explanandum*) based upon calculus of probability can be false although the premises of *explanans* are true. Inductive explanations are based upon a calculus of probability, and they show that the *explanandum*, given the information in *explanans*, is very likely to be true.

This reasoning can be used to evaluate a SGI and all other known premises (*explanans*) to generate a certain territorial impact (*explanandum*). In some cases this will be made by deduction and in some cases by a discussion on probability.

The main purpose of ex ante evaluation techniques is improve policy and program designs and avoid failure by providing information about the direction and magnitude of effects that are likely to occur (Bornhorst 2009:4). Other researchers argue that ex ante evaluation is useful for designing programs that achieve some optimality criteria, such as maximising impact for a given cost (Todd & Wolpin 2006:1). Also the European Commission (2001) consider ex ante analyses as an useful tool to define objectives, to ensure that these objectives can be met, that the instruments used are cost-effective and that reliable later evaluation will be possible. Existing information and evidence from earlier evaluations, studies and other sources should be fed into the ex ante process whenever possible.

A key issue in evaluation methods is that we do not always know what the optimal criterion is. Pawson and Tilley (2010:110) suggest that we instead provide estimates for the *expected* performance for any group of subjects and that these expected outcomes are compared with the *actual* performance of the subject(s) under investigation. This is a key component in their evaluation model *realistic evaluation*.

In this context it can be worth mentioning that also the European Commission advocates ex-ante impact assessments. In table 2 are exposed examples of territorial elements that are considered by the European Commission when conducting ex-ante impact assessments.

Table 2: Examples of territorial elements for Commission ex-ante impact assessments

Impacts	Key questions
ECONOMIC: Specific regions or sectors	- Will it have a specific impact on certain regions, for instance in terms of jobs created or lost?
SOCIAL: Social inclusion	- Does it affect equal access to services and goods? - Does the option affect specific localities more than others?
ENVIRONMENTAL: Land use	- Does it affect land designated as sensitive ecological reasons? Does it lead to a change in land use (for example, the divide between rural and urban, or change in type of agriculture)?

Source: European Commission (2010:179)

What we suggest and will carry out in this paper is therefore in line with the practices of the European Commission.

CONNECTIONS BETWEEN TERRITORIAL IMPACT ASSESSMENT, TERRITORIAL COHESION AND SERVICES OF GENERAL INTEREST: AN OVERVIEW

The purpose of this section is to expose an overview on the link between TIA – TC - SGI in order to provide answers to the first two research question of the paper. The criticism brought to the Cohesion Policy is focused on the thinly spread of the resources across the policy areas and that "its impact is often difficult to measure" (European Commission 2010:205). So, there is interest for making IAs within Cohesion Policy, but the difficulty pops up when quantifying the impact.

The IA generates results that are relevant in decision- making procedure, but is not always efficiently used. Group interest can interfere and formal assessments can be conducted in order to support a certain decision; situation that is leading to a limited efficiency of the method (Golobič and Marot 2008:13).

As regards the sources of impact on territory, the EU initiatives are composed of the EU integration discourse, the EU spending programmes and the EU legislation (Zonneveld and Waterhout, 2009:7). Overall, the EU policies can generate direct and indirect impacts, the difference between these two types being determined by the time dimension. More precisely,

the direct impact represents the immediately effects of a certain project, and its indirect impact is more clear seen in time through the economic development of that particular region. In these terms, an EU policy proposal is more likely to have its direct territorial impact assessed rather than indirect impact, because of its complexity.

Determining the direct or indirect impact is out of our investigation area, as the second research question is formulated in connection to the ESPON programme. By analogy 'To what extend can TIA be applied for assessing SGI?' is focused on investigating "the possible and/or potential territorial impact of policies…within member states" (Zonneveld and Waterhout, 2009:5), without no interest for direct or indirect impact on policies, governance systems or practices.

On the other hand, the most challenging direction of TIA refers to capturing those particular impacts that are mainly dependent on the territorial particularities of each country and implies a very well knowledge of that specific environment. Camagni (2009) has identified three main components of Territorial Cohesion, namely *territorial efficiency*, focused on economic growth, minimal use of land resources and accessibility, *territorial quality*, taking into account quality of life, economic innovation and similar access to services of general interest, and *territorial identity*, concentrated on "social capital", local know-how and competitive advantage of each territory. Related to TIA, these components represent the starting point for developing an IA in general and the basis for the construction of the TEQUILA technique in particular.

By crossing the TC major components and TIA's main axes for the particular case of SGI, reveals that the discussion is directed towards the crossing of the territorial quality component of TC and the three elements of IA, regarding policy measures, territorial cohesion elements and parameters for spatial units.

Zonneveld and Waterhout (2009:12) highlight that TIA could generate better policies within the EU, and including TIA like a component of the European Commission's own Integrated Assessment instrument, rather than a separate instrument is the best solution to be adopted at the European level. The same authors emphasize that it would not be relevant to use an exclusively evaluation instrument mainly focused on the territorial aspects as objectives of social and economic cohesion are already included in the method of Impact Assessment.

Economic, social and environmental directions are considered to be the most important areas when assessing the impact of a policy, and as Zonneveld and Waterhout (2009:15) sustain,

there are very well connected to territorial issues. The same authors point out that the access to SGI is among the main questions that need an answer when talking about social impacts, as a basic principle of the territorial cohesion. Also environmental impacts are related to territorial issue in connection to SGI, as it is the case of waste production, production, generation and recycling.

Beyond the three directions of IA, the territorial issue is being considered only when the policy proposal has a clear territorial dimension. So, only in these cases TIA could be applied, even more, in relation to SGI several shortcomings are revealed. Due to the particularities of each SGI, the TIA appliance has a diverse intensity, and the extremes are represented on one hand, by the explicit spatial dimension and on the other hand, by the lacking of spatial dimension. Given the wide range of situations, the recommendation for state representatives would be to take into consideration territorial impacts when elaborating policies and regulations regarding SGI, by analysing their particularities related to spatial dimension. Overall, when referring to the territorial aspect of a policy or legislation the focus is placed on monitoring its impact at the state, regional or local level. The outcome of this process would be the harmonization between the European Community and the member states regulations.

ASSESSING THE TERRITORIAL IMPACT OF 14 SERVICES OF GENERAL INTEREST

The European Union policies in relation to the territorial distribution determine three different situations expressed by explicit, partial or without spatial dimension (European Commission 2010:179).[1] The recommendations received by the European Commission during the debates on Green Paper on Territorial Cohesion are mainly focused on the IA of the territorial dimension (European Commission 2010:195-197). Is recognised that policies with an explicit territorial dimension, e.g. transport or environment, could have their impact assessment easily evaluated, and as a result the policy could be appropriately adapted. When the policy can be adjusted in accordance with its territorial impact, then the ideal case has been encountered. On the opposite side, there are policies that could hardly be associated to a certain spatial dimension, namely single market or trade policy.

[1] The first category includes the policies of Competition, Transport, Environment, Maritime Policy, and Common Fisheries Policy. Policies with partial spatial dimension are represented by Research and technological development, Innovation and entrepreneurship, Information Society and Media, Poverty and social exclusion, Employment, Education, Gender equality, Health, The Common Agricultural Policy, and Climate. Policies without a spatial dimension refer to Single Market, Trade, Energy, Economic and Monetary Fund, and The Lisbon Strategy.

Analogous to the division between the European policies and the 14 examples of SGI mentioned earlier, transport could be considered part of the first category with explicit spatial dimension. Moreover, electricity, gas, water, waste management and postal services could be *broadly* included in the same category. ICT and telecom, education, health services and health care are partially corresponding to a territorial distribution. Social housing, elderly care and child care as well as labour market services such as e.g. unemployment insurance and sickness insurance has no spatial dimension *per se*. In line with this reasoning, SGEI could have their territorial impact differently assessed from SSGI, because of the differences of explicitly between the spatial dimensions. Having an explicit spatial dimension, a more precise evaluation of the territorial impact could be made for SGEI than for SSGI. The latter type of services meets some limits in TIA, because of their partial spatial dimensions.

Overall, the territorial impact has to be differently assessed for the two categories of SGI as they are differently reporting to the spatial dimension. In this sense, the following subsections aims to clarify 'to what extend TIA can be applied for assessing SGI' and if 'there are any external factors that make TIA difficult to use for assessing the territorial impact of SGI?'.

EXPLICIT SPATIAL DIMENSION

It is noticed that all the services that are included within this category dispose of solid infrastructure that assures the development of a widespread network in order to support the provision of that particular service. These services are usually referred to as transport, electricity, gas, water, waste management and postal services.

The transport could have different connotations, on one hand the focus placed on the transport network, and on the other hand, related to the provision of urban public transport. In both cases, the *explanandum* refer to the spatial distribution that is supported by *explanans* related to territory. Explicitly, the transport infrastructure can be easily determined within a territory as the distance between point 'a' and 'b' can be measured. As for the provision of service, it is known that each vehicle that is part of an auto park, under the administration of a certain city or region, has to obey the route that has been allocated. Further on, the costs associated to this service are in strong correlation to the number of km registered by a vehicle, the type of road and the available routes- all being connected to territory. Both the infrastructure and the provision of the transport service have an explicit spatial dimension and the use of '*Territorial Impact Assessment*' is more overlooking and complex than the '*Impact Assessment*'.

An analogy between the transport service and the postal services could be done. Postal services require a wide infrastructure represented by the fix collecting points and the means of transport, both spread all over the world. The explicit spatial dimension of the postal services could be explained by the number of km to the destination, the type of means of transport related to the time needs of the customers and the available routes- all being related to territory. Also in this case, the '*Territorial Impact Assessment*' could be more appropriate than the '*Impact Assessment*'.

Also water service provision implies the use of a developed infrastructure that is directly related to territory. To generate an *explanandum*, the *explanans* have to reflect the geographical location of the water service. The mechanisms in this case are reflected by the number of km of existing pipelines used for water provision and the ratio of households and enterprises connected to the water network in a certain territory. As for the context, local networks and the modalities of public – private cooperation lead to the regularity of regional spin-off effects. This kind of service very clearly illustrates the effectiveness of using '*Territorial Impact Assessment*' instead of '*Impact Assessment*'.

Similar arguments as in the case of water service provision may also be applied to electricity and gas service.

Waste management contains several directions that are mostly related to spatial dimension. Streets' cleaning, waste collection, waste transport and waste processing within an ecological centre are the main components of the waste management that could be analysed by applying '*Territorial Impact Assessment*' rather than '*Impact Assessment*'. The operator that has to clean the streets, collect and transport the waste from the households and enterprises knows precisely the territory where to provide these services. As for the ecological centre where the waste processing is done, the spatial dimension is illustrated by the area that it has been allocated[2].

PARTIAL SPATIAL DIMENSION

ICT & telecom has a partial spatial dimension as long as the focus is placed on two main directions: on one hand, the infrastructure supporting this service and on the other hand, the provision of the service itself. The first approach allows us to explicitly determine the territorial spread of the ICT& telecom network, as for the second approach, the outputs of this

[2]In most of the cases, an ecological center is ascribed to a certain region of the country.

service provision are generating impacts beyond the borders of the infrastructure located in that particular area.

Wide spread ICT & telecom networks can lead to impressive spin-off effects on the territory where they are developed. Based on the current households' needs and adding the enterprises' necessities a very good covering of the territory with ICT & telecom networks become a rough requirement that has to be accomplished both within the urban and rural areas. The context, *C*, is shaped by the will of investors and households to invest and live in that particular area. Regarding the output of this service, it would be unrealistic to assess its effect because of the large spectrum of recipients situated all over the world. These two opposite *explanans* explain why the ICT & telecom service could be considered both having or not spatial dimension. As *explanandum*, there are situations in the case of ICT & telecom when '*Impact Assessment*' could be also conducted as '*Territorial Impact Assessment*'.

Tertiary education can have an impact on territory, but the contextual factors influencing the impact are strong. Just locating a university or a university college in a rural and remote area is not enough to generate a territorial impact. If such university just educate primary school teachers, social workers and nurses few spin-off effects on the territory will be generated: these professions are needed to make society work, but they do not generate innovations, private-public partnerships to stimulate entrepreneurship etc. If students and university teachers are not local, the needed social capital to generate the desired spin-off effects is also missing as local networks do not exist.[3]

Tertiary education with strong research facilities with clear specialisation, strong local networks with private and public actors can, on the other hand, generate desired spin-off effects on territory. These universities are, however, seldom found in rural and peripheral areas. Lindqvist *et al*. (2012) argue that if higher education institutions are to support regional development the formation of regional partnerships are needed, where the universities and its researchers take an active part. Regional development should also be a part of the university strategy and a new university culture must be developed.[4] Finally, it is concluded that the main indirect effect of placing a university in a rural and peripheral area is that it will have a

[3]Westlund (2004) provide a thorough literature review on these aspects.

[4]The methodology used by Lindqvist et al. (2012, p. 85) can be questioned. When e.g. analysing how efficient regional universities are to solve matching problems at the labour market, unemployed persons have been excluded from their analysis (sic!). Furthermore, they have not controlled for natives studying abroad and then returning after graduation to pick up a job, nor have they been able to control for foreign students and what impact they have. Finally, important data has been left out from the analysis as it was too expensive to buy from the national statistical offices. To what extent these methodological shortcomings affect the result is difficult to estimate.

significant effect on the regional image and attractiveness (Lindqvist *et al*. 2012). The inhabitants may feel that the image of their region improves and becomes more attractive, but for potential investors, students, teachers and business partners the quality of the education and the scientific production will be the determinant of their judgement.

To be able to produce an *explanandum*, the *explanans* must include the geographical location of the tertiary education. The mechanisms (ratio education and research, what kind of offered educations etc.) and context (e.g. local networks and public-private partnerships) will determine the regularity of regional spin-off effects. In some cases territory matters and it will be possible to conduct a '*Territorial Impact Assessment*' and not only an '*Impact Assessment*'.

Health care can be assumed to have the same impact on territory as tertiary education: in some cases the territorial impact will be significant, but in other cases more or less absent. The territorial impact depends on what kind of health service is discussed. The overwhelming part of all heath service produced – the local health centre to which you go when you have a nasty cough or need penicillin to cure pneumonia – can be assumed to have little territorial impact. The location of the local health centre is determined by market factors – a certain number of persons should need a certain number of medical doctors – or by political decision. Both demographic and economic factors play an important role in the location of local health centres. If you place one extra doctor in a peripheral region does not lead to other people moving in to that area etc. Local health centres do not contribute to innovations and economic growth – it is simply not their role to do so.

Large hospitals with a high share of medical research can produce many spin-off effects on the territory in which they are located. We can expect innovations, entrepreneurship, business networks etc. to stem from these environments. In this aspect, research intensive health care can be assumed to have the same effect as tertiary education facilities on the territory.

The *explanandum* needs to include an *explanans* covering territory as territorial impacts can be expected under some conditions. The mechanisms (ratio medical service and medical research, what kind of service offered etc.) and context (e.g. local networks and public-private partnerships) will determine the regularity of regional spin-off effects. Just as in the case with tertiary education, territory will matter in some cases and it will be possible to conduct a '*Territorial Impact Assessment*' and not only an '*Impact Assessment*'.

LACKING SPATIAL DIMENSION

The basic question is why child care is organised in a geographical area. The most likely answer is because there are many children in that area. Once child care is organised it *may* attract parents to move into that area– access to child care is only one of many important aspects for the decision on where to settle. It may be one out of many aspects taken into consideration. If factors such as distance to work, access to daily services, house prices, tax situation etc. make parents leave the area, the child care will close down when a threshold is passed – it is simply too costly to run a kindergarten or child care for too few children.

What is the spatial dimension of child care? Is it territory or contextual factors, such as demographic structure and economy, determining the spatial distribution of child care? The phenomenon we want to explain, the spatial dimension child care, is the *explanandum* in this case; the demographic structure (young couples with small children) and economic aspects (distance to work, access to daily services, house prices, tax situation etc.) are the *explanans*, not territory *per se*.

Seen from another perspective, the regularity, *R*, in this case the spatial dimension of child care, is determined by mechanisms, *M*, and context, *C*. The mechanism can be seen as the demographic structure – a high share of young couples with young children creates a demand for child care – and the reason why there is a high share of young couples with young children in a certain geographic area depends on the context – distance to work, access to daily services, house prices, tax situation etc. Hence, territory *per se* is not the driver for child care, but demographic and economic factors. An assessment of the territorial impact of child care should then focus on other aspects (demographic structure and economic factors) rather than territory. Consequently, the '*Territorial Impact Assessment*' will be an '*Impact Assessment*'.

The same reasoning can be applied on primary and secondary education; the only reasons why primary and secondary schools are located in a specific geographical area depend on the demographic structure and economic factors. Territory cannot be seen as the *explanans* for the spatial distribution of primary and secondary schools. It is rather mechanisms in the shape of demographic structure and the economic context (distance to work, access to daily services, house prices, tax situation etc.) causing the regularity of spatial distribution of primary and secondary schools. As other factors as territory are important, analogous with the child care, the '*Territorial Impact Assessment*' will be an '*Impact Assessment*'.

Elderly care and social housing are also very dependent on other things than territory. Assume that we have a geographical area with a high density of services for elderly care and that these services are easily accessible for elderly. What is the territorial impact of elderly care in this case? This area will attract elderly, and it will repel all other age groups; this can take place either by elderly persons moving in or other age-groups moving out or both. This impact of the demographic structure takes place with or without a high density of services for elderly care and that these services are easily accessible for elderly. Furthermore, elderly care is in general a labour intensive and low productive service job; these kinds of jobs do not promote economic growth, on the contrary they keep down economic growth. It is the same for child care and to some extent also primary and secondary education.[5] Such areas could become unattractive. Again, the *explanans* appears to be related to demography and economy rather than territory. Mechanisms in the shape of demographic structure and the economic context (labour, distance to hospitals etc.) causing the regularity of spatial distribution of elderly care appear the most important. Just as in the case of child care and primary/secondary education other factors than territory are important, leading to the results that the '*Territorial Impact Assessment*' will be an '*Impact Assessment*'.

Social housing can be treated analogous with elderly care.

Labour market services such as unemployment insurance or sickness insurance have no spatial dimension *per se*; the latter is an indirect labour market service. Other labour market services, such as vocational training or rehab-centres, are located where the demand is. Statistically they will be located where unemployment and long-term sickness leave is high; indirectly, this means that they will be located in or in close distance to areas with certain demographic structure and economic situation. The *explanans* will focus on, both for unemployment and rehab centres, factors such as education, previous jobs, immigrant background, age, sex, health status etc. Again the regularity (the vocational training centres and rehab centres) will be caused by mechanisms (demography) and context (economy). A '*Territorial Impact Assessment*' will then be '*Impact Assessment*' as territory is subordinated to demography and economy.

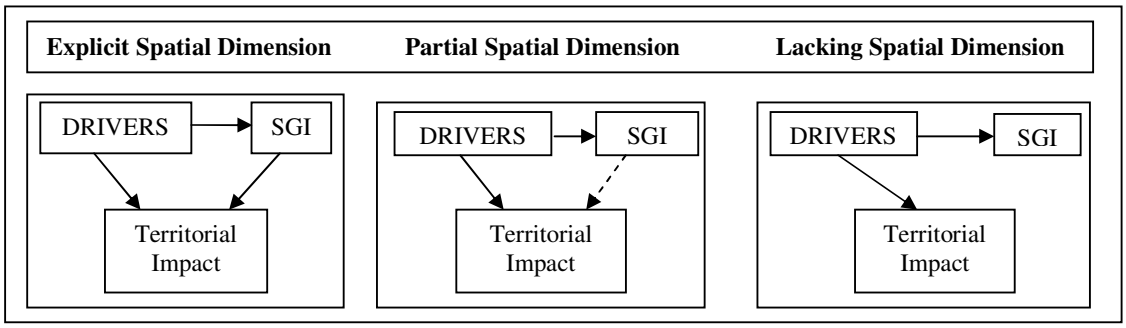
SUMMARY

The findings here indicate that the three groups of SGI have different impact on territory: explicit (transport, electricity, gas, water, postal services and waste management), partial (ICT

[5]In the case of primary and secondary education, the eventual positive effects on economic growth come with a 10-15 year time lag.

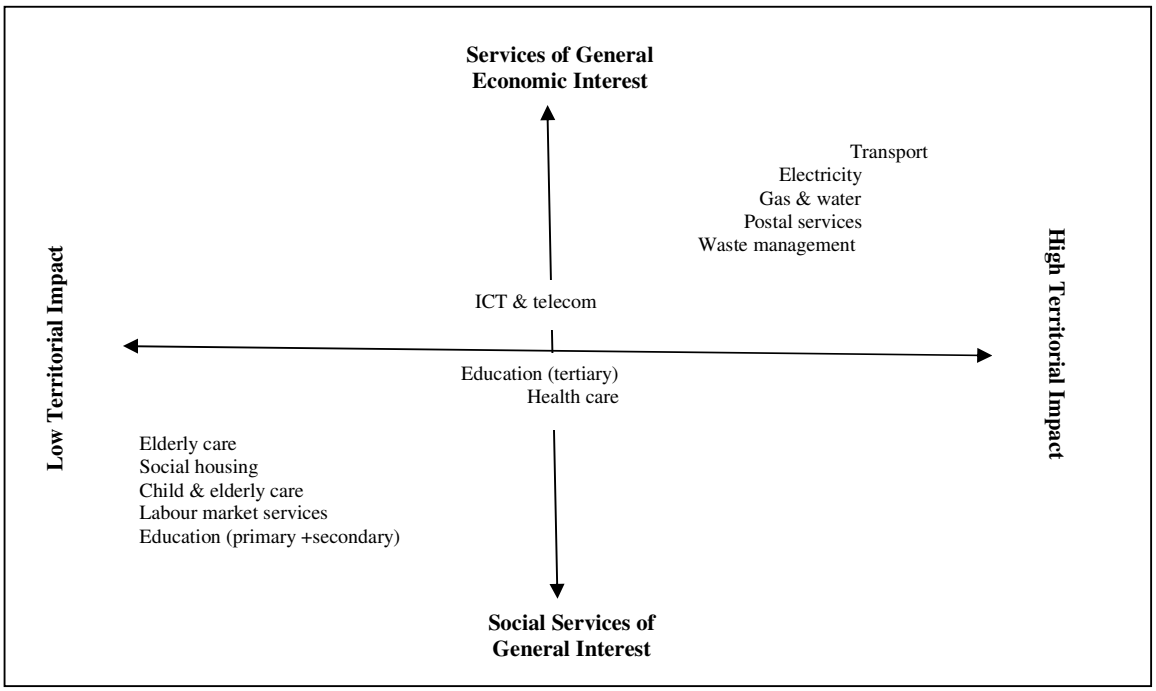
& telecom, tertiary education and health care) and lacking spatial (labour market services, elderly care, child care and social housing) dimension. Summing up, the relations are illustrated in the figures 1 and 2 below.

Figure 1: The theoretical territorial impact of groups of services of general interest



Source: own representation

Figure 2: Services of general interest and their territorial impact



Source: own representation

A recommendation formulated by Zonneveld and Waterhout (2009:22) regarding TIA is to include territorial perspective into the IA procedure in order to increase its performance. In relation to the findings in this paper, their suggestion is wise given that it is a SGI with an explicit spatial dimension being assessed; an SGI with a partial or lacking spatial dimension may not benefit from a territorial assessment in the same way in the analysis.

As we have previously shown, TIA has a different spectrum of applicability depending on each type of SGI, meaning that the 'territorial impact is differently assessed for different SGI'. If economic, social and environmental influence of SGI can be more easily determined, the territorial assessment imposes some clear limits. So, the following dilemma appears: there is need to be developed an individual TIA instrument or there is enough to include TIA in the European Commission's Integrated Assessment (ECIA) instrument. As TIA has its unsolved connections related to SGI, it would be more like a limitation imposed by this instrument to the assessment procedures of EU and to the implementation of policies within the state members.

Within TIA, several difficulties could appear when relating the economic, social and environmental impact to the spatial dimension. This happens because of the impossibility to place and measure the consequences within a certain territory. In the particular case of SGI, territorial impact is manifesting with different intensities, starting from SSGI that have a low territorial impact up to the SGEI that register a high territorial impact.

In this sense, it would be efficient to develop a TIA instrument only for some particular SGI or to include territorial impact as a component of a larger instrument, as it is ECIA instrument at the European Union level? To include TIA in the analysis when it is obvious that it is inapplicable does not make any sense. As the European Union interest is to have policies and instruments with a wide range of propagation in the member states, the TIA instrument could be considered most like a tool for raising the territorial awareness on a long term basis rather than an analytical instrument that can be immediately used. Consequently, as territorial impact could not be clearly defined in all the SGI cases, it may seem unfeasible to develop an instrument only for a narrow category of services. We would like to highlight that TIA can be applied only for some specific SGI, mainly the SGEI category, and scarcely to SSGI, where the territorial dimension is an insignificant issue.

CONCLUSIONS

This paper aims at discussing the applicability of territorial impact assessment on services of general interest. The analysis was based on an ex ante evaluation of TIA and on the methodology of critical evaluation. To be able to say anything about how TIA relates to SGI requires relatively well defined concepts. Unfortunately, even though several definitions of TIA exist, worse is that the understanding of the concept is still in its cradle waiting to mature; the definition of SGI is so vague, incorporating everything from investment in nuclear

power plants to the consumption of elderly care, which makes it difficult to use for analytical purposes. Consequently, as long as definitions are vague and unclear (explanans) the predictions of how TIA and SGI relate (explanandum) will be mere 'guestimates'. Just for clarification we would like to emphasise that we do not consider one of the present definitions or methodologies of TIA as superior to the other ones discussed in this paper. We just conclude that that there is a wide range of definitions and methodologies that makes TIA difficult to use.

Some SGI lack a spatial dimension which makes a territorial assessment abundant. For the SGI with an explicit spatial dimension TIA can be used – well, that is when TIA is defined and there is a common understanding of the concept. Some SGI have what we call a partial spatial dimension, and even though TIA is defined it is not likely to be able to explain the territorial impact of a SGI (explanandum). In this sense, a differentiated impact assessment could be one way solving this problem and thereby strengthen the scientific conclusion (explanans).

In line with the methodology of critical evaluation it is clear that contextual factors do have a varying degree of impact on different SGI. These external factors must be taken into account when assessing what territorial impact a SGI has; if not, we will instead assess what territorial impact contextual factors as demography or economic structures have. The actual occurrence of such situation is most likely related to the vagueness and imprecision in the analytical tool TIA. In turn, this high-lightens the need for further development of TIA to increase its precision and predictability as an analytical tool. Until now, TIA has been struggling with a troublesome methodological individualism, which is manifested in several and vague definitions and as many used methods for analysis. If TIA continues to be based upon normative and non-testable assumptions the most likely to happen is that it becomes a tool of limited analytical potential.

There is need to assess the territorial impact of the motley crew of services referred to as SGI and a tool that provides precise and true predictions has to be developed. Related to this, TIA tool must strive to be scientific, based upon facts, objective and positive. What we see today is a subjective, normative, vague and soft tool which at best comes up with opinions about what territorial impact a SGI has. To base political decisions on opinions and not facts may, in line with McCloskey's reasoning, be devastating.

We acknowledge the need of an analytical tool that could overcome the methodological individualism, which TIA struggles with. Solving this issue should be the top priority of both policy makers and scientists. Hopefully, our conclusions can stimulate the process of creating a tool for assessing the territorial impact of a particular range of services of general interest.

REFERENCES

Backlund, A.K. (2009) 'Impact assessment in the European Commission- a system with multiple objectives', *Environmental Science& Policy*12:1077-1087

Blaug, M. (1994) *The Methodology of Economics or How Economists Explain*. Cambridge: Cambridge University Press

Bornhorst, F. (2009) *How Good Are Ex Ante Program Evaluation Techniques? The Case of School Enrollment in PROGRESA*. IMF Working Paper WP/09/187

Böhme, K., Doucet, P., Komornicki, T., Zaucha, J. &Swiatek, D. (2011) *How to strengthen the territorial dimension of 'Europe 2020' and the EU cohesion Policy.* Background Report for the Polish EU Presidency. Warsaw: Ministry of Regional Development

Camagni, R. (2007) 'Terrotorial Development Policies in the European Model of Society', in Andreas Faludi (Ed.) *Territorial Cohesion and the European Model of Society*. Camebridge, Ma.: Lincoln Institute

Camagni, R. (2009) 'Territorial Impact Assessment for European Regions: A methodological proposal and an application to EU transport policy', *Evaluation and Program Planning* 32: 342-350

CEEP (2010) *Mapping the Public Services: Fact Sheet.* Available at: < http://www.ceep.eu/images/stories/pdf/Mapping/CEEP_mapping%20experts%20report.pdf?c43417316a8c0ddb72ab1893be164a25=8631f441ff75f91cf01cefddce73c446> [Accessed on 22 June 2010]

Davoudi, S. (2005) 'Understanding Territorial Cohesion', *Planning, Practice & Research* 20(4):433-441

De Ruffray, S. &Hamez, G. (2008) *The social dimension of territorial cohesion*. A paper presented at the 48th ERSA conference in Liverpool, 27-31 August 2008

ESDP (1999) *European Spatial Development Perspective – Towards Balanced and Sustainable Development of the Territory of the EU*. European Commission

ESPON (2010) *New Evidence on Smart, Sustainable and Inclusive Territories. First ESPON 2013 Synthesis Report*. ESPON: Luxembourg

ESPON (2011) *Indicators and perspectives for services of general interest in territorial cohesion and development*. Inception Report Activity 1: Terms, concepts and definitions. ESPON Applied Research project 2013/1/16, Luxembourg: ESPON

European Commission (1999) *European Spatial Development Perspective: Towards Balanced and sustainable Development of the territory of the EU*. Office for Official Publications of the European Communities

European Commission (2001) *Ex ante evaluation- A practical guide for preparing proposals for expenditure programmes*. Available at: <http://ec.europa.eu/dgs/secretariat_general/evaluation/docs/ex_ante_guide_2001_en.pdf> [Accessed on 22 June 2010]

European Commission (2006) *Implementing the Community Lisbon programme: Social services of general interest in the European Union*, COM (2006)177 final

European Commission (2007) *Services of general interest, including social services of general interest: a new European commitment*, COM(2007)725 final

European Commission (2008a) *Commission Staff Working Paper – Biennial Report on social services of general interest*, SEC(2008)2179/2

European Commission (2008b) *The Green Paper on Territorial Cohesion – Turning territorial diversity into strength*. COM(2008) 616 final

European Commission (2010) *Investing in Europe's Future – Fifth report on economic, social and territorial cohesion.* Luxembourg: Publications Office of the European Union

European Commission (2012) *Impact Assessment*. Available at: <http://ec.europa.eu/governance/impact/index_en.htm> [Accessed on 18 June 2012]

Faludi, A. (2005) 'Territorial cohesion: an unidentified political objective', *Town Planning Review* 76(1):1-13

Golobič, M. & Marot, N. (2008) *Territorial Impact Assessment: A Policy Development Tool for Territorial Cohesion*. GALLA, Judith (ed.). Governance by evaluation institutional capacities and learning for sustainable development: Conference proceedings of EASY-ECO Vienna. Vienna: University of Economics and Business Administration. Available at: <http://www.wu.ac.at/inst/fsnu/vienna/papers/golobic_marot.pdf > [Accessed on 15 December 2011]

Greiving, S., Fleischauer, M., Tarvainen, T., Schmidt-Thomé, P. & Jarva, J. (2008) 'A Methodological Concept for Territorial Impact Assessment Applied to Three EU Environmental Policy Elements', *Raumforschung und Raumordning* 66(1):36-51

Hempel, C. (1969) *Vetenskapsteori*. Lund: Studentlitteratur

Lindqvist, M., Smed Olsen, L. & Baltzopoulos, A. (2012) *Strategies for Interaction and the Role of Higher Education Institutions in Regional Development in the Nordic Countries*. Nordregio Report 2012:2

McCloskey, D. (1985) *The Rhetorics of Economics*. Madison: University of Wisconsin Press

Pawson, R. & Tilley, N. (2010) *Realistic Evaluation*. London: Sage

Polverari, L., Quiogue, N., Gross, F. &Novotný, V. (2005) *Territorial Cohesion and Structural Funds Programmes: Urban Development and Territorial Cooperation*. IQ-Net Thematic Paper no. 16(2)

Rauhut, D. & Ludlow, D. (2012) *Services of General Interest and Territorial Cohesion: What, How and by Whom?* Paper prepared for the NS-RSA's 2nd Winter Conference, March 14-15, 2011 in Oslo, Norway.

Schön, P. (2005) 'Territorial Cohesion in Europe?', *Planning Theory & Practice* 6(3):389-400

Syll, L.P. (2001) *Den dystra vetenskapen*. Stockholm: Atlas Akademi

Todd, P.E. & Wolpin, K.I. (2007) *Ex Ante Evaluation of Social Programs*. PIER Working Paper 06-022

Zonneveld, W. & Waterhout, B. (2009) *EU Territorial Impact Assessment: Under what conditions?* Final Report of OTB Research Institute, commissioned by the Ministry of VROM.

Waterhout, B. (2007) 'Territorial Cohesion: The Underlying Discourses', in Andreas Faludi (Ed.) *Territorial Cohesion and the European Model of Society*. Cambridge, Ma.: Lincoln Institute

Westlund, H. (2004) *Regionala effecter av högre utbildning, högskolor och universitet*. ITPS rapport A2004:002