

Strategic-Based Regional Development: Towards a theory of everything for regional development?

Eduardo Medeiros, Instituto Universitário de Lisboa (ISCTE-IUL), DINÂMIA'CET - IUL

Abstract

This paper presents a potential ‘theory of everything’ for regional development processes which can be applied to development and cohesion policies. Denominated as strategic-based regional development, this more comprehensive regional development theoretical background embraces several established regional development paradigms, which include sustainable-, institutional-, knowledge-, place-, infrastructural-, and balanced-based policy rationales. Strategic-based regional development aims to respond to the development challenges and needs of all regions by embracing not only socioeconomic and environmental policy actions, but also spatial planning and governance-related policy approaches. Drawn mostly on desk research, the presented theoretical rationale draws a distinction between mainstream regional development theories since it builds upon the territorial development concept, rather than the economic development.

Keywords

Strategic-Based
Regional
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Introduction

In his most recent book, the world-renowned theoretical physicist Michio Kaku discusses the long-term goal of theoretical physicists to disclose “a single framework that would unite all the forces of the cosmos and choreograph everything from the motion of the expanding universe to the most minute dance of subatomic particles” (Kaku, 2021: 7). This is also known as a ‘theory of everything’ of physics. Different theoretical approaches to regional development discussed in this paper are useful in their diversity and eclecticism because they enable us to use the conceptual and analytical tools we find useful for any given context. What if, however, a unified ‘theory of everything’ for regional development can add any value to this scientific domain? This paper addresses this regional development theory of everything as strategic-based regional development (SBRD).

Generically understood as the body of rules, ideas, principles, and techniques that applies to a subject (see Encarta, 2009), a theory can also be understood as the system of ideas geared to explain something. In the case of regional development theories, there has been much academic debate and primary arguments over recent decades on the most effective and efficiency policy actions to promote development processes in regions across the world. This

paper discusses these mainstream regional development theories and contributes to this theoretical debate by presenting a framework for a theory of everything for regional development entitled SBRD. Unlike previous and ongoing mainstream regional development theoretical approaches, SBRD provides a first attempt to incorporate all the main dimensions of territorial development, which include not only economic, social and environmental processes – that dominate the current thinking of regional development theories (see Beer & Clower, 2020; Fouberg et al., 2012; Pike et al., 2011) – but also territorial governance and spatial planning-related processes (see Medeiros 2019), which ultimately are approached by several development paradigms.

Considered as a relatively large land area that has geographic, political, or cultural characteristics that distinguish it from others (Encarta, 2009), a region is a flexible and evolving concept. In the European Union, for instance, it is quite common to associate a region with the nomenclature of territorial units for statistical purposes – NUTS 2. As a way of illustration, in the south of Portugal, the Algarve region is easily distinguishable from the Alentejo region, located further north, by its distinct (more mountainous) physical geography and culture (different dialects). In parallel, since the 1990s these regions have forged cross-border cooperation alliances with the neighbouring Spanish regions via the implementation of cross-border entities (Euroregions, Eurocities, etc.) (Medeiros. 2021). Region development thus implicates a positive change in development indicators in a region over a period of time or, as Nijkamp & Abreu (2009) put it, refers to complex space–time dynamics of regions.

Instead, the term development refers to processes of changing prosperity of a given territory. According to Knox and Marston (2015: 286) these processes can involve three types of changes: (i) changes in the structure of the region’s economy (for example, a shift from agriculture to manufacturing); (ii)– changes in forms of economic organisation within the region (for example, a shift from socialism to free-market capitalism); and (iii) changes in the availability and use of technology within the region. For Potter et al. (2008: 6), “progressive and effective development represents change that is intended to lead to the betterment of people and places around the globe”. However, this is manifestly affected by many factors other than ideologies and theories. These development vistas tend to change over time, “shaped by critique, debate, experience and evaluation” (Pike et al., 2007: 1255).

Crucially, development is a multidisciplinary concept. It not only entails the growth of per capita income and poverty reduction, but also the access to civil liberties, education and health, among others (Stutz & Warf, 2012). These authors present a more precise group of policy areas which development processes should encompass. These include: (i) an adequate, healthy diet and clean drinking water; (ii) sufficient health care; (iii) environmental sanitation and disease control; (iv) employment opportunities commensurate with individual talents; (v) sufficient educational opportunities; (vi) individual and collective freedom of expression and

freedom from fear; (vii) decent housing; (viii) economic activities that do not impose undue costs on the natural environment; and (ix) social and political milieus promoting equality.

For the Organisation for Economic Co-operation and Development (OECD) (2010), the regional level is the optimum territorial level to implement development policies. The same entity, however, also recognises that the degree of growth rates is commonly correlated with the national growth rates, and that the direction of causation operates in both directions, since regional development strategies are bonded to national development contexts (Beer & Clower, 2020). Indeed, the OECD has provided a wealth of recommendations on how to promote regional development policies, with a particular emphasis on supporting infrastructure, human capital and innovation (OECD, 2010).

More recent and detailed analysis on research literature on urban and regional development applied to the United States, provided by Beer and Clower (2020: 11), advances a few city- and community-based economic development strategies regarded as most effective. These include: (i) the provision of business support and advice to individual enterprises; (ii) the preparation of land and the development of sites for incoming or expanding firms; (iii) the provision of grants or loans that enable businesses to establish or grow; (iv) the establishment of networks and the formation of partnerships; and (v) measures to secure inward investment and promote the region. In essence, these strategies are supported by a strong economic development-based rationale, which advances the need to support innovation and knowledge-based policies which directly benefit the business sector.

To complement this still globally prevailing economic-based development policy rationale, other regional development paradigms (understood as a model that forms basis of something – see Encarta, 2009) have gained momentum in recent decades. Probably the most robust and globally accepted of them is the sustainable-based development paradigm, which now permeates national, regional and local development strategies (Sachs, 2015). In parallel, bottom-up, endogenous or place-based approaches (Barca, 2009) have long been more or less accepted as a more valid alternative to mainstream top-down development and infrastructural-based development paradigms. Alongside this, the role of institutions (Rodríguez-Pose, 2013) and administrative capacity (Surubaru, 2017), as well as integrated (Medeiros & van der Zwet, 2020a) and polycentric (Dühr, 2005) regional development approaches, have gradually been incorporated into development strategies.

In this context, this article embraces the policy strengths of these regional development paradigms vis-à-vis regional economic development-focused theories (briefly introduced in the next section), with the goal of addressing a more holistic, complete and policy-relevant regional development framework, encompassing not only economic, but also social, institutional, environmental and planning aspects of development. Ultimately, a ‘strategic regional development’ framework incorporates complementary yet distinct regional development paradigms in a coherent and integrated manner to be used in regional

development policies, aiming at promoting territorial development and cohesion processes in a given region.

From a methodological standpoint, the analysis draws mostly on desk research (policy documents and other literature, including studies and articles). From a theoretical prism, this paper adds a novel perspective to the theory of regional development: the strategic-based regional development paradigm, explained in the third section., followed by a conclusion.

From regional economic development to strategic regional development theories

There is a wealth of literature debating various theories of regional economic development, stretching back to the 1950s. According to Capello (2009a: 14-5), many regional economic development theories “seek to identify the local conditions that enable an economic system to achieve and maintain high rates of development”, and embrace the idea that exogenous factors, such as the presence of infrastructure and innovation, are at the basis of regional development. Being about the geography of welfare in a specific region and its trends, regional development is not a static phenomenon (Nijkamp & Abreu, 2009). Moreover, economic development has often a regional dimension, due to common unevenness in economic development processes that has been largely exposed by economic globalization (Knox & Marston, 2015).

Economic centric regional development theories

One interesting compilation of such mainstream regional economic development theories is proposed by Sousa (2010), who identifies nine distinct main theoretical paradigms, some including several of these theories with respective strengths and weaknesses (Table 1). As seen, they all embrace a prevailing economic vein of theoretical reasoning and are essentially rooted in a combination of both diseconomies and economies of agglomeration. Complemented theoretical classifications and respective theories abound in the available literature. For instance, when highlighting the advantages of the more recent development of the endogenous growth theory vis-à-vis the conventional neoclassical regional economic development approaches, Martin & Sunley (1998) also identify four distinct types of growth theories: (i) augmented neoclassical; (ii) endogenous broad capital; (iii) intentional human capital; and (iv) Schumpeterian endogenous innovation.

In her seminal work on regional economic development theories, Capello (2009a) invokes and discusses these and several other regional economic development theories, such as interregional trade theory, and the neoclassical model of interregional growth, which presumes that the national growth rate is exogenously determined. By following a timeline of evolution to explain regional economic development theories, Capello (2009a: 15) asserts that

the mid-1970s witnessed the emergence of novel academic discourses and theories on regional development in which local production systems with higher levels of innovation, productivity, and economic efficiency replace the location and availability of economic resources as a major factor for regional development. By this time, development is, by definition, endogenous, rather than exogenous, since it is seen to depend on such factors as entrepreneurial ability, relational skills of local actors, and decision-making capacity. Some endogenous regional development theories include ‘bottom-up development’, ‘indigenous potential’, the ‘localized industrial system’ and ‘local context’ theories. The more recent (1990s) ‘new economic geography theory’ is, instead, anchored “on the assumption that productive activities concentrate around particular ‘poles’ of development, so that the level and growth rate of income is diversified even within the same region” (Capello, 2009a: 7).

In this academic debate, McCann & van Oort (2009: 26) also invoke the ‘evolutionary economic theory’ which resulted from the “dissatisfaction with many of the equilibrating notions of neoclassical economics”. Crucially, these more recent regional economic development theories address a few non-economic factors of social and institutional character. However, they remain profoundly influenced and largely anchored in econometric analysis. More recently, however, MacKinnon et al. (2019: 113) propose a broader and geographical political economy approach to regional development, which addresses the limitations of evolutionary economic geography by integrating five key dimensions of path creation and the constitutive relationships between them: (i) institutional environments; (ii) key actors; (iii) market construction; (iv) regional and extraregional assets; and (v) mechanisms of path creation.

Theoretical paradigm	Rationale / Factors (sub-theories)	Main sources
Firm Location Theory	- Regional development is largely dependent upon the existence of firms in the region / transportation costs.	(Isard, 1949) (Hoover, 1948)
Traditional Neoclassical Theories	- Regional development is mainly affected by factors related with supply capacity, including free trade among regions, perfect competition and information, technological progress exogenously determined, and an equilibrium growth path leading to a convergence of growth rates among regions / endowment and productivity (the ‘Borts and Stein model’ and the ‘factor price equalization theory’).	(Borts & Stein 1964) (Cheshire & Malecki, 2004)
Keynesian Theories	- Regional development is largely demand driven / activities producing goods and services (‘export-base theory’ and ‘input-output theory’).	(Tiebout, 1956) (Kriklas, 1992)
Core-Periphery Theories	- Regional development is inherently uneven as it contemplates advanced (leading) regions and underdeveloped (lagging) regions / resources endowment (‘theory of cumulative causation’, ‘growth pole/growth center theory’, and ‘central place theory’).	(Myrdal, 1957, Nelson, 1993)
Functional Development Theory	- Regional development can be achieved by harnessing selected regional resources to create generative growth. Hence, it is possible to move a	(Friedman & Weaver, 1979, Nelson, 1993)

	region to higher stages of development by organizing it around a principal function closely related with its resources endowment / investments funds originated in leading regions, reduce imports of goods and services and to reinvest locally the regionally created saving, decentralized regional administrative organization.	
Stage Theory	- Regional development occurs through five stages: (1) traditional, (2) preconditions for take-off, (3) take-off, (4) maturity, and (5) mass consumption / technology, investments flows, physical infrastructure, skilled labour.	(Rostow, 1960) (Nelson, 1993)
Disequilibrium Theories	- Regional development is boosted by disequilibrating forces / productive structure, technology, infrastructures, market dynamics ('schumpeterian dynamic disequilibrium', 'regional life cycle theory', and 'product life-cycle theory').	(Schumpeter, 1939) (Nelson 1993)
Neoclassical Endogenous Growth Theories	- Regional development depends not only on long-term regional growth as a result of accumulation of capital and labour, but also on endogenous economic factors / human capital, R&D, innovation, knowledge spillovers, and technological spillovers.	(Grossman & Helpman, 1994) (Magrini, 1997)
New Economic Geography Theories	- Regional development depends on the balance between centripetal (agglomerating) and centrifugal (dispersing) forces in determining the extent and form of regional concentration of economic activities / Centripetal: market size, transportation costs, cooperative and functional linkages between firms, dense labour markets with a diversity of skills, and external economies of scale such as knowledge spillovers. Centrifugal: labour immobility, lower land costs, and external diseconomies of various sorts such as congestion.	(Martin, 1999) (Hudson, 2009)

Table 1 - Theories of regional economic development

Semi-economic centric regional development theories

Following several decades dominated by the previously discussed economic-centric regional development theories, some authors have proposed the inclusion of several non-economic related elements as crucial to the successful design and implementation of regional development strategies, over the last two decades. One eloquent example is the 'beyond-economy regional development approach' presented by Moulaert's et al. (2016) eightfold typology, which combines agency, structure, institutions, and discourse (ASID) features: (i) strategic economic agency in 'local' development; (ii) local–regional socio-economic organization and strategic agency; (iii) national–regional juridico-administrative-political regulation; (iv) reproduction systems: service providers; (v) global (corporate) market-economy agents and institutions; (vi) international cum national juridico-political-administrative regulation; (vii) sub- and counter-hegemonic and/or socially innovative agencies and movements; and (viii) 'eccentric' and 'leadership' individual agency and conjunctural dynamics.

Indeed, there are several reasons underlying the failure of traditional regional development policies. A known shortcoming is the excessive concentration of investment in

infrastructure without an integrated development approach (Medeiros & van der Zwet, 2020b) between all policy sectors (EC, 2010), and/or a territoriality approach (Medeiros, 2020c). Among other factors related to deficient skills, weak economic, social, and/or institutional contexts, attempts to replicate regional development success stories from other parts of the world without considering local contexts and the predominance of top-down development models and practices have led to undesired policy outcomes (Pike et al., 2006).

In view of these shortcomings associated with traditional visions for regional development, several theoretical alternatives have been proposed, as seen in the previous sections. More important however, are the rise of non-economic centred development paradigms that have been widely adopted as some development strategies. These include the well-known sustainable development paradigm which supports the United Nations (UN) 2030 Agenda for Sustainable Development for transforming our world (UN, 2006). This widely accepted sustainable development imaginary is sometimes accompanied by other development policy orientations giving licence for more integrated (Mendez et al., 2021), balanced (Medeiros, 2016), and place-based (Barca, 2009) strategic policy guidelines, especially in Europe. Alongside this, the focus on infrastructural modernisation and support to human capital continue to make sense to be incorporated in regional development strategies in such an unbalanced developed world. Finally, there is increasing recognition of the need to support sound institutional settings and contexts to foster worldwide regional development processes.

In this context, current academic thinking on regional development also acknowledges the importance of “endowing individuals, firms and territories with the factors that will allow them to place their skills, products or services in the global marketplace and to compete with others” (Pike et al., 2006: 13). These endogenous or indigenous approaches to development require a place-based approach that takes into account the regional context (Barca, 2009). However, even today, mainstream regional development policies are still supported by investment in infrastructure (mainly to improve accessibility as a solution to lagging regions), and top-down policies based on industrialisation (attraction of large firms) (see Pike et al., 2006).

Despite these systematic regional development theoretical advances and additional inputs recognizing the need for a more integrated and interdisciplinary vision for regional development policies, the economic growth and competitiveness rationale continues to prevail in elements of policy practice (see Beer & Clower, 2020). Indeed, even the novel regional economic development theories, including ‘new economic geography’, which “contributed positively to a major renewal of the local and regional development repertoire” (Hadjimichalis & Hudson, 2014: 112), brought a widespread concern that these still require further improvements which combine economic growth mechanisms and laws with territorial development features (Capello, 2009a). This is visible, for instance, in the limited

consideration of them in crucial development dimensions, such as those of institutional and governance (Sousa, 2010), the local-level system of economic and social relations, and physical-geographical features (Capello, 2009b).

As a potential solution, Capello (2009b: 43–4) proposes a “cross-fertilization among location theory, development theory and growth macroeconomics” towards a “synthesis which would bring out the territorial micro-foundations of macroeconomic growth models”. In other words, she proposes a convergent regional economic development theory between ‘endogenous local development’ and the ‘new economic geography’. Similarly, Martin & Sunley (1998: 220) acknowledge that the ‘endogenous growth theory’ has several limitations, “many of which stem from its reliance on formal models which fail to capture the importance of the socio-institutional context and embeddedness of regional economic development”. Likewise, Moulaert & Mehmood (2010: 108) assert that ‘new regionalism’-related regional development models suffer “from ontological and epistemological reductionism”, whereas Hadjimichalis & Hudson (2014: 213) state that this and the ‘new economic theory’ focus mainly on a few successful ‘superstar’ regions and cities, neglecting all other ‘ordinary’ places.

Without denning the crucial role of economic processes in the development of regions, it is also undeniable that regional development entails other crucial domains such as social cohesion, environmental sustainability, spatial planning and governance related processes (Medeiros, 2019). In response to such clear needs, Moulaert & Mehmood (2010) propose the notion of ‘territorial innovation models’ of regional innovation, which consider the crucial role of local institutional dynamics as catalysts in innovative development strategies. With noticeable advantages over mainstream regional economic theories, this more territorial policy approach maintains an economic-centric imprint coupled with institutional elements of development. This academic recognition that regional development goes beyond economic and efficiency processes and that it should consider interdisciplinary approaches which include equity (Capello & Nijkamp, 2009), welfare (Knox & Marston, 2015), and institutional (Hadjimichalis & Hudson, 2014; Sotarauta & van Oort, 2009; Moulaert et al. 2016), infrastructural and technological progress (Nijkamp & Abreu, 2009) issues, supports the argument for the presented SBRD.

The need for a more comprehensive theory for regional development

Fundamentally, a new comprehensive theory for regional development is needed because, in our view, existing ones do not fully encompass policy actions covering all the main dimensions of territorial development in an integrated manner. Put differently, the novel regional development rationale reflects an understanding that, for improving positive development trends, regions need more than socio-economic and environmental progress. They also require positive progress in institutional, governance and spatial planning indicators. This

implicates not only investments to improve infrastructures, innovation, human capital and environmental sustainability, but also administrative capacity, a balanced and harmonious development within the region, and a place-based approach which considers the territorial capital of the region, for instance.

But more importantly, the presented SBRD aims at highlighting crucial elements of policy practice in the regional development arena by integrating many of its key elements in a comprehensive framework, as they are not necessarily followed by main schemes of regional development policies. One eloquent example is the development strategies supporting EU Cohesion Policy frameworks. In the past programming period (2014–2020), for instance, this key EU policy for regional development identified 11 thematic objectives for supporting growth: 1. strengthening research, technological development and innovation; 2. enhancing access to, and use and quality of, information and communication technologies; 3. enhancing the competitiveness of SMEs; 4. supporting the shift towards a low-carbon economy; 5. promoting climate change adaptation, risk prevention and management; 6. preserving and protecting the environment and promoting resource efficiency; 7. promoting sustainable transport and improving network infrastructures; 8. promoting sustainable and quality employment and supporting labour mobility; 9. promoting social inclusion, combating poverty and any discrimination; 10. investing in education, training and lifelong learning; and 11. improving the efficiency of public administration. Again, by using the ‘growth’ instead of the ‘development’ rationale in the design of this strategy, the European Commission keeps this mainstream economic vision of implementing public policies alive. Moreover, elements towards a balanced-based and place-based driven regional development are clearly absent from these 11 thematic objectives. For the 2021–27 programming period, EU Cohesion Policy is supported by a small number of policy objectives (5): 1. a more competitive and smarter Europe; 2. a greener, low-carbon transitioning towards a net zero carbon economy; 3. a more connected Europe by enhancing mobility; 4. a more social and inclusive Europe; 5. A Europe closer to citizens by fostering the sustainable and integrated development of all types of territories. However, it continues to invoke a ‘growth’ rather than ‘development’ policy rationale to implementing them and, on a positive note, an element (connectivity) related to a more balanced EU territory is introduced. Even so, in our view, the use of the SBRD presented here could contribute to maintain the core strategic guide of EU Cohesion Policy as well as national regional development policies over several decades, as it already incorporates the main practical elements to foster regional development, even though the presented framework (Fig. 1) it is rather simplified and can be further detailed with the inclusion of several other elements in each of the six development paradigms.

Taking this further, even the most recent regional development theoretical proposals fall short, in our understanding, of addressing crucial ingredients of regional development in current globalised times. In a recent analysis on regional development paths and transitions,

De Propris & Bailey (2021: 1619) speak about several of these regional development theoretical approaches, including the ‘clusters, industrial districts, and milieux’, which advocate “the benefits of industrial spatial concentration”. Both authors also consider the highly influential strand of evolutionary economic geography (EEG) and path development approach to regional development which consider that industrial activities are place based. Again here, the economic dimension is elevated to higher ground in this theoretical debate. As Henning (2019: 603) claims, “while EEG has productively drawn on evolutionary economics, innovation economics and classical economic geography, in formulating its basic propositions, insights from adjacent traditions in human geography concerning the relationship between time and space have so far been largely neglected”.

Similarly, the new path development (NPD) theory is forged on economic development rationales in which regions “can take different routes such as path branching or the creation of entirely new paths (...). Branching implies that new paths emerge from industries and capabilities already existing in the region, often based on ‘related variety’ and related diversification processes” (Tödtling & Trippl, 2018: 1780). Equally, the regional innovation system (RIS) models, despite considering particular sociocultural conditions (Cooke, 2008), are supported by a narrow focus on the economic dimension of development. Instead, the more recent ‘smart specialisation’ theoretical approach to regional development has found several setbacks when being implemented in the EU “because a coherent set of analytical tools to guide the policy directives remains elusive” (Balland et al., 2019: 1252). Even the seminal work of McCann & Ortega-Argilés (2015: 1292) in presenting the smart specialisation approach to regional development recognises “this concept evolved as a response to the challenges associated with innovation policy” and that it is particularly “suited to promoting innovation in a wide variety of regional settings, and in particular in the heterogeneous environment of European Union (EU) regions”. In this stance, it is mainly economic-driven and focused on high-technology and knowledge-intensive sectors. Conversely, the relational economic geography paradigm for regional development highlights the need to incorporate social, institutional, path-dependent policies constrained by historical contexts, as well as agents’ interests and actions when designing regional development policies (Bathelt, & Glückler, 2003). As these authors claim, however, this theoretical approach is very much centred on the geography of the firm, and hence on economic-related concerns.

It is in this context that the next section will debate the theoretical premises of a theory of everything for regional development which, unlike current mainstream regional economic development theories, encompasses not only all the main dimensions of development in equal measure, but also incorporates ongoing and widely accepted development paradigms supporting the elaboration of development policies worldwide at different territorial scales, including approaches to sustainable development and place-based development. Ultimately, the SBRD paradigm presented seeks to counter dominant conceptions of regional

development by presenting a more holistic, convincing and appealing theoretical framework for the design of regional development strategies worldwide by policymakers and regional development actors. Hence, SBRD is to be viewed more as practical and insightful guide to these stakeholders so that all crucial elements of regional development are considered by the designed and implemented strategy. Similarly, this theoretical lens intends to (re)ignite the debate on how to maximize the impacts of regional development policies fuelling territorial cohesion processes in an increasing globalised world.

Strategic-based regional development: towards a theory of everything for regional development?

In the previous sections, a main reason was put front and centre to justify the presentation of a strategy towards a theory of everything for regional development: a need for a comprehensive guide to design and implement regional development policies. This considers a fresher look for regional development strategies driven by resonant development components such as the need to regards institutions, governance and spatial planning approaches. It thus complements mainstream approaches aligned with socioeconomic and environmental development-driven strategic approaches. Clearly, as seen below, there is already a large body of literature and ongoing development paradigms recognising the relevance of encompassing regional development policy measures aimed at promoting, for instance, more cohesive, balanced and polycentric development, as well as increasing institutional and administrative capacity. Typically, these latter policy goals are not regarded by mainstream regional development theoretical approaches. In this context the SBRD presented here is justified by its wider comprehensive and holistic rationale that holds far-reaching implications for increasing the integration of a multifaced and multidimensional process such as regional development. By the same token, by presenting a more complete set of regional development policy goals, the SBRD framework could help policymakers to select all or just a few relevant development components from the six integrated regional development paradigms which support the theoretical framework for the SBRD (Figure 1).

The fundamental question in understanding the need for a SBRD framework is: What is the real difference between the recent literature on regional development and the SBRD model? Firstly, even the most recent regional development theories do not comprehensively incorporate all the critical events of regional development that are incorporated in the presented SBRD model. Secondly, in our view, SBRD presents a more comprehensive and integrated vision of regional development for policymakers, who do not always find time for deeper theoretical analysis. Finally, this model clearly elevates the ‘development’ rationale vis-à-vis the ‘growth’ rationale which still permeates EU and national development and cohesion polices. Notwithstanding, economic-driven development elements are visible across the

presented model in some of the development paradigms (e.g. circular economy, innovation, smart specialisation).

Ultimately, the proposal of multidimensional development strategies, which go beyond the mainstream development triad of economy + society + environment, is not new. Potter et al. (2008), for instance, hold that development strategies reflect different goals and objectives as well as influences on social, economic, political, cultural, ethical, moral and even religious thinking. Furthermore, Beer & Clower (2020) propose an interplay of economic, infrastructural, and institutional elements for fostering regional economic development, based on recent development paradigms, since regional development approaches have evolved over time. As the economic system became more globalised, complex, intensive and competitive, regional development strategies have adapted to a novel reality and environment. To mould these changes and foster adaptation to new territorial realities, increasing social (inclusiveness) and environmental (sustainability) concerns were absorbed, as well as the role of evolving multilevel structures of government and governance (Pike et al., 2006). Alongside this, from a global prism, there is a wide recognition that financial capital and globalising territories affect regional development processes in almost every way (Halbert et al., 2014).

In this line, the presented SBRD model is supported by the incorporation and interplay of elements from six mainstream regional development paradigms: sustainable based, institutional based, knowledge based, place based, balanced based and infrastructural based (Figure 1). In a nutshell, these six paradigms were selected based on the author's experience in assessing the implementation of territorial development strategies and policies, and in particular EU Cohesion Policy in several member states (EC, 2014; 2017). From this work, it was possible to understand how important a sustainable development approach is for the future of our planet, as well as a balanced development approach which explores the territorial capital of all regions and not only the more socioeconomically developed ones. In addition, the analysis of the implementation of EU Cohesion Policy in the Iberian countries revealed the importance of modernising infrastructures and supporting human capital and public institutions to maximize the positive impacts of public policies. Finally, the EU Cohesion principle of subsidiarity, largely associated with a place-based development approach, has revealed all its advantages to boost local and regional development in the studied areas. Again, the proposed SBRD model does not neglect elements of an economy-based paradigm. Instead, it distributes them along some of the six selected paradigms based on the principle of integrated development. These are debated in a necessarily synthetic manner in the following sub-topics. Ultimately, existing regional development approaches can find common ground with one or more of these six development paradigms. In essence, the SBRD approach aims at presenting a more comprehensive picture of the potential regional development needs to policymakers and practitioners involved in designing and implementing regional development and cohesion policies. On top of this, the SBRD rationale aims at instilling

further academic debate on the need to shift a still predominant econometric lens to design regional theoretical approaches into a more territorial development policy rationale.

Expectedly, the six key development paradigms presented in Figure 1 embrace far more than the five general key policy elements shown in that picture for each paradigm. For instance, a more in-depth sustainable-based development approach requires the support to biodiversity, risk-prevention, and resource efficiency, among many other specific policy interventions. The same goes, for instance, with the remaining five paradigms such as the institutional-based development paradigm, which requires local mobilisation as well a learning and collective action allowing for local ownership. Similarly, this institutional-based approach is strongly linked with the other five presented development paradigms. Here, for instance, local mobilisation would gain with the implementation of participatory planning approaches, which are linked to the place-based development paradigm. On the other hand, sound administrative and institutional capacity can only be maximised via high levels of human capital, technological innovation, and modernised infrastructure (e.g. telecommunications). Likewise, a sound implementation of an infrastructure-based development paradigm needs to consider a balanced-based approach to correct uneven development processes and to mitigate the urban/rural divide and territorial inequalities. Likewise, a sustainable-based development approach requires the application of integrated policies towards the achievement of territorial cohesion and environmentally sustainable policy goals. There is also much to be welcomed by improving human capital to increase social environmental awareness and stimulating environmental conservation via the reduction of all citizens' carbon footprint.

In sum, there are inevitable overlapping elements between all presented key six development paradigms. However, this does not reduce the importance of each one of these paradigms as a key distinctive vehicle to promote regional development trends, with minor or major intensity, in a given territory. Indeed, needless to say, in some countries, the need to improve infrastructure is no longer a major regional development policy goal. In others, a knowledge-based development process is also quite advanced after many decades of profound investment. However, the presented paradigm offers a simplified check-box for achieving key regional development aspects which go beyond mainstream economic-based regional development theoretical proposals. In contrast, it intends to present useful elements of policy practice, rather than theoretical avenues, to be considered by all entities interested in designing regional development strategies with a comprehensive strategic vision. Put differently, the presented SBRD approach seeks primarily to unfold and entangle a complex field of policy intervention (regional development), and to facilitate policy implementation for all interested, rather than necessarily propose a new model for regional development.

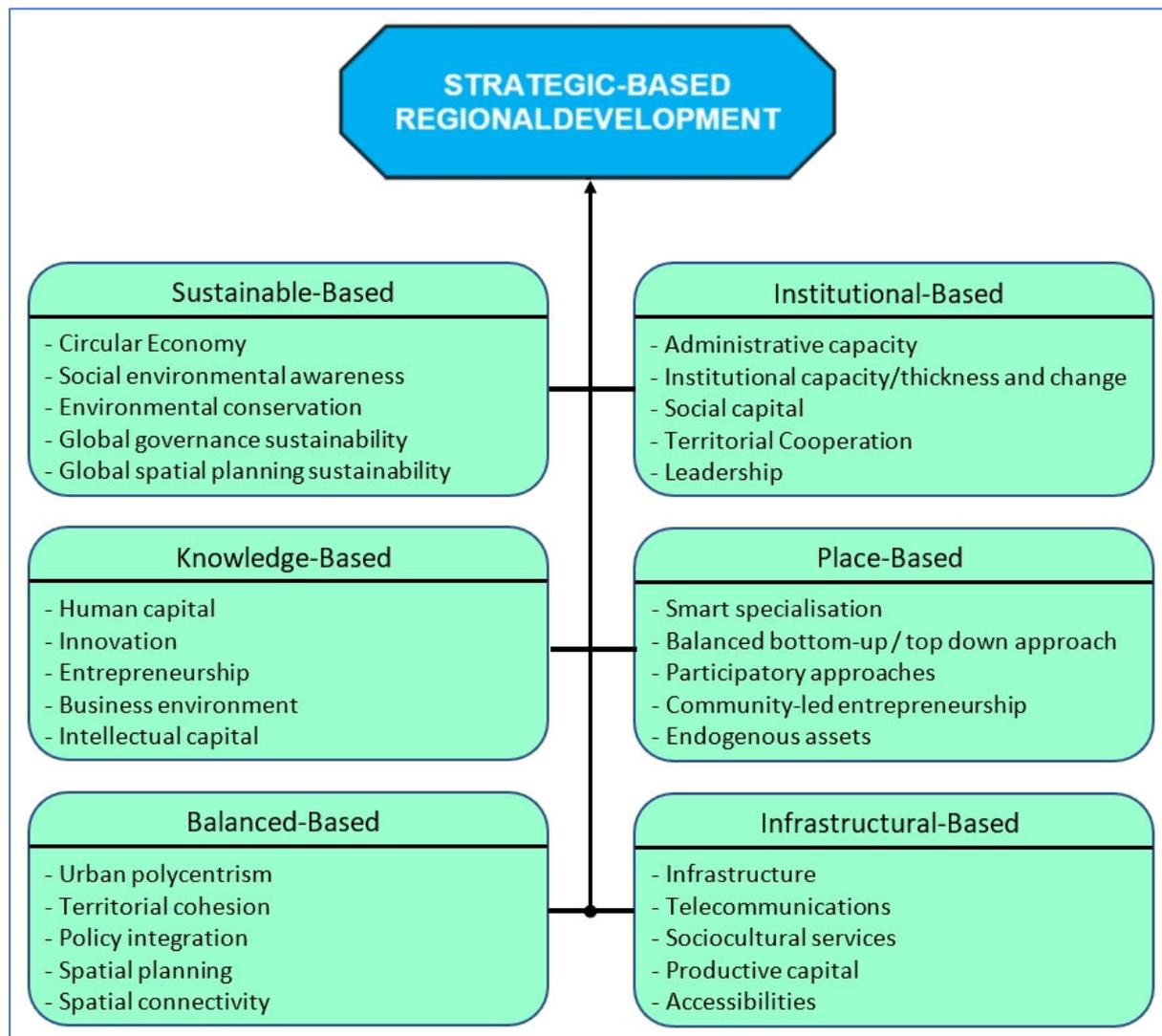


Figure 1 – A theoretical framework for Strategic-Based Regional Development. Source: own elaboration

Sustainable-based development

The emergence of environmental consciousness in the arena of development thinking has undergone major developments since the 1970s (Potter et al., 2008). In almost every way, however, the Brundtland Report (WCED, 1987) ended up being the crucial element in affirming the sustainable-based development paradigm or ecodevelopment rationale in mainstream policy discourses, at all territorial levels. This rationale was underpinned by the need to preserve natural biological systems and resources for future generations. More recently, the UN launched the 2030 Agenda for Sustainable Development (UN, 2016), as a plan of action for people, the planet and prosperity, supported by 17 sustainable development goals (SGDs) to stimulate action over the next fifteen years in areas of critical importance for humanity and the world: (i) people; (ii) planet; (iii) prosperity; (iv) peace; and (v) partnership.

Indeed, a rich vein of theoretical reasoning on sustainable development produced by Sachs (2015) follows this broad notion of sustainable development and proposes it as the central development concept for the current age. However, Sachs provides an additional

flavour to the understanding of sustainable development, by stating that, “to achieve the economic, social, and environmental objectives of the SDGs, a fourth objective must also be achieved: good governance. Governments must carry out many core functions to enable societies to prosper” (Sachs, 2015: 3). Again, the addition of the ‘governance’ dimension only supports the critics that correlate that particular conceptual vision of sustainable development with a broader notion of territorial development. To counteract this commonly held vision of sustainable development, a conceptual ‘return to its original meaning’ is proposed, but with a broader conceptual lens, by associating it with five main analytic dimensions: (i) a circular economy; (ii) social environmental awareness; (iii) environmental conservation; (iv) global governance sustainability; and (v) global spatial planning sustainability (Medeiros, 2020b).

The emerging concept of a green economy, supported by low-carbon initiatives, is at the heart of ecological modernization (Gibbs & O’Neill, 2017) and the notion of a circular economy (Lin, 2020). The questions associated with this environmental and biodiversity protective regional development approach comes with many challenges and can sometimes be hard to sell. In essence, this “model of generative growth includes regional support as a precondition for successful economic development” (Seidl et al., 2003: 336).

Institutional-based development

Adequate institutional settings and contexts are increasingly regarded as a key element to foster regional development processes (Pike et al., 2006). For Laasonen and Kolehmainen (2017: 1687), “regional competitive advantage may reside in organizational level resources and/or in activities and ways in which regional networks of organizations, engaged in knowledge-based regional development activities, exploit and renew the resources and capabilities”. This broader and increasing consideration of the role of decentralised regional institutions to shape regional development processes is increasingly recognised as a vehicle to facilitate negotiation and dialogue which can “mobilize stakeholders and integrate them into the development processes, enhance policy continuity and strengthen territories” (Pike et al., 2017: 52).

Running parallel to the importance of governance to regional development processes is the notion of institutional thickness, which is often considered an element which consolidates the embeddedness of economic activities (Stoffelen & Vanneste, 2017). Supporting processes of learning and innovation by ‘thick institutions’ is understood as a crucial facet of location competitiveness (Jones, 2005). In turn, institutional thickness is partly correlated with institutional leadership and the presence of key actors to make policymaking more effective (Sotarauta et al., 2017). Likewise, attitudes, relationships and values governing interactions amongst people and institutions shape the quality of institutional cooperation and interactions (Iyer et al., 2005).

In his seminal work on the importance of institutions to regional development, Rodríguez-Pose (2013: 1042) suggests that “institutions are crucial for economic development and deserve to be considered in any development policy” and that “institutional intervention cannot be done via a ‘one size fits all’ policy framework or simplistic criteria for intervention”. For the same author, the key outcomes of institutional intervention for regional development are largely dependent on a myriad of factors and, in turn, can influence regional development trends in a positive and negative manner.

Knowledge-based development

Among several reasons justifying the failure of certain regional development strategies and policies is the deficient or weak presence of skills and education among people and communities (Pike et al., 2006). According to Laasonen and Kolehmainen (2017), over the last couple of decades, a knowledge-based economic development rationale has become a prime goal for economic development across several European countries. This knowledge-based and innovation-driven regional development policy approach considers the importance of human capital and science and technology innovation as key drivers of regional development (Diebolt & Hippe, 2019). Knowledge and absorptive capacity enhancement are considered sources of innovation and economic growth which sustain strategic regional-level innovation policies via university–industry interactions (Rantala & Ukko, 2019). The increasing awareness of the importance of a knowledge or learning economy for regional development via innovation and knowledge production makes skills training and education essential to any sound regional development strategy (Eriksson et al., 2017).

In this context, entrepreneurship is seen as an essential element of regional development policies supported by a knowledge-based regional development approach. This is especially important for peripheral areas with informal institutional frameworks (Baumgartner et al., 2013). As Müller (2016: 1134) acknowledges, “entrepreneurs create jobs, introduce new innovations and contribute to economic wellbeing and resilience of our regions”. In view of this, regional innovation systems have been implemented to foster innovative clusters of firms as a means to increase the technological level and innovation capacity of regional firms and clusters (Kaufmann & Wagner, 2005). Also important are knowledge spillovers to surrounding regions which contribute to productivity improvements via, for instance, increasing intensity of communication between local actors, and enhanced learning among workers (Pike et al., 2017). Ultimately, the quality of human capital determines the absorption of innovation by regions (Rodríguez-Pose, 2013). Similarly, public innovation support is regarded as having a positive impact on the supported companies (Kruszelnicki et al., 2020).

Place-based development

For the most part, place-based or endogenous/indigenous regional development approaches intend to “make places less dependent upon exogenous or external economic interests” by seeking “to work with existing assets and resources from the ground up to explore and unleash their potential” (Pike et al., 2006: 155). According to Amdam (2010), sound regional development processes require an adequate combination between top-down and bottom-up planning approaches. These, at the same time, require regional development strategies which consider place-bound institutions to make the most of the regional endowments (Rodríguez-Pose, 2013). Concomitantly, in his seminal report, Barca (2009) suggests that an in-depth understanding of local conditions is required to implement effective regional development processes.

Fundamentally, according to Pike et al. (2006: 17), local and regional development entails a bottom-up policy approach, coupled with decentralised and vertical territorial cooperation and place-based approaches, with the necessary “provisions of key conditions for the development of economic activity”. For these authors, the effects and advantages of entailing such regional development approaches can be seen in: (i) increasing empowerment of local and regional communities; (ii) increasing transparency and accountability of civil society; (iii) generating sustainable economic growth and employment; (iv) fostering involvement of local stakeholders; and (v) contributing to a general improvement in the quality of jobs in a given region.

Balanced-based development

One of the key contributions of the European Spatial Development Perspective (ESDP), as a strategic document for the territorial development and planning of Europe, was the proposal of the development of a balanced and polycentric urban system and a new urban-rural relationship. This was one of the main goals to promote sustainable development of the EU through a balanced spatial structure (EC, 1999). Indeed, nowadays, in an ever-increasing urban world, it is hard to conceive any kind of regional development strategy that neglects the crucial role of cities as regional economic engines, either in a stand-alone mode or via a web of urban networks. It was based on this rationale that Medeiros and Rauhut (2020) proposed a somewhat ‘radical policy approach’ to favour the concentration of EU Cohesion funding on medium-sized towns located in less-developed European regions: the territorial cohesion cities policy rationale.

Far from signalling the end of mainstream policy development rationales, which mainly support infrastructure-related investments, as well as the support to human capital and economic activities (Medeiros, 2017), in recent programming periods, EU development and cohesion policies have highlighted the need for supporting integrated territorial investments (ITI) and community-led local development (CLLD) processes (Rauhut & Humer,

2020). In this regard, it is crucial to point out the more than 700 integrated sustainable urban development strategies (SUDS) being implemented in large metropolitan and medium- and small-sized European cities (Medeiros & van der Zwet, 2020b). The fact is, human capital tends to concentrate in urban regions, and specifically in large metropolitan areas, hence the need to design regional policies that support the location of knowledge-intensive sectors in medium- and small-sized cities to foster a more balanced regional development process (Eriksson et al., 2017).

Infrastructural-based development

Traditionally regarded as a key factor for increasing productivity and greater labour inputs, infrastructural-based development is still routinely contended as an essential counterpart for producing necessary regional multiplier effects, and as a supplier of improvements in personal welfare (Rodríguez-Pose, 2013). As Pike et al. (2006: 15) postulate, however, “heavy investment in infrastructure, with little or no emphasis on other development factors such as the support of local firms, the improvement of local human resources, or the diffusion and assimilation of technology, has often created only imperfect accessibility to markets” and “instead of dynamizing their environment, and triggering multiplier effects, large industrial complexes brought from other locations have in many cases only been lured by incentives and subsidies and have tended to foster a greater dependency on external economic actors”.

On a positive note, some authors postulate that infrastructure-based development can add positive effects to the dissemination and accumulation of knowledge capital, which eventually will contribute to improving the quality of economic development (Zhou et al., 2021). It is also routinely contended that investments in infrastructure can provide positive direct and indirect effects in long-term changes in regional investment, income and employment in the private sectors. These changes, in turn, can induce wide opportunities to long-run regional development effects and spin-offs (Rietveld, 1989), as occurred with the implementation of EU Cohesion Policy in Portugal and Spain, largely sustained by an infrastructural-based development approach (Medeiros 2014; 2017a). Instead, for Nijkamp (1986), a regional infrastructure policy entails two main types of impacts. Firstly, in the short run, it can lead to the stimulation of regional demand via a multiplier/accelerator mechanism. Secondly, in the long run, it can stimulate development via the creation of social overhead capital.

Conclusion

The term ‘regional development’ encompasses two very important concepts for all interested in designing and implementing public policies aimed at improving economic

competitiveness, social cohesion, environmental sustainability, territorial governance and spatial planning, among others, in a given territory. It is not by chance that nations with a sizeable territory end up dividing it into smaller administrative territories for improving the effectiveness and efficiency of the implementation of development policies. The regional scale is often the first of the sub-national administrative levels and is regarded by the OECD as the optimal territorial level to implement development policies. It is not difficult to understand why, since regions are normally sufficiently large to encompass several urban areas and some rural areas, with specific development idiosyncrasies and needs which require policy interventions for the common (national and European) good. Instead, the notion of development is far more relevant for policymaking than the nowadays often-used term of 'growth' in national development strategies. Why? Simply because it is possible to achieve growth without development if only a few (individuals or territories) benefit. On the other hand, certain policy goals of achieving territorial cohesion in certain territorial scales can only be achieved if a certain lagging region, or nation, obtains higher levels of positive development trends in a certain period of time, when compared with development trends obtained by leading regions in that period of time.

Indeed, the relevance of regional development has led to the production of a wide body of theoretical and practical scientific work aiming at presenting policymakers with the most positive impactful regional development strategies. As expected, these regional development theories have evolved over time in past decades, as knowledge and cultural perceptions progress. From the initial classical and traditional regional economic development theories supported by top-down policy approaches to alternative and bottom-up and endogenous approaches, all regional development theories present advantages and, sometimes, disadvantages. In more recent decades, rising environmental awareness has placed sustainable-based development at the forefront of territorial development concerns globally. Likewise, the global rise of urbanisation levels has raised the role of cities as the engines of regional development in national and transnational development strategies and policies. Moreover, there has been an interplay of knowledge-based development strategies supporting innovation, human capital, business environments and entrepreneurship; these, coupled with balanced-based development approaches fostering integrated, polycentric and territorial cohesion approaches, as well as environmentally sustainable development approaches, are often used as a theoretical backbone to design current local, regional and national development strategies.

In this context, why the need to propose a 'theory of everything' for regional development? Firstly, old and current mainstream regional development theories do not always acknowledge and appropriately interlink crucial development dimensions away from economic-related ones, like the need to support a knowledge economy, learning and innovation. Moreover, more recent regional development approaches acknowledging the key

role of regional agents and institutions to positive development paths do not consider a more comprehensive and complete perspective of the SBRD model. In a simple to understand framework, this model integrates sustainable-, institutional-, knowledge-, place-, infrastructural-, and balanced-based paradigms of development. As such, the presented model can be translated into regional development policy practice by more easily alerting policymakers to the need to consider elements related to these six development paradigms when designing regional development strategies. Crucially, the connection between elements of these paradigms will depend on the development needs and challenges of each region. In an unbalanced region, for instance, a stronger focus on the balanced-based development paradigm could only work with increasing institutional and administrative capacity, as well as improved human capital, in lagging places. Hence, the presented SBRD needs to be used wisely by policymakers for increasing the effectiveness and efficiency of public policy investment, thus posing evident challenges to regional authorities.

In a nutshell, when compared with ongoing regional development theories, the more practical and comprehensive SBRD approach, which for the first time integrates several key components to regional development associated with six key development paradigms in a comprehensive framework, intends to facilitate policy practice in designing and implementing regional development strategies. As such, unlike existing regional development policy approaches, the SBRS offers a condensation of wider range of policy options in one theoretical framework which can be applied in any given territory and adapted to its development needs. Secondly, this more holistic and integrated SBRD rationale aims at providing a more robust regional development policy template for all interested entities, policymakers and practitioners involved in this crucial process across the world. In the end, it intends to guide them in shifting away from an excessive focus on economic development, and to alert them to a need to deliver policy actions in other crucial dimensions of territorial development, such as spatial planning and territorial governance. Thirdly, the proposal of the SBRD policy rationale intends to stimulate further academic thinking on regional development theories, which has, in our view, had positive development in past years, but has not proved to be sufficiently influential in changing persistent regional development trends. Indeed, as presented in the analysis, even the promising 'smart specialisation' approach to regional development has not yet delivered the promised land that some could have expected.

In conclusion, in an ever changing and globalised world, with increasing environmental concerns, urbanisation levels and transitional policy experiments, regional development strategies will inevitably evolve to address pertinent issues for all concerned. Here, the presented SBRD intends to provide an effective contribution in the format of a new agenda setting for regional development: it is supported by the concept of territorial development rather than the concept of economic development, to facilitate policy implementation to all interested in regional development. Ultimately, more than proposing a new regional

development model, this article intends to present a practical and integrated perspective of crucial development paradigms that need to be considered when designing regional development strategies. It is also important to recognize the practical difficulties related to political instability and rising nationalism, which might end up being mirrored in future regional development strategies supported by anti-migrant and rising neoliberalist ideals. Whatever the case, at least two suggestions for future research can be identified from this paper. One deals with the need to shift the current mainstream policy and academic discourse from the 'economic growth' policy rationale which largely dominates local, regional and national development strategies into the more comprehensive and appropriate 'development' or 'cohesion' policy goals. The other topic for future research is the need to further explore the relevance of the 'regional level' as a crucial level of development and cohesion policies. It goes without saying that these two suggestions are particularly relevant to the (re)design of the regional development strategies towards their initial and ultimate goal of promoting more balanced and harmonious territories, not only from an economic prism, but also on other crucial dimensions of development, as this goal can only be achieved via strategic-based regional development. Finally, future research on regional development theory should encompass the collection of a wider and multidimensional set of regional data to bypass current research limitations in incorporating spatial planning and governance processes in better understanding regional development trends.

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Conflict of interest

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