

Changing Endogenous Development: the Territorial Capital

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Abstract

The aim of this research is to analyze territorial capital as a new paradigm to make best use of endogenous assets. The study is dealing with the preconditions, meaning and possible theoretical taxonomies of territorial capital. In this study I emphasize that the cumulative effects of regional potentials are more important than economies of scale and location factors. I present different approaches and interpretations of territorial capital, then make an attempt to create an own model. I try to find answers for questions, such as why territorial capital shows a new perspective of urban and regional development; how cognitive elements of territorial capital provide increasing return; how territorial capital influences competitiveness and what kind of relation it has with cohesion.

Keywords: territorial capital, regional potentials, regional development, competitiveness, cohesion.

The meaning and the background of territorial capital

Although the idea of *territorial capital* has occurred in several scientific essays and documents of the European Union recently, these publications, beyond mentioning the expression, have not given its exact definition yet. The theory is newly shaped and the expression has lead to many different interpretations. Out of these approaches the concept of *Roberto Camagni*, published in 2008, seems to be a generally accepted and wide-spread idea in regional sciences, nowadays.

Territorial capital was mentioned first in a regional policy context by the *OECD* in 2001, then the expression was reiterated by DG Regio

of the Commission of the European Union (*Capello et al.* 2009). These documents expressed that "each region has a specific territorial capital that is distinct from that of other areas and generates a higher return for specific kinds of investments than for others, since these are better suited to the area and use its assets and potentials more effectively" (*EC* 2005, 1; *Camagni* 2008, 35). An other possible approach emphasizes that territorial capital is the mirror image of regional competitiveness which links inhabitants, firms, environment and local society. It enhances investments within a region by adding value, building networks and linking regional potentials (*Konvitz* 2000).

The appearance and application of territorial capital derive from three different processes and facts. First, it is in connection with the changing interpretation of sustainable development; secondly, it is related to the European cohesion policy and the enlargement of the EU; and finally, the connection between territorial capital and regional growth theories is also undeniable.

Since the mid 1990's the notion of sustainable development has been changing. Previously, sustainable development had been regarded for long only from the output side. It means that sustainability had been interpreted as a long-term maintenance of production level ($Q_1=Q_2=\dots=Q_n$, where Q means quantities and n the number of years). Some years later the maximalization of social welfare function ($SWF_1=SWF_2=\dots=SWF_n$, where SWF is the social welfare function) became the key element of the theory. Further on, researches stressed that the quantity of indispensable energy did not have to decrease ($EN_1=EN_2=\dots=EN_n$, where EN means the capacity of energy), so only by exploring new quarries can be avoided the reduction of production (*Perman et al.* 1996).

But since the mid 1990's it is obvious that the classic production factors (capital, labour force, land, energy etc.) are scanty, so sustainable development has become unstable and vulnerable. The concepts above have not lost their reason for existence, however more attention has been given recently to new factors to interpret sustainability. They are the intangible, immovable assets of nations and regions. It means that besides classic factors, new forms – and models – of the economic system must be regarded. If regions and counties do not realize this new relation, territorial disparities would remain, so the development gap between regions – and countries – will further

increase. In the 21th century the wealth and prosperousness of regions are lying in the balance of natural, produced and intangible capital.

The decrease of natural and produced capital (especially in a period of economic crisis and exploitation of resources) must be substituted by intangible assets. As a consequence, profits and benefits need to be invested in knowledge management, creative industries and in research and development. Recently, the *Europe 2020 Strategy* has formulated a reinforcing priority to develop economies, based on knowledge, creativity and innovations (*EC 2010*). Truly, this is not only sustainable development, but smart and intelligent growth as well. It seems plausible that the appropriate and advanced knowledge plays an important role more and more.

The equation below symbolizes the new concept for sustainability and smart growth which have changed the already existing theories:

$$NaK^r_1+PrK^r_1+ItK^r_1 = NaK^r_2+PrK^r_2+ItK^r_2 = \dots = NaK^r_n+PrK^r_n+ItK^r_n$$

where r stands for the region, n is the number of years, NaK is natural capital, PrK is produced capital and ItK is intangible capital.

The success of a territorial system does not depend solely on material resources, but on the richness of cognitive elements, too. Intangible elements in connection with culture and innovative capacity accumulate through complex processes of individual and collective learning (*Capello et al. 2009*). The three components of the equation above represents the territorial capital of a region.

The second precondition for the idea of territorial capital is bounded to the enlargement of the European Union and the unsuccessful experiences of the cohesion policy. It must be stressed that due to the cohesion policy of the EU, regions and cities could develop and they have made considerable progress in many industrial branches in the past few years. The closing up procedure of territories manifests itself in the development of physical and human resources, the well-performed economies and the accumulated knowledge capital. The positive side of the convergence is not doubtful, cohesion policies had and have many advantages¹, although in many cases spatial-economic disparities remained rather persistent over time (*Capello et al. 2009*).

¹ The Fourth Report on Economic and Social Cohesion (*EC 2007*) refers to these advantages, results and efficacy. It needs to be mentioned that the second and third

Nowadays, many critical points have been drafted by scientists and politicians, too. It has become clear that the reforms of Lisbon Strategy and the agreements of Stability and Growth Pact will not be improved. The convergence policy did not manage to rearrange the unequal spatial structure of economic activities and welfare (*Bougas* 2001). Territorial disparities between regions are proved to be constant, but it is sure that without the European structural policies regional disparities would have increased. Actually, many regions will never reach the productivity and efficacy which is present in the relatively wealthy regions! This is why researchers should focus on the different paths of improvement, labelled by a new form of endogenous development based on the capital of territories. Territorial disparities must not be judged only on the basis of transferable and flexible resources (classic capital and labour), but resources and potentials should be taken into consideration which root deeply in regional economic systems. According to *Barca* (2009) the spatial development and efficacy depend on the question, how much profit is drawn from the potentials and possibilities of a territory.

Finally, the shift to supply-oriented approaches has led to the change in regional development concepts. It is stressed that "supply-oriented approaches have outperformed strictly demand-oriented ones" and "regional internal demand is not relevant, even in the short run, to drive regional growth" (*Camagni* 2008, 33). It means that scientists should focus on more complex elements and assets of regions to identify economic, cultural, social and symbolic characteristics as a starting point for specialisation and positioning between them. Urban competitiveness is to be considered not only in economic terms but also in terms of living quality and socio-spatial cohesion as well (*Giffinger–Hamedinger* 2008). Truly, every region has its own development path, so the development directions of regional economic systems are merely determined by the previous happenings, experiences and processes (*Gertler* 2005).

The supply-oriented approach explains the differences between regional performances well, especially when cumulative effects played an important role in economic activities and influenced the typology of "winners" and "losers". Scientists have become more sensitive to

report had different establishments. According to these documents, regions achieved several results, but regional disparities remained severe.

define the possibilities of regional economic growth correctly. It also means that the feasible development strategies of territories or cities are dominantly determined by the locally-based assets, resources and their efficient utilization.

The presented perconditions above have drawn the attention of scientists and policy-makers to many important and endogenous resources, which bring higher return into the region than to other areas (*OECD* 2001). Territorial capital also implies a cognitive distance between regions and territories, since insiders are able to make a demand on higher return, benefits and revenues than the outsiders². Knowledge, creativity, network building etc. are reducing the cognitive distance between regions. The insiders understand the economic processes of the territory better than others, so they are able to use the region's assets and resources more efficiently. Proximity and local milieu are reducing distrust and transaction costs, while they transfer knowledge to each other³.

It integrates people, firms and societies on local and regional levels, where spatial relationships (relational capital) are often more important than environmental quality (natural capital), social integrations (social capital) or economic efficiency (based on knowledge capital, cultural capital), although these factors are indispensable in a local context, too. According to *Konvitz* (2000) territorial capital enhances investment within a region by building on the qualities of places, their comparative – and absolute (*Camagni* 2008) – advantages which are a combination of immovable and intangible assets.

The concept of territorial capital is not static, but dynamic. It corresponds to the analytical description of how to take actions in an area. Each territory endeavours to find its position by focusing on access to markets, its image and potentials to attract people and business.

Conceptual categories and relations

In this part I give a brief analysis of the relation between territorial capital and some expressions used in regional economic sciences

² Insider refers to the region's inhabitants; outsider refers to residents in other regions.

³ Local firms and inhabitants can exploit externalization of tacit knowledge, internalization of explicit knowledge and combination of information (*Nonaka–Takeuchi* 1995) more effectively than others.

(location factors, economies of scale, cohesion and regional competitiveness).

Territorial capital is more than the set of physical and non-physical location factors since more complex and subjective elements play an important role above casual relations which means that territorial potentials are the real economic driving forces. Trust is more important than safety and security; regional creativity is more important than the availability of labour; interregional relations are more important than the reach of physical resources and socio-cultural communities are more important than simple business attitudes.

Territorial capital does not have to be identified with economies of scale either. Firstly, the examination units of scale economies are often firms and industries, while the objects of territorial capital are territories and regions. However, this statement is not generally acceptable because of the urbanization economies of scale (*Isard 1975*). It is easy to define the difference between large-scale economies and territorial capital, because the investments of regional capital assets are not linked with only one company seat. Territorial capital is not related to only one industrial branch, the components of territorial capital are not exclusively industry-specific. This is the main difference between territorial capital and localization economies of scale. Urbanization economies of scale and territorial capital are nearly the same, but elements of territorial assets are present much wider than in the other category. Urbanizational economies of scale does not contain high rivially, private goods and such collective goods as landscape and cultural heritage.

The interdependence between territorial capital and convergence also needs to be briefly discussed. Convergence in this context refers to the reduction of inequality of income (*Molle 2007*). Absolute convergence means that regions tend to the same value of GDP per inhabitants in long term, but this logic does not fit into the concept of territorial capital. According to the interpretation of conditional convergence every region tends to its own value of GDP per inhabitants in long term, determined by regional potentials. The dynamism among elements of territorial capital promotes the reaching of theoretical maximum performance of regions, but it does not mean that areas tend to the same value of GDP per inhabitant. Absolute convergence is meaningless, but conditional convergence makes sense in this context. The level of economic, social, cultural and environmental differences do

not equalize themselves, but they accumulate and result in regional divergences. Territorial assets ought not to be compared with each other, because development paths, resources, demands, possibilities and – consequently – the positions of territories are different.

According to *Giffinger* (2007) the meaning of regional competitiveness has been changed in understanding. Instead of concentrating on economic performance as the only relevant output (simple concept), the consideration of economy, society and policy as an interlinked system needs to be stressed (complex concept). Besides economic performance the standard of living, the function and characteristics of local societies and the natural and built environment are relevant, too. Advantages gained by specific territorial assets and the knowledge or ability to make best use of these have become increasingly important and provide socio-cultural exchange.

Theoretical taxonomy of territorial capital

The objects of territorial capital consist of a wide scale of territorial assets. The possible components of territorial capital was summed up by the *OECD* in 2001 and later in 2008 by *Camagni*. In this study I also present an other possible classification of the elements of territorial capital on the basis of capital categories of economic sciences, sociology and social-psychology. Without the deep analysis of the capital forms I only cite some relevant authors below and present a possible new aspect on the basis of the quoted categories.

I regard territorial capital as a *collective term* for tangible and intangible capital forms that researchers have already known and used on different scientific fields. Territorial capital is a set of tangible and intangible capital forms and this term contains individual and collective capital categories⁴, too. Individual capital is inherent in people, while collective capital forms are inherent in firms or in the society.

⁴ *Individual capital* categories: human capital, creative capital, psychic capital, knowledge capital, cultural capital, part of relational capital. *Collective capital* categories: structural capital, organizational capital, part of relational capital, economic capital, natural capital, social capital, symbolic capital.

Table nr. 1: Elements of territorial capital

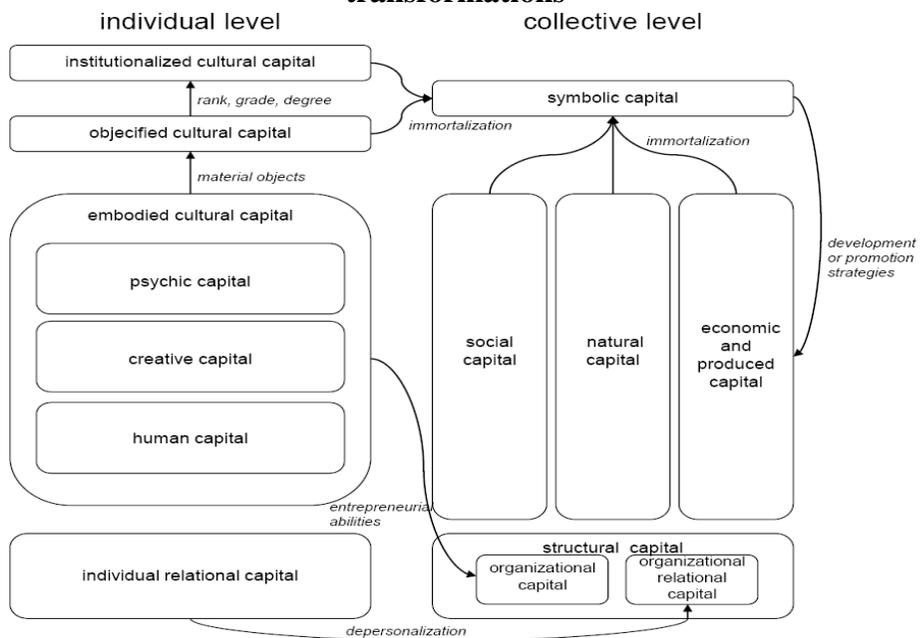
<p>OECD (2001): <i>Territorial Outlook</i></p>	<ul style="list-style-type: none"> – the area’s geographical location, size, factor of production endowment, climate – the area’s traditions, natural resources – quality of life or the agglomeration economies, business incubators and industrial districts or other business networks – ‘untraded interdependencies’ such as understandings, customs and informal rules, social capital – combination of institutions, rules, practices, producers, researchers and policy makers (the ‘environment’ according to Marshall)
<p>R. Camagni (2008): <i>Towards a Concept of Territorial Capital</i></p>	<ul style="list-style-type: none"> – a system of localised, pecuniary and technological externalities – a system of localised production activities, traditions, skills and know-hows; – a system of localised proximity relationships – a system of cultural elements and values – a system of rules and practices
<p>own modification (2009):</p>	<ul style="list-style-type: none"> – tangible capital assets: economic capital, produced capital, nominal capital, investment capital, natural capital – intangible capital assets: human capital, creative capital, psychic capital, cultural capital (embodied, objectified, institutionalized), relational capital, organizational capital, structural capital, social capital, symbolic capital

Source: Edited by the author (2010)

Scientists have separated produced, financial and investment capital for a long time. These capital forms are measurable and they contribute to a regions’s GDP. Besides material components there is a row of intangible capital forms. The first attempts to define these cathegories came from sociologists. *Bourdieu* (1983) separated economic, cultural, social and symbolic capital cathegories and he defined the transformations into one another. Some years later *Coleman* (1988), *Putnam* (1993) and *Fukuyama* (1996) dealt with social capital, too. Intellectual capital was mentioned first in 1969 by *Galbraith*, but in fact it was used in the 1990’s by many economists (e.g. *Sveiby* 1995; *Stewart* 1997). *Becker* (1993), *Schultz* (1983) and others were dealing with the idea of human capital, while *Tomer* (1987) published the concept of organizational capital among the first. The notion of natural capital (*Costanza–Daly* 1992; *Costanza* 2008; *Jansson et al.* 1994) became popular by the strenghtening of environmental management theories. After the milleneum new capital cathegories were published or made up: creative capital (*Florida* 2002), psychic capital (*Judson* 2002) and on the basic work of *Sprenger’s* (2001) interfirm relation concept I separate the ”personalized” and ”depersonalized” relational capital.

It must not be evaded how the different components of territorial capital transform into one another. Material and physical objects (codified documents, compositions, products of fine art, products and techniques etc.) provide the transformation from embodied cultural capital into objectified cultural capital. Educational qualifications, academic degree and promotion at workplace accredit an institutional acknowledgement to the individuals. Enterprenurial abilities are input factors for cooperative working together in organizations. Characteristics like that always increase the value of organizational capital. Relational capital is formulated through depersonalization on collective level. The immortalization of capital cathegories is the most important in this context. In long term the transformation into symbolic capital provides the real – absolute – advantages and success of a territory. To make the best of symbolic capital, development or promotion strategies are needed. The suitable strategies and development plans bring on the one hand higher return in the region than in other areas and on the other hand they result financial benefits (economic capital).

Figure nr. 1: Economic, natural and intangible capital assets and transformations⁵



Source: Edited by the author (2009).

⁵ The size of the bubbles is not related to the amount of the capital forms.

I introduce territorial capital and its elements through mathematical formulations. The components of tangible capital in region i are the following:

$$K_{material}^i = Pr K^i \cup NoK^i \cup IvK^i \cup NaK^i$$

$$K_{material}^i = f(Pr K^i; NoK^i; IvK^i; NaK^i).$$

The components of intangible capital in region i are the following:

$$K_{immaterial}^i = ItK^i = \sum_{j=1}^m CuK_j^i \cup Re K^i \cup OrK^i \cup SoK^i \cup SyK^i$$

$$K_{immaterial}^i = ItK^i = f\left(\sum_{j=1}^m CuK_j^i; Re K^i; OrK^i; SoK^i; SyK^i\right).$$

where:

$$\sum_{j=1}^m CuK_j^i = \sum_{j=1}^m CuK_j^{emb} \cup \sum_{j=1}^m CuK_j^{obj} \cup \sum_{j=1}^m CuK_j^{ins} =$$

$$= \left(\sum_{j=1}^m HuK_j^i \cup \sum_{j=1}^m CrK_j^i \cup \sum_{j=1}^m PsK_j^i \right) \cup \sum_{j=1}^m CuK_j^{obj} \cup \sum_{j=1}^m CuK_j^{ins}$$

and where:

$$Re K^i = \sum_{j=1}^m Re K_j^{ind} \cup Re K^{org}$$

The elements of territorial capital in region i are the following:

$$K_{territoid}^i = K_{material}^i + K_{immaterial}^i$$

$$K_{territoid}^i = Pr K^i \cup NoK^i \cup IvK^i \cup NaK^i \cup \sum_{j=1}^m CuK_j^i \cup Re K^i \cup OrK^i \cup SoK^i \cup SyK^i$$

$$K_{territoid}^i = f(Pr K^i; NoK^i; IvK^i; NaK^i; \sum_{j=1}^m CuK_j^i; Re K^i; OrK^i; SoK^i; SyK^i).$$

Signs and abbreviations:

PrK – produced capital	PsK – psychical capital
NoK – nominal capital	ReK – relational capital
IvK – investment capital	ReK ^{ind} – individual (“personalized”) relational capital
NaK – natural capital	ReK ^{org} – organizational (“depersonalized”) relational capital
CuK – cultural capital	OrK – organizational capital
CuK ^{emb} – embodied cultural capital	SoK – social capital
CuK ^{obj} – objectified cultural capital	SyK – symbolic capital
CuK ^{ins} – institutionalized cultural capital	i – territories, regions (i = 1,2... n)

Direction of investments

Regional development based on territorial capital covers two possible directions. Investments could tend towards the development of the built and natural environment – enhancing natural capital (NaK) and one part of produced capital (PrK) – and towards processes which give more attention to the intangible capital stock of inhabitants, institutions and the whole local society (ItK). The duration and extent of the development depend on the already existing level of material and immaterial capital assets and the way how individuals see their future and opportunities. It means that investments must be concentrated on two segments:

- investment into natural and built environment. City planners should focus on the aesthetic and ecologically balanced local milieu to increase living quality. These investments contribute to the establishment of innovative capacity and they strengthen the innovative environment, which attracts creative people. The material investments enrich the local characteristics and increase the level of symbolic capital.

- investment into personal skills and relationships. It mainly depends on the intelligence, mental, emotional and psychic conditions of inhabitants. The level of cultural capital (knowledge, creativity etc.) and relational–social capital (relationships, trust, institutions etc.) provide absolute advantages. Personal skills aggregates with entrepreneurial and social abilities through cooperation of people in firms and other institutions. Investing into regional relationship systems and innovations (product, technological and organizational innovation) are very important, because they integrate the system of local production. Individuals and group members should cooperate with each other in

order to reduce transactional, motivation and cooperation costs and increase information flow and opinion sharing.

Both the material and the intangible side of investments must be connected to each other, in other words they cannot function separately. This is the way people and companies can benefit from the physical and immaterial proximity.

Conclusions: a new paradigm?

I emphasize that the system of territorial capital is a new model and paradigm for spatial development. The elements of the new paradigm are the following:

- city planners and researchers have to deal with the question how to increase the economic and social performance of regions and they should not focus only on the reduction of regional disparities;

- the conditions to improve regional performance should not be realised in a "top down" strategy, which means that the whole process must be established endogenously and shaped through "bottom-up" strategies. External financial assets should be inductive, but not significant;

- for a long time the objective of the regional development has been dealing with the problem, how to reduce the so called "unjustified" regional disparities. Basically, the problem is not in connection with the goal itself, but with the fact that scientists regard regional disparities as unjustified phenomenon. Truly, the characteristic of territorial differences is genuine, self-evident, so "justified" and in this way determines the positions of territories;

- scientists should emphasize more the sources of long-lasting competitive advantages. They should focus not only on economic advantages and economies of scale, but on social, cultural and environmental advantages as well. The concept of territorial capital requires letting many social and relational factors into the analysis;

- convergence, as I mentioned above, is conditional, since the maximal productive capacity of regions cannot be compared because of different development paths. This also has to be allowed for by researchers.

Table nr. 2: Characteristics of the existing and new paradigm

	Existing opinion	New paradigm
<i>Objective of territorial development</i>	reduction of disadvantages	increasing economic and social performance
<i>Direction of territorial development</i>	rather exogen than endogen	rather endogen than exogen
<i>Characteristic of territorial disparities</i>	unjustified	justified
<i>Types of permanent competitive advantages</i>	economic advantages agglomeration advantages comparative advantages	social advantages cultural advantages absolute advantages
<i>Type of convergence</i>	absolute convergence	conditional convergence
<i>Competitiveness versus cohesion</i>	economic and social cohesion	efficacy, positioning, competitiveness
<i>Function of external financial assets</i>	significant	inductive, complementary

Source: Edited by the author (2010).

The area's territorial capital depends on how people see their future and how they use and enhance the different capital forms on individual and collective levels. Regions need to concentrate on a number of strategic areas or unifying themes, built around specific elements and carefully integrating tangible and intangible resources available.

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