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PERSPECTIVE

A Constructive Critique of the Endogenous Development Approach in the European Support of Rural Areas

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ABSTRACT In recent years, the endogenous development (ED) approach has gained influence within the rhetoric of European rural development policies (RP). This paper provides a fundamental critique of the approach and shows that neither the economic elements of RP in general nor ED in particular are targeted towards the specific economic needs and capabilities of rural areas. The second part of this paper consists of the search for possible alternative concepts for a more targeted and effective RP. Based on a synopsis of existing theories, an integrated approach is proposed that builds upon the different coordination mechanisms for economic activity suggested by different theories. The new, integrated perspective enables an economic characterisation of rural areas and indicates that the successful support of local coordination of economic activity is determined by specific local conditions. It also makes evident that localised approaches usually cannot compensate rural areas for the lack of agglomeration advantages. Therefore, programmes for the economic development of rural areas which support the local coordination of economic activity remain a second-best policy. As such, they do not free the state from policies of spatial redistribution if the political aim is the creation of comparable living conditions.

Introduction

The concept of "endogenous development" (ED) currently dominates the socio-economic element of the European Rural Development Policy (RP) with its multiple key targets, at least rhetorically. The term "endogenous development" is sometimes used synonymously with "locally-based" (Martin and Sunley 1996), or with "localised" or "place-based" development and refers to approaches that emphasise the need for integrated planning in a territorial approach (Vázquez-Barquero 2006), and the relevance of soft factors such as

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"leadership" and "entrepreneurship" for development (Garofoli 2002; Stimson, Stough, and Salazar 2009). ED approaches therefore propose a bottom-up governance model based on the proposition that local knowledge and local preferences should guide decisions on regional policy (Stimson and Stough 2009; Vázquez-Barquero 2006). In doing so, they stress the relevance of local institutions with regard to rules and constraints on behaviour (Stimson, Stough, and Salazar 2009). This required change in policy styles has been described as a change from "government towards governance" or as a growing intertwining of the public and the private sector (Shucksmith 2010). The remaining "government at a distance" (ibid.) mainly provides a supra-local policy design that defines the overarching goals of the society as a whole and establishes general rules for the local measures.

Nevertheless, aside from these common themes, there are no clear definitions of ED approaches in the literature, and their theoretical backing is weak. Since different authors ascribe different meanings to ED, the concept is "fuzzy" in the sense defined by Markusen (2003). Despite these shortcomings, the optimistic notion that mainly the capabilities and cooperation of local actors determine regional development in a world of growing mobility and information access is a cornerstone of the current RP of the European Union. This paper asks why the socio-economic elements of RP rest on ED, and whether RP in general, and its localised approaches in particular, could be better supported if they were based on alternative regional economic theories.

Based on a critical assessment of "The 'Theory' of ED", the following section discusses whether "Europe's Rural Development Policy" in general, and its endogenous approach in particular, have been developed in reaction to perceived specific challenges in rural areas. The section's negative response to the question leads to the conclusion that ED in its current form serves a political function rather than common social or economic aims. Then the question of "Rural Development as a Specific Economic Problem?" guides the assessment of possible alternative frameworks for rural development policies. The section starts with an overview of existing regional development theories with a special focus on the role they ascribe to rural areas. The paper then proposes that only an integration of existing theories could support the needed economically meaningful characterisation of rural areas. This characterisation could build upon the different coordination mechanisms for economic activity which are proposed by the different theories and on their relative relevance for different regions. The last section summarises and concludes with policy implications. It stresses that the transparent communication of the terms, potentials, and restrictions of rural policies is necessary because ineffective empowerment of regions could also imply that support for peripheral areas is secretly abandoned.

The "Theory" of ED

Three constituent elements provide a relatively concise summary of the "endogenous development hypothesis": the territorial, instead of the sectoral, framework; the valorisation and exploitation of local physical and human resources; and the focus on "needs, capacities and perspectives of local people" (Ray 2000). There is considerable confusion, however, as to whether ED describes a concept itself, or whether it is a catch-all phrase for theories on innovative milieus, clusters, industrial districts, and regional milieus (Tödtling-Schönhofer et al. 2009).[1] In this context, two characteristics distinguish the ED approach: one is the concentration, from a conceptual point of view, on local factors; the other is the central role that ED ascribes to agents from the non-economic sphere. Specifically, the ED approach suggests that representatives of regional society are needed to proactively coordinate regional development and develop "a vision for the future" (Stimson, Stough, and Salazar 2009: 19).

The close relationship between ED and the concept of industrial districts (Martin and Sunley 1996), and the differences in policies based upon them, may be better understood in light of the parallel historical development of political paradigms in the later decades of the twentieth century.

Localised policy approaches in a historical context. With the emergence of "new growth theory" (NGT) in the 1980s, theories of economic development began to formally recognise the importance of knowledge as a production factor. At the same time, communities were experiencing accelerating macroeconomic structural change from an industrial society towards a globalised "knowledge society." In economic policy, a shift occurred away from the welfare state paradigm towards the liberal market paradigm.

Partly as the result of these developments, a new model evolved for regional policies. The policy shift of the 1980s could be characterised by a change from the "hierarchically organised intervening state" towards the "cooperative state" (Wissen 2001), or by the replacement of a focus on comparative advantage with a focus on competitive advantage (Stimson and Stough 2009). Reliance on the notion of competitive advantage is congruent with the more recent paradigms of industry clusters and the new economic geography (NEG). At the same time, this new policy model stresses the importance of soft factors and rests on integrated strategic planning (Stimson and Stough 2009). The change also implied a shift from sectoral to territorial approaches in regional policies (Shucksmith 2010).

Reliance on integrated planning with a territorial approach and an emphasis on soft factors led, consequentially, to a bottom-up governance model in which local knowledge and local preferences should guide decisions on regional policy

(Stimson and Stough 2009). In the subsequent development of this notion, regions emerged "as new political arenas" (Gualini 2004: 330) and, in Europe, the 1988 reform of structural funds represented an important step towards this "new regionalism." Nevertheless, in practice, the central state was usually reluctant to delegate too much political power to the regions. Exceptions are the so-called local action groups (LAGs) in rural policy (Kull 2009: 22), whereby participation by local actors in political decision making is intended to limit "the number of errors of diagnosis that are all too common when planning is carried out from the outside" (EUCom 1988: 62). Therefore, while regional policies in general began to stress the notion of regional competitiveness, policies for rural development put much more emphasis on regionalism. The ED approach serves as the conceptual basis for this political rural paradigm.

Critical aspects of the ED approach. The various hypotheses concerning clusters and industrial districts that developed towards the end of the twentieth century were based on theories that could be related to either industrial economics or microeconomics (e.g., Porter 1998b), which provided their micro-foundation. Alternatively, the hypotheses were inspired by empirical regularities, such as the case of "Third Italy" (see, e.g., Piore and Sabel 1984), that prompted new explanations of regional prosperity. The literature on ED offers neither strong empirical evidence nor a rigorous theoretical rationale for the propositions that local development should rest primarily upon the exploitation of local factors and that non-economic actors have an important role to play in the coordination of regional economic development. The following paragraphs highlight the specific weaknesses of ED's theoretical foundation.

The normative foundation of the endogenous approach. It has sometimes been suggested that the desire for concepts that support the possibility of ED has its origins in the political rather than the scientific sphere. Accordingly, it could be argued that the perceived need to stimulate growth in peripheral areas in the 1980s and 1990s (Gordon and McCann 2000) was one of the major reasons for the success of ED approaches. Rather than being founded on a sound theoretical basis or empirical observations, the idea of ED might stem from a normative reaction towards an exogenously driven development that was perceived as "dependent," "distorted," "destructive," and "dictated" (Lowe et al. 1998). ED was therefore a reaction to the negative experiences in setting up the most standardised production aspects of firms and enterprises[2] ("extended workbenches") in peripheral areas (Schenk and Schliephake 2005: 480). The notion of a self-governing, independent development of regions might have evolved as a reaction to the dominant political and economic trends of globalisation and liberalisation "rather than constituting a model of development with clearly identified theoretical roots" (Slee 1993: 43).

ED has thus been described as "a manifestation of the new ethos" (Ray 2000: 164) of regional self-determination.

Conversely, Hadjimichalis (2006: 82) stresses the supportive nature of certain EDs in terms of the neoclassical school of thought. In this view, successful industrial districts "became the symbol of the success of small-scale flexible capitalism, with its highly individualistic and competitive character." From this perspective, the emphasis on ED is a reaction to the otherwise weak empirical support for the neoclassical expectation of regional convergence. Yet, successful regions like Emilia-Romagna, which is often described as exemplary in this respect, show that convergence is possible. In this interpretation, only problems of coordination among local actors and their interests hinder area-wide convergence. The ED approach is thus a conscious attempt to initiate a bottom-up process of convergence. Consequently, under the neo-liberal mainstream politics of the 1980s and 1990s, "an emphasis on endogenous processes of regional growth and development" (Stimson and Stough 2009) was supposed to enable regions to help themselves, while at the same time justifying a cut in centralised, redistributive measures. In summary, it seems unclear whether the ED approach represents a scientifically founded hypothesis or an ethically grounded plea.

The problem of agency in (rural) ED. Markusen (2003: 701) has argued that regional models are often difficult to put into practice because they rest on vague causal connections and replace agents with passive processes and abstract social phenomena. Concepts of *rural* ED[3] are especially vulnerable to this critique. Here, a participatory approach is valued highly while "surprisingly little [is] written about why participation is so important" (Lowe et al. 1998). The participatory approach seems to have two aims: on the one hand, participation is an aim in itself, while the second aim is that of increased efficiency in measures for economic development.

Nevertheless, numerous problems related to democratic legitimacy and political economy are associated with this participatory approach, stemming from the existence of heterogeneous interests within the given territory. Not only do the aims of local society need to be consistently determined, but the realisation of these aims must also be secured despite the diversity of interests among local agents. These problems are often neglected and hidden behind a curtain of rhetoric that ascribes agency to the territories themselves, and sees them as an "unproblematic and homogeneous 'community of place' " (Shucksmith 2000: 208). According to the LEADER concept capacities are to be built and social capital is to be created within these "communities of place." Actually, the question of whose capacities have to be built remains open (Shucksmith 2000).

This problem of undefined agency becomes evident in Ray's "principles of endogeneity," which suggest local autonomy. Ray defines the principle as "the idea of local ownership of resources and the sense of choice (local, collective agency) in how to employ those resources (physical and intangible) in the pursuit of local objectives" (Ray 1999). This concentration on local objectives implies a potential redefinition of the term "development." Accordingly, the aim of ED is not only to support economic expansion and job creation (Ray 1999), but also to support and preserve local specificity (or culture). The principal decision, according to Ray, is about "a continuum of development models" between market integration and disengagement in the wider economy.

A potential trade-off therefore exists between economic objectives and other possible aims of ED. Given this trade-off, it seems even less probable that all members of a rural community would reach a stable and viable consensus on these far-reaching questions. On the one hand, the enhancement of regional competitiveness may have a higher potential for boosting rural development in comparison with concentration on local factors.[4] On the other hand, the distributive effects of such development are questionable; rural economic development that is instigated or supported from outside may result in certain conflicts between "rural values" and the (urban?) "growth ethos" (Meyer and Burayidi 1991). Preserving rural values and specificities has a cost that needs to be made transparent and discussed publicly because only the effective coordination of all interests guarantees welfare-maximising "endogenous" development. Analysis of such non-cooperative conditions with regard to ED requires "a more formalized strategic framework" and reference to concepts of "modern game theory" (Johnson 2001: 190).

In summary, even a democratically legitimised agreement about the target course of a region's development does not guarantee its enforcement if the potentially diverging interests of local agents are not coordinated effectively. Currently, the ED approach offers no solution on how to accomplish this.

The problem of dynamics in the endogenous approach. One attempt to clarify the distinctive character of the ED approach has been the introduction of a "regional competitiveness performance cube" (Stimson, Stough, and Salazar 2009: 21), with the three dimensions of leadership, institutions, and market fit resembling Porter's diamond (Porter 1998a). Porter's approach has been criticised since it provides no "insights into the dynamics by which diamonds can be developed in economies that are not already heavily industrialised" (Yetton et al. 1992). Conditions favourable for cluster formation have primarily been found in regions with "well-developed industry agglomerations" (Barkley and Henry 1997: 321). A self-reinforcing dynamic usually starts to work after the initial formation

of a cluster (Porter 1998b). This critique applies to ED as well. According to ED literature, the development process is to be initiated and driven by deliberate decisions of local agents who are able to control, at the local level, the "use and implementation of local resources," "the process of accumulation at the local level," "innovation capacity," and "intrasectoral and intersectoral productive interdependences" (Garofoli 2002). However, if the relevant factors are endogenous to the process itself, they cannot purposely be influenced by local agents. In that case, a relocation of responsibilities for regional development to the local level might first and foremost strengthen those regions that were already in a favourable position (Markusen 1996).

This phenomenon is caused by a process of cumulative causation that was introduced by the concept of endogenous growth in the "new growth theory" (Lucas 1988; Romer 1986). NGT makes technical progress endogenous to growth and partly solves the problem of a significant and unexplained element of growth (the "Solow residual") in the neoclassical model (Solow 1956). It follows that "economic growth tends to be faster in areas that have a relatively large stock of capital, a highly educated population, and an economic environment favourable to the accumulation of knowledge" (Button 1998: 146). Consequently, a great number of contradictions between ED and NGT follow. First, NGT casts significant doubt on the extent to which endogenous forces are sufficient to initiate self-sustaining regional development or a "virtuous circle for sustainable regional development" (Stimson, Stough, and Salazar 2009: 20). Consequently, the role of public policy is rather limited (Marcouiller, Kim, and Deller 2004).[5] Second, NGT's internal logic demonstrates that neither knowledge nor entrepreneurship, ED's relevant "local" factors, is static entities that can be localised independently of the process of development. Third, the new dynamic spatial models (see Section 4.1) have demonstrated that, without compensations and transfer payments, the cumulative causation implied by endogenous growth theory does not cause positive "endogenous" development in all regions in equilibrium.

These conceptual problems have often been camouflaged by a reinterpretation of endogenous growth as "locally-based" growth (Martin and Sunley 1996). This superficial reference by proponents of ED to the concept of endogenous growth veils ED's weakness in explaining regional dynamics and causes existing contradictions between NGT and ED to be neglected.

Europe's Rural Development Policy

The fuzziness of the ED approach and its lack of an obvious relation to specific rural challenges raises the question of why it features so prominently in the

socio-economic elements of RP. Institutionally, RP is part of the European Common Agricultural Policy (CAP). Nowadays, the CAP is organised conceptually within two pillars. The first pillar addresses the agricultural sector and its market, using market interventions, coupled subsidies, and direct income support. This paper is concerned with the second pillar, which addresses rural areas with a less-pronounced sectoral focus. The second pillar was originally built on three so-called "axes" with the objectives of improving the competitiveness of the agricultural and forestry sector (Axis 1), improving the environment and the countryside (Axis 2), and improving the quality of life in rural areas and encouraging diversification of the rural economy (Axis 3).

The 2007–2013 programming period introduced a fourth axis that is based on the LEADER experience and is intended to introduce possibilities for innovative governance. LEADER was originally introduced in the 1990s as an experimental policy approach, and aimed at supporting locally based, small-scale projects (Ray 2000). "Local action groups" (LAGs) develop relevant projects and apply for programme funding; they are also responsible for securing the active participation of different social groups in initiating the development process (ibid.). The experimental character of LEADER was partially abandoned with its institutionalisation as a fourth axis, with a specified minimum budget in the so-called "mainstreaming" process. The newly created LEADER axis cuts across the other three axes because its institutional aims are applicable in the realisation of each of the other three targets. Its conceptual importance might therefore be higher than its budgetary relevance.

RP as an answer to specific rural challenges? With its three primary axes, RP addresses the general social, ecological, and economic problems of rural development. Nevertheless, in the economic sphere, the exclusive reference to specific spaces bears considerable conceptual problems because, so far, a consistent economic definition of rural areas has not been offered by either science or politics. At the same time, RP's positive discrimination in favour of rural regions can only be justified if rural areas differ from other areas and are capable of autonomous development. In this case, other forms of support that are targeted towards other regions, intentionally or otherwise, might even discriminate against rural areas.[6]

If, in contrast, rural areas, however they are defined, are not principally different from other regions, then they should be supported by existing general measures. If they are ultimately judged to be dependent regions, and the support of agglomerations provides higher macroeconomic returns, structural policies should not address rural areas at all. In this case, the redistribution of the wealth generated in agglomerations, and the spread of spillover effects, would contribute

more efficiently to a spatial balance of wealth. Accordingly, in order to be justified, rural development policies need to be directed towards specific needs and related to specific capabilities of rural areas. Only then would measures for rural development not be redundant or even counterproductive but complementary to existing measures without a rural focus. The question therefore is, whether RP in general, and the ED approach in particular, represents a reaction to specific rural needs and capabilities.

Nevertheless, the history of RP shows that it was not created purposefully in recognition of rural specificities as a complement to other existing measures for regional development. Originally, the CAP, as implied by its name, had a straight sectoral focus. Until it was reformed stepwise at the end of the twentieth century, there was no specialised support for the economic development of rural areas apart from agriculture. One of the main triggers of the CAP reform was the growing international pressure to reduce the protection of agricultural markets. Consequently, RP was mainly directed towards farmers and their infrastructural needs. This initial concentration of RP on support for the competitiveness of farming and for top-down decisions on infrastructural investment has been interpreted as an expression of an "exogenous perspective on rural development" (Lowe et al. 1998: 7). However, it was not only the dissatisfaction caused by such approaches that led to the growing interest in rural development policy.

The General Agreement on Tariffs and Trade of the Uruguay Round (1994) also brought about further needs to replace direct market interventions with "green box measures" that do not directly affect agricultural production. Subsequent pressure from the demands of the World Trade Organisation contributed significantly to the Agenda 2000 reforms (Swinbank and Daugbjerg 2006). This and all other reforms took place under considerable political pressure from the farmers' well-organised national and supranational interest groups. The political willingness to redistribute "farmers" funds' to the large and non-organised group of rural non-farm residents is probably rather low as is indicated by the sustaining sectoral focus of RP.

Divergence between practice and rhetoric in RP. This view is supported by RP's enduring focus on farmers and farmers' needs. According to the *Council Regulation on support for rural development by the European Agricultural Fund for Rural Development* (EAFRD) (EC 2005), RP, despite its multidimensional construction, still addresses primarily farms and agricultural production. In fact, the multi-sectoral focus of the economic target system is restricted to those Axis 3 measures that aim at diversification of the rural economy with "support for the creation and development of microenterprises with a view to promoting entrepreneurship and developing the economic fabric" (EC 2005: Article 52). A closer look at the opportunities offered under Axis 3 reveals even more restric-

tions, with support being mainly targeted towards industries related to tourism, recreation, environmental services, traditional rural practices, and quality products (EC 2006: Section 3.3). The competitiveness target of horizontal Axis 4 creates other possibilities for support of the wider rural economy. In total, the concept of the multi-functionality of agriculture plays a much stronger role than multi-sectorality (Marsden and Sonnino 2008).

Nevertheless, the anachronistic focus of this rural development policy on farmers' needs is camouflaged by the European Commission's non-binding rhetoric. Here, the multi-sectoral claim for general economic development plays a central role in the justification of funds under the Second Pillar. The Community's strategic guidelines for rural development, for example, stress that "Axis 3 helps to develop local infrastructure and human capital in rural areas to improve the conditions for growth and job creation in all sectors and the diversification of economic activities" (EC 2006). In particular, the new programming period 2014–2020 is seen as a "unique opportunity to refocus support from the new EAFRD on growth, jobs and sustainability." The rhetoric of RP thereby reflects a concept called "the new rural paradigm" (OECD 2006) which, according to the OECD, rests on two principles: "1) a focus on places instead of sectors; and 2) a focus on investments instead of subsidies." Thus, the new rural paradigm mainly stresses the diversity of rural areas and the resulting necessity to focus not only on agriculture and farmers but also on other industries and different private and public actors. To a certain extent, it also favours the decentralisation and regionalisation of political and administrative decision-making structures.

This obvious divergence between the labels and the content of RP suggests that the concept was not designed in reaction to the observed specific needs of rural areas. Instead, it is rather the product of considerable external political pressure. In line with this assessment, Dwyer et al. (2007: 880) found that the existing variation in national and sub-national Rural Development Plans is not consistent with observed structural and socio-economic differences among the corresponding regions. They conclude that institutional path dependence and inflexibility may instead explain existing differences. These considerations imply that ED, too, might serve to politically justify rural development policies for which the true additional value remains to be substantiated.

The institutional function of ED. Obviously, "[t]he designation of bottom-up approaches has spread across EU regions and became the symbol for a changed perspective on rural areas" (Copus and Dax 2010: 46). Copus and Dax also find that "endogenous growth" is among those "buzz words" that are often used in RP literature (see also Ray 1999). Nevertheless, there is no argument inherent to ED that excludes its application to non-rural areas. The question of

why institutional improvements that serve rural areas should not serve other areas as well remains unanswered. Proponents of the ED approach do not usually claim that their concept is restricted to specific regional economies but rather they warn against "concentrating on rurality per se" (Ray 1999). A critical assessment of ED raises doubts on the arguments for economic discrimination between rural and non-rural areas on conceptual grounds.

Nonetheless, the European Commission stresses explicitly that the "bottom-up approach," to support for the rural population, could help establish complementarity of RP towards other policies (EC 2006: Section 3.6). The additional value of the local governance approach of RP is seen in its counteraction against the "pulling upwards" of decisions from the local to the national and supranational levels, apparently caused by measures from the Structural and Cohesion Funds (Ray 1999).[7] These observations feed the assumption that European agricultural policies and the administration take advantage of the missing political willingness to implement bottom-up approaches in other policy fields. Reference to ED as a particular paradigm for the specific economic support of rural areas thereby creates the impression that the EAFRD augments the European Regional Development Fund (EC 2005).

This impression of a specific type of support that is seemingly based on a flexible and widely accepted paradigm of regional development might help proponents of RP to immunise the policy against those critical voices that deplore the lack of theoretical foundation in RP (Sotte 2003) and the presumed "gap between academic discourse and policy practice" (Dax, Kahila, and Hörnström 2011). In the context of this reasoning, the ED approach mainly serves a political function within RP: It demonstrates, rhetorically, the complementarity of RP to measures from other programmes that directly or indirectly affect rural areas, and it therefore justifies the existence of RP. This sceptical view provokes the question of whether RP in general, and its localised approach in particular, could be based on an alternative framework that promises a traceable theoretical foundation and therefore more transparency in policy design.

Rural Development as a Specific Economic Problem?

Theories that ascribe specific autonomous paths of development to rural areas (either implicitly or explicitly) represent alternatives to the ED approach in justifying specific rural development policies. This chapter identifies the role such theories attribute to rural areas.[8] It analyses the extent to which specific support for rural areas makes sense in the light of different theories, and identifies potential alternative approaches to the problem of rural development. Since there are

numerous theories, the various approaches are grouped according to their common scientific origins and fundamental themes. This synopsis leads to a fresh view of the rural development problem and a final assessment of the ED approach.

Regional development and rural areas in established theories. Dawkins (2003) identified five approaches to the foundation of regional economic development theory: 1) interregional convergence hypothesis, 2) location theory, 3) external economies, 4) models of spatial competition, 5) and central place theory. Dawkins also highlights key "alternative theories," which are often extensions of the five principal approaches (Table 1). While convergence hypothesis (1) is based on strict neoclassical assumptions, the idea of external economies (3) is closely related to the concept of endogenous growth. Location theory (2) and central place theory (5) may be seen as the static ancestors of modern dynamic models since they all partly explain regional heterogeneity with reference to transport costs.

External economies (3) build the foundation for these modern dynamic macro-models of regional development. They represent a rediscovery of Marshall's (1890) notion of positive local scale effects exogenous to the firm (Englmann and Walz 1995) and inspired different models on uneven regional economic development (Hudson 1999; Krugman 1981). Related models rely on the idea of interlinked industries and input–output relationships, which cause cumulative dynamics. Further spatial and dynamic extensions of these interlinked industry models have been generated by the inclusion of market-size effects, as in the formalisation of the big push theory (Murphy, Shleifer, and Vishny 1989), or imperfect competition and resulting cumulative effects (Venables 1996). In Dawkins' (2003) list these theories correlate to the so-called New Economic Geography (NEG) (Krugman 1991), cumulative causation theory (Myrdal 1957), and the growth pole theory (Perroux 1950). Terluin (2000: 21) refers to all models characterised by cumulative causation as "pure agglomeration models." Pure agglomeration models explain the heterogeneous economic activity of different places endogenously, and tend to predict divergence rather than convergence.

As all pure agglomeration models aim at the explanation of macro-dynamics, they create a stylised dichotomy between agglomeration and periphery, where the rural is necessarily associated with the latter. Rural areas are therefore characterised by lower product diversity, lower population density, and economic activities that relate to immobile factors of production. These models, in their extreme versions, imply that support for economic development should generally be concentrated on "growth poles."[9] A spatial redistribution of wealth could best provide comparable living conditions[10] and public funds should not support the innate development of rural regions. NEG models, especially, are based exclusively on monopolistic

TABLE 1. TRIGGERS AND DRIVING FORCES IN THEORIES OF REGIONAL DEVELOPMENT.

Concepts			Trigger	Driving forces
Dawkins (2003)		Terluin (2000)		
1 Interregional convergence hypothesis	Neoclassical exogenous growth theory	Traditional models	Capital mobility/functioning capital markets	Decreasing returns to capital
	Export base theory		Free trade, specialisation	Exchange
2 Location theory 5 Central place theory 3 External economies	Cumulative causation Growth pole theory New economic geography	Pure agglomeration models	Labour mobility, trade costs Intensity of competition Shock ("big push") or interregional knowledge spillover	Self-sustaining growth due to growing product/commodity markets and spillovers
Stage/sector theory Profit/product cycle theories Industrial restructuring theories Flexible specialisation	—	Territorial innovation models	Evolutionary approach: Chance, creative destruction, segregation, and specific dynamics	Historic/idiosyncratic events
4 Models of spatial competition	—		Restricted competition/network formation in oligopolistic markets	Strategic behaviour and institutional rules
Network theory Political institutions	—	Local milieu models	Institutions and networks: Planned coordination	

Source: Own figure.

competition and pecuniary external effects. They therefore lack a comprehensive micro-foundation and have nothing to say in detail about rural areas (Kilkenny 2008). They provide a weak rationale, though, for ED's concentration on local factors because they provide little hope to attract other factors in peripheral areas. Models inspired by NEG instead show that higher factor mobility might even contribute to the further relative economic decline of rural areas (Fujita, Krugman, and Venables 1999).

The opposite is true for models that are summarised by Dawkins under the convergence hypothesis (1). Together with export base theory and neoclassical exogenous growth theory, these models form Terluin's "traditional models" (Terluin 2000: 21). Theories based on the idea of comparative advantage following Ricardo (1817), which formed important paradigms for earlier policy approaches (see Section 3.1), may also be counted among "traditional models." Such models usually imply conditional convergence in factor payment, given the differences in initial resources. The theory is therefore static in nature and does not necessarily imply convergence in per capita income (Dawkins 2003).[11]

Traditional models assume differences to be due to exogenously determined factor endowment. Therefore, the higher total factor mobility in open markets allows for regional specialisation. In consequence, the realisation of comparative advantage, factor mobility, and trade may speed up convergence, and the capture of spillover benefits increases growth (Nijkamp and Poot 1998: 22). While rural areas probably differ from non-rural areas due to their specific factor endowment, this does not imply a necessity for specific structural policies. Instead, factor mobility should be generally fostered. Also, rural residents may need redistributive measures if convergence in per capita income is a political aim. The local coordination among actors that is central to ED is not a relevant factor in traditional models or in pure agglomeration models.

Dawkin's stage/sector, profit/product cycle (Markusen 1985; Vernon 1966), and industrial restructuring theories, as well as the "flexible specialisation approach," may be summarised as "evolutionary approaches." These theories are characterised by the acknowledgment of restricted information, historical contingency, and path dependence. The idea of Schumpeterian "creative destruction" is important for many of these theories, which have been summarised as "territorial innovation models" by Terluin (2000: 21). Territorial innovation models are characterised by the relevance they attribute to a given industry structure (Markusen 1985; Storper and Walker 1989), which determines further development but is, nevertheless, itself historically contingent (Boschma 1996; Storper and Walker 1989). This contingency is due to the assumption that new industries create their own favourable environment (Boschma 2007; Storper and Walker 1989). In consequence, evolu-

tionary models have been criticised for their ambiguity regarding the determination of potential "hot spots" of growth, and their indeterminacy concerning supportive factors for regional growth. Because of these weaknesses, evolutionary approaches have, so far, been unable to discriminate between different types of regions or to give guidance for the economic characterisation of rural areas.

As is shown in Table 1, Dawkins also makes reference to theories that are concerned with political institutions. These might also incorporate the Marxist view, as well as growth machine theory (Molotch 1976) and new institutional economics. In this context, Terluin explicitly identifies the regulationist approach, which is also based on political economy. He subsumes these theories with those that are concerned with the idea of networks as "local milieu models" (Terluin 2000: 21). Network theoretical approaches rest on the idea of "social behaviour as exchange" (Homans 1958) and social embeddedness (Granovetter 1985). Theories that focus on industrial districts (Piore and Sabel 1984) and industry clusters (e.g., Porter 1998b) belong to this group.

Within the category of "models of spatial competition," Dawkins includes those approaches that, starting with the Hotelling model (Hotelling 1929), build upon Cournot's (1838) ideas of strategic competition in a spatial context.[12] It is revealing that Terluin does not refer to models of strategic interaction and non-cooperative coordination, which seem to form an isolated strand of research in regional economic development. Nevertheless, the newer technical approaches to "games in networks" show the relevance of strategic behaviour for network formation, and also of networks for strategic behaviour (see, e.g., Venables 1996 or Kranton and Minehart 2001). Therefore, models of imperfect competition and strategic interaction could play an important role in the analytical treatment of theories from the local milieu group.[13]

Like the territorial innovation models, theories from the local milieu group and models of spatial competition stress that behaviour is not exogenous to (industry) structure. In these schools of thought, potentially evolving coordination problems call for place-specific policies. In this respect, the ED approach could be counted within the local milieu group if it were attributed the status of a theory. Neither of these groups of theories, though, refer in any way to specific types of regions. Instead, they generally call for place-specific approaches. A closer inspection of the character of rural economies in terms of industries, networks, and resulting competitive forces could nevertheless help to identify common specificities within rural areas, in terms of conceptually relevant characteristics. However, the question whether such rural specificities exist with respect to the fundamental parameters of the local milieu group of theories or models of spatial competition continues to remain open.

In summary, those theories that are able to endogenously explain regional differentiation do not offer any justification for specific structural support for rural areas. Some NEG models even imply that all funds should be concentrated on growth poles. Local milieu group theories contend that this picture is far too simple. They generally call for place-specific solutions since price coordination does not produce convergence in the presence of external effects and efficiency gains through non-market coordination might be possible in both agglomerated and non-agglomerated areas.

Economic development of rural areas as a coordination problem. A conscious application of theories from the local milieu group and well-known stylised facts to rural areas might help identify common specificities in the rural context. This section proposes an economic characterisation of "rural" areas which can be supported conceptually. Only frameworks that permit such a definition of rurality in economic terms are candidates for a sound theoretical foundation of RP.

An economically meaningful characterisation of rural areas. Economists frequently claim that, in comparison with more agglomerated areas, rural economies follow different development trajectories (Murdoch 2000: 407). Kilkenny reconsiders some of the specific, distinctive features of rural areas: the relative importance of a service sector with severe constraints due to the small local markets; the relevance of site-specific amenities as "non-market attributes tied to land"; and the function of products of the natural resource industry as intermediate goods, while final goods are sometimes site specific (e.g., regional specialities) (Kilkenny 2008). Additionally, and most importantly, the division of labour in rural areas is often limited due to the restricted size of regional markets (ibid.).

These characteristics highlight the importance of specialisation and niche production. In sparse/non-agglomerated markets, the local variety of products and commodities is naturally lower than in agglomerated markets. Consequently, not only does the attractiveness of these regions decrease for both firms and residents,[14] but the need for regional specialisation is higher due to the absence of general positive scale effects in the production sector. Through specialisation, economies of scale may be realised and a premium may be obtained that allows for production in remote areas despite high transport costs. Nevertheless, little is known about how a process of successful regional specialisation can be initialised, because it may not be guided through global coordination signals.

In sparse markets, the innovative entrepreneur faces a lack of complementary products, services, and commodities, and a lack of knowledge about these factors and their efficient production. Here the decisions of single actors exert direct influence on prices and markets due to local or private price information

(Makowski and Ostroy 1995). As a direct consequence, the consistency of individuals' local price information is no longer guaranteed, the possibility of coordination failures arises (Makowski and Ostroy 1995), and local coordination mechanisms gain relevance. At the same time, the typical low factor mobility of rural areas' local production factors facilitates the required local coordination through cooperative or non-cooperative interaction.[15]

In conclusion, incomplete markets and the resulting stronger need and capability for the local non-price coordination of economic activity might be seen as an economic characteristic of "rural" areas.

Coordination mechanisms. In the light of this insight, the following discussion concentrates on the different coordination mechanisms for economic activity proposed by the theories discussed above. While proponents of institutional economics often contrast market- with non-market institutions (e.g., Dorward et al. 2005), this "coordination approach" acknowledges that institutions and markets again consist of different coordination mechanisms.[16] These mechanisms are described within the different theories on regional economic development (Table 2).

The advantage of price as the coordination mechanism in traditional models is its overall transparency in enabling successful coordination in dynamic markets. However, prices do not effectively coordinate decisions in the presence of external effects.

The visible macro-dynamics of growing agglomerations serve as a signal for market participants and as a coordination mechanism in pure agglomeration models. However, this self-sustaining mechanism actually creates difficulties in explaining changes in the position of individual regions in the growth continuum of models of cumulative causation (Nijkamp and Poot 1998).

In order to understand existing differences between regions that are characterised by economic specialisation rather than by general agglomeration effects, one must take industry-specific agglomeration effects and industry-specific differences into account. This regional specialisation causes differences in regional development trajectories, which can not be communicated effectively by prices or by visible macro-dynamics. Instead, local coordination mechanisms become relevant as discussed in territorial innovation, spatial competition, and local milieu models. This local coordination occurs through visible singular events, direct interaction by local actors, or institutional rules (Table 2).[17]

The coordination approach calls for a careful consideration of the coordination mechanisms to be supported in each single region. The *success* of local coordination mechanisms might depend on the initial existence of a minimum local economic activity. Otherwise, policy might need to refer initially to global

TABLE 2. COORDINATION MECHANISMS IN THE DIFFERENT THEORETICAL STRANDS.

	Model type (see Table 1)				
	Traditional	Pure agglomeration	Territorial innovation	Local milieu	Spatial competition
Analytical level	Macroeconomically determined		Micro-macro interaction → complexity	Microeconomically determined	
Effect of coordination	Convergence	Path-dependent unequal development	Specialised growth		
Coordinating factors	Prices	Visible macro-dynamics	Visible singular events	Institutional rules	Direct interaction
Analytical models	CGE		Evolutionary	Network analysis	Game theoretical
Model character	Convergence	NEG	Multifaceted	Cooperative	Non-cooperative
Helps to understand	Large patterns and mean situation of different types of regions		Specific patterns in single regions/under certain conditions		
Coordination	Global		Local		

Source: Own figure.

CGE, computable general equilibrium models; ED, endogenous development; NEG, new economic geography.

coordination mechanisms that support convergence or initiate a specific regional dynamic (Table 2). Such policies attempt to attract large enterprises with cheap industrial sites or low local taxes.[18]

The *preferability* of local coordination mechanisms depends on the lacking possibility of a region to attract new investments in the open local market.[19] Through attempts to coordinate local decisions, the most is made of the relative isolation of local markets without overcoming this obvious disadvantage.

The *functioning* of the different local coordination mechanisms, i.e., of signals from *visible singular events*, *institutional rules*, and *direct interaction of local actors* (Table 2), depends on specific local preconditions. Signals of *visible singular events* usually result from the decisions of single firms (Storper and Walker 1989). They are difficult to manipulate politically.

Institutional rules represent a cooperative solution to the coordination problem, but diverging interests may prevent the most relevant actors from participating in the cooperative solution and active cooperation among a large group of actors may go along with high transaction costs. These could restrain participation in local development projects, especially for firms (Langguth, Schubert, and Elbe 2011). Moreover, if actors are opportunistic and act strategically, cooperation needs to be secured through binding commitments and the possibility of exogenous enforcement or it must build upon strong existing formal and informal relations between the relevant local actors.

Otherwise, coordination must rely on the direct, non-cooperative *interaction of local agents* (Table 2). Conditions for the stability of such a non-cooperative coordination can then be derived from theories on strategic interaction and related game theory models as they depend on the distribution of interests and power among relevant actors.[20]

The coordination approach proposes the systematic application of theories on networks and strategic interaction in order to address these questions. Such research will, at the same time, reveal the instability and specificity of policy approaches that rest, like the ED approach, on cooperative local solutions. A rigorous reformulation of localised approaches to regional/rural development in the framework of the coordination perspective would reveal potential conditions and restrictions of localised support for rural areas. Thereby, the theoretical development could provide guidance for a rigorous empirical analysis of rural development processes.

Summary of Results and Conclusions

The ED approach proposes that a common vision among local actors for active cooperation in their future will be enough to initiate the self-sustaining economic

development of a region. This paper has argued that this idea does not rest on a sound theoretical basis. Nonetheless, current RP is largely based on ED. A short historical sketch of RP has suggested that it was not designed for and motivated by particular economic challenges of rural areas. Its additional value with respect to other general supports for regional development is therefore doubtful. Specifically, ED does not claim that it can compensate for the specific economic disadvantages of rural areas, and there is no reason why it should not be applied in non-rural regions as well. Nonetheless, ED helps to maintain the impression of the additionality/complementarity of rural development policies, because the bottom-up approach is not widespread in other programmes. ED therefore serves the political and administrative aim to preserve a potentially ineffective policy for economic rural development.

In order to create transparency and implement an effective rural development policy, the current approach needs to be replaced by new, theoretically supported concepts. Based on an analytical synopsis of existing theories of regional economic development, this paper has proposed that the rural development problem be considered within the framework of economic coordination. This access to the problem and its subsequent reintegration with microeconomic and regional development theories helps reveal different, and potentially relevant, coordination mechanisms, alongside conditions for their applicability. According to this "coordination approach," incomplete markets and the resulting stronger need and capability for local non-price coordination of economic activity might be seen as an economic characteristic of "rural" areas.

This new perspective reveals the specificity of localised approaches like ED, which rely on the concept of cooperative decisions. Cooperative coordination requires common interests or binding commitments, conditions that are rarely fulfilled in practice. Rather, in actual development, supportive institutions arise as the result of non-cooperative interaction among actors. Consequently, analyses based on theories related to strategic interaction and networks, which consider the interests and structure of local firms and other agents, could support the creation of more efficient rural development policies.

Important political implications arise. First, as ED lacks a clear definition and a precise theoretical foundation, it is unable to guide a transparent policy design and a comprehensive assessment of measures and programmes. Only a theoretically backed political paradigm allows for the efficient design of measures and their effective implementation. The proposed coordination approach does not deliver a simple recipe for rural policies, but asks for a conscious selection of supported coordination mechanisms and a careful evaluation of the conditions for their effectiveness in the region.

Second, the theoretical analysis shows that local coordination among actors cannot usually compensate for the lack of agglomeration advantages in peripheral areas. Instead, the support of local coordination mechanisms represents a second-best policy option. Through attempts to coordinate local decisions, the most is made of the relative isolation of local markets without overcoming this obvious disadvantage; localised approaches only mitigate its most severe structural consequences. Accordingly, support for local coordination mechanisms in peripheral regions does not substitute for measures of spatial redistribution, if the aim is the creation of comparable living conditions. In the democratic process, transparency has to be created with respect to the reality that many regions will be unable to realise convergence by their own means; otherwise, ineffective efforts to achieve peripheral regions' empowerment run the risk of disguising their effective abandonment.

NOTES

1. In this report, concepts of regional specialisation, such as product cycle theory and the new theory of specialisation and trade, are also characterised as a part of the endogenous development model. We find this definition goes too far.
2. This argument might be better understood in the broader context of more general criticism of imperialism (see, e.g., Galtung 1971).
3. In recognition of actual interregional relationships between agents in the modern world, the concept of endogenous development was somewhat attenuated by the "neo-endogenous" concept of regional development (Lowe et al. 1998) in literature concerned with rural questions. Its main proponent Ray, though, refers mainly to extra-local actors in the politico-administrative system and not so much to extra-local entrepreneurs, industries, and firms (Ray 2006: 278).
4. The concentration on existing small firms might be economically disadvantageous since small-scale businesses are described as having "low investment levels, lack of access to knowledge bases and a limited ability to absorb new technologies" (Vaz, Morgan, and Nijkamp 2006). Moreover, it has been recognised that the in-migration of entrepreneurs has helped rural communities strengthen their economic foundation with an "injection of wealth and income" (Bosworth 2008).
5. New growth theory and its spatial "relatives" remain silent on the adequate scale of regions. Accordingly, even rural places could turn into the growth poles for their surrounding areas. This approach has been chosen in the "internal combustion theory" that Daniels (1989) ascribes to Harmston (1983). In this approach, specific "export industries or local secondary base companies" form a region's "growth machines" in local central places (Daniels 1989). However, accompanying empirical studies (in a North American context) produce rather doubtful results. It is found, on the one hand, that business growth in smaller communities depends on population development (McGranahan 1984). But on the other hand, local development organisations are seen to attract firms but not new population (Krannich and Humphrey 1983). Consequently, the creation of a positive dynamic is hampered. In addition, small remote towns with under 2,500 inhabitants are found to lack the necessary resources to initiate a process of endogenous growth (Daniels and

Lapping 1987) and the identification of possible growth centres by the administration poses great difficulties. Therefore, respective growth pole concepts were discredited over time (Irwin et al. 2010).

6. In Germany, for example, a recent study demonstrated that, in many cases, non-regional policies are nevertheless spatially effective and that they particularly strengthen favoured agglomerated regions (Lichtblau and Lutzky 2009).
7. In 1996, the Cork declaration stated that "[t]he emphasis must be on participation and a 'bottom up' approach, which harnesses the creativity and solidarity of rural communities. Rural development must be local and community-driven within a coherent European framework." Under the title "Towards an integrated Rural Development Policy" the Cork declaration was issued at the rural development conference "Rural Europe—Future Perspectives," organised in Cork from 7 to 9 November 1996 under the Irish presidency of the Europe Union. It was published in the LEADER magazine 1–2 (http://ec.europa.eu/agriculture/rur/leader2/dossier_p/en/dossier/cork.pdf).
8. The chapter deals with theories that are explicitly concerned with economic activity in space. Only these theories could potentially guide the design of policies for rural areas. Other models, such as (spatial) computable general equilibrium models ((S)CGEs), are applied in order to analyse the impact of regional policies. They capture regional specificities within detailed sets of parameter values and functional forms. Nevertheless, a major problem with CGE models is the lack of guidance on which features are needed, given the policy question and the regional characteristics at hand (Partridge and Rickman 2010). Accordingly, they do not provide for a generalisation of spatial characteristics and their impact on economic development. Just such a generalisation is a precondition for the rigorous justification of rural policies.
9. There are also empirical studies that test the hypothesis of positive external effects of production on efficiency. Ciccone and Hall (1996), after analysing the relation between density of economic activity and labour productivity at state level in the U.S., conclude that "[o]ur empirical work also suggests that rising density over time may be an important factor in growth." Applied economists, regional planners, and politicians have picked up respective ideas. For example, the Swiss Federal Law on Regional Policy (Bundesgesetz über Regionalpolitik vom 6. Oktober 2006) states, as one of five fundamental principles, that regional centres are to act as motors for development ("Die regionalen Zentren bilden die Entwicklungsmotoren"). In Germany, the frame of action for regional policy (Raumordnungspolitischer Handlungsrahmen, 1995) states that, "Metropolitan areas are motors of the economic, social and cultural development of international relevance and accessibility" ("Motoren der wirtschaftlichen, sozialen und kulturellen Entwicklung mit internationaler Bedeutung und Erreichbarkeit"). In the German Regional Development Report 2005 (Raumordnungsbericht 2005), the necessity for a growth-oriented policy for regional development is stressed, which should be concentrated at existing regional growth poles. At the international level, the World Development Report 2009, from the World Bank, stresses the importance of positive general agglomeration effects. Rather than propagating the re-localisation of industries to remote areas, a further support of agglomeration is proposed: "For policy makers the challenge is to best relax the constraints generated by the congestion and overcrowding of land and resources so that the benefits of agglomeration can be maximized." They describe possible diseconomies to scale, only to conclude: "But restricting the growth of cities is not the answer. There is no evidence that the agglomeration economies of megacities have been exhausted" (World Bank 2009: 144).

10. If the idea of positive external effects due to knowledge spillover effects is combined with Krugman-type models of the NEG, it can be shown that "the additional growth spurred by agglomeration may lead to a Pareto-dominant outcome such that, when the economy moves from dispersion to agglomeration, innovation follows a much faster pace. As a consequence, even those who stay put in the periphery are better off than under dispersion, provided that the growth effect triggered by the agglomeration is strong enough" (Fujita and Thisse 2003: 121). The authors add that this result does not require any transfers. On the other hand, according to the authors' results, the growing wealth does not imply convergence.
11. The neoclassical growth and comparative advantage theories rely on different mechanisms. The process of trade partially compensates regions with differing comparative advantage for their resource base. In neoclassical growth theory, on the other hand, decreasing returns to capital set incentives for investment in regions with a low capital–labour ratio, which implies induced structural change.
12. Some later examples of analysis in the strategic competition framework challenged the Hotelling results and predicted more elaborate patterns in space (d'Aspremont, Gabszewicz, and Thisse 1979). Others have discussed the possibility of strategic pre-emption in space (Eaton and Lipsey 1979).
13. The importance of strategic aspects in endogenous development has been recognised by Johnson (2001), see Section 3.2.2.
14. NEG models apply this positive market-size effect by formally including monopolistic competition (Krugman 1991).
15. Free entry and exit, for example, regularly undermine strategic coordination mechanisms, as in the competition on quantities in oligopolistic models (see Kreps and Scheinkman 1983). Relevant literature has also stressed the significance of the potential for exclusion from participation in networks, as opposed to agglomerations (Johansson and Quigley 2004). This argument is in line with the findings that "community and industry organisations, such as chambers of commerce," can play a role "in establishing efficient networks," if firms do not coordinate their activities otherwise (Kranton and Minehart 2001: 500).
16. Boschma and Lambooy's (2002) analysis of the dynamics of industrial districts is exemplary in this respect.
17. Examples are "fostering inter-firm networks," "nurturing trust and voice-based mechanisms," and "promoting a cultural disposition which sets a premium on finding joint solutions to common problems" (Morgan 1997: 501), described in the context of the concept of "learning regions." A solid economic basis is necessary as learning regions build upon the existence of manufacturing and services of different kinds in order to "embed existing foreign plants, promote more robust linkages between these plants and indigenous firms, and helps to disseminate 'best practice' throughout the regional economy" (Morgan 1997: 501). Morgan stresses that projects created according to the concept may not create many new jobs but rather help preserve existing jobs (ibid.).
18. This type of regional policy was quite successful in the past. Consequently, convergence was expected for many regions in the later decades of the twentieth century (Seitz 1995), while the development was often based on external decision structures and imported innovations.
19. The preferability of a promotion of easy access to open local markets arises according to models of the traditional type and because the competitiveness of regions and firms is supported by strong

local competition (Porter 1998a). Local coordination might provide a "road to competitiveness" (Hudson 1999) but it could also enable collusion and thereby reduce general competition (Overgaard and Møllgaard 2008).

20. Because of the mechanisms that are described by theories on non-cooperative coordination, even seemingly successful cooperative solutions might suffer from dynamic instability as Boschma and Lambooy (2002) have shown with respect to industrial districts. Possible unintended side effects of the support of local coordination when individual interests are not considered can be derived from literature on strategic interaction and networks. One example is the undesired selective support of less-competitive industries, since stable networks of producers and firms seldom evolve in highly competitive markets (Combes and Duranton 2006). A similar adverse effect may also affect the structure of specific local industries, since even networks of initially similar enterprises might possibly strengthen key firms and thereby contribute to widening asymmetries in the distribution of firm sizes (Goyal and Joshi 2003). Network analysis principally shows that cooperation due to social embeddedness is only probable with a low level of economic complexity (Kali 2003). With growing complexity, coordination by intermediaries gains importance for information processing and the enforcement of cooperative behaviour. However, the optimal institutional structure is difficult to find since the most effective networks might be characterised by problems of democratic legitimacy (Li 2003). At the same time, network structures significantly relate to their outcome (Bodin and Crona 2009).

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