Endogenous approaches to local and regional development policy

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Definition and genesis of the concept

Indigenous and endogenous approaches to local and regional development policy were introduced in the late 1970s and have become prominent since then both in advanced economies and in developing countries (see e.g. Stöhr 1990, Garofoli 1992, OECD 2003, Pike et al. 2006, Vázquez-Barquero 2006). They are based on the idea that local and regional development should be driven in a bottom-up manner by indigenous and endogenous forces and factors. There is a certain difference, however no clear borderline, between indigenous and endogenous development concepts. Pike et al. (2006: 155) refer to indigenous development as being based upon naturally occurring and/or socially produced sources of economic potential growing from within localities and regions. They regard indigenous approaches as a means of nurturing such 'home-grown' assets and resources that may be more locally and regionally embedded, more committed and more capable of making enduring contributions to local and regional development. Such resources and factors include land, natural resources, the resident local labour force, historically rooted skills, and local entrepreneurship. Endogenous approaches are more broadly defined in comparison, referring to those that focus more on internal factors and processes of local and regional development instead of external ones (Stöhr 1990). Included here are also factors which are intentionally created or upgraded by policy makers and related institutions, such as infrastructure investments, schools, training organisations, universities and research organisations. Created endogenous factors, thus, refer to a highly educated workforce, and to knowledge and technologies developed in the region, which might lead to new products, processes or other new solutions. Endogenous forces include also social and political factors such as the engagement of social agents and civil society which trigger processes of self-help, local initiatives, and social movements aiming at the improvement of living conditions in a particular region. Due to the strong role of local forces and factors, such a development strategy has often also been called the “bottom-up approach”. This refers to the idea that regional development is initiated and carried by local and regional actors and agents instead of central government or external agencies, and that it is oriented to the needs and objectives of the regional population.
In endogenous development various spatial levels and respective institutions play a role. The focus is on the local and regional levels where specific processes, institutions and agents are the key driving forces. At the local level we often find entrepreneurial processes, economic and social initiatives and movements, whereas at the regional level activities of regional government and associations, official programmes for (endogenous) economic development, cluster initiatives and innovation support including university–industry relationships may be identified. Endogenous local and regional development also depends, however, to a considerable extent also on national political and institutional structures (e.g. policy competences of regions, national economic policies), macro-regional conditions and institutions (e.g. EU regional policies and structural funds), and also on global regimes and institutions (e.g. trade regimes and related institutions).

Endogenous approaches to local and regional development have evolved as a counterthesis to previous regional development approaches for less developed areas which have strongly emphasised external factors such as interregional trade (exports, imports) or the mobility of capital (firms), labour and technology between regions and countries. More specifically, endogenous regional development strategies were formulated as a response to often unsuccessful policies of the 1960s and 1970s which were strongly based on factors such as external demand (export base theory, trade theory), the attraction of leading international firms and technology to growth centres (growth pole theory), and the mobility of capital and labour between economically strong and weak regions (neoclassical growth theory). This previous external development paradigm has also been called “top–down regional development approach” (Stöhr and Taylor 1981) because it was often designed and implemented by central government or external agencies. A number of critical reviews and studies have pointed out that those external strategies had not been very effective for improving the economic situation of less developed and peripheral regions and countries (Stöhr and Tödtling 1977, Stöhr and Taylor 1981). In particular, the gap to the economically leading regions, i.e. the core areas, could often not be reduced. A number of critical points had been raised regarding the external regional development paradigm. The first was that due to the strong orientation on external demand and on specific comparative advantages of respective regions only a small share of regional factors had been mobilised and used in previous development policies. In particular specific natural resources, tourist sites and low-cost labour had been exploited in less developed regions and countries, whereas other factors and potentials such as qualified labour, specific skills and competences had been rather neglected. Then, a key strategy had been the attraction of external firms and of branch plants. This, however, had benefited often central locations or growth centres in those regions, and there were few economic spillovers to less developed areas. If these existed, they took the form mainly of labour commuting to the centres and the dispersal of branch plants to the hinterland, less through input–output linkages and technology diffusion to peripheral regions. Furthermore, the branch plants have lacked usually higher level functions such as office and managerial activities, R&D and innovation offering only low-quality jobs with few prospects of upward mobility for workers and employees. Then, the potential of mobile plants to locate in less developed regions had been reduced due to an increasing globalisation of the economy. New locations for multinational companies had been coming up in emerging economies such as South East Asia and Latin America as well as in Eastern Europe, offering abundant cheap labour as well as prospects for a high market growth. As a consequence, firms have been setting up new subsidiaries or branch plants in those new locations, and less so in backward regions of advanced countries.
A related problem was that the focus on branch plants in such external strategies did not raise the entrepreneurial potential and the innovation capability of less developed regions to a notable extent. As a consequence, there were few start-ups and a lack of innovations, in particular as regards new products. Last but not least, the external strategies often have deteriorated the environmental situation in the respective regions because ecological and sustainability aspects had not been taken into account.

As a reaction to these problems, scholars and policy observers since the 1980s were looking for new approaches for local and regional development. Policies in many advanced and developing countries were shifting subsequently more towards endogenous concepts. These were not based on a consistent new theory, but were defined rather as a counter-thesis to the external approach. The following elements and characteristics have been pointed out for such a new orientation (Stöhr and Tödtling 1977, Stöhr 1990, Garofoli 1992, Vazquez-Barquero 2006, Pike et al. 2006):

i) It was argued that regional economic development should take a long-term perspective and harmonise economic, social and environmental goals (Stöhr and Tödtling 1977, Morgan 2004). Economic growth, thus, should not only enhance regional production and average per capita income, but also improve the broader socio-economic situation, including the living conditions for the poor. Furthermore, it should not deteriorate the environmental and ecological situation of the region, an idea which more recently has been introduced as “sustainable regional development”.

ii) Strategies were based to a higher degree on the mobilisation of endogenous regional factors and potentials, instead of external and mobile ones. Endogenous potentials were seen to exist in particular in natural resources, landscapes and tourist sites, qualified labour and specific skills or competences of the respective regions. Porter (1990, 1998) more recently has pointed out in this context that such factors and potentials are not just “given” but can be created or upgraded through a long-term goal-oriented public policy as well as through corporate initiatives and actions.

iii) It was also argued that other sectors than manufacturing, such as agriculture, craft-based industries, tourism and other services, should be included in development strategies. The intention was to formulate integrated concepts trying to interrelate different but complementary sectors. This has included, the strengthening of input-output linkages and other relationships between those various sectors. Examples are complementarities and interrelations between agriculture, tourism and craft-based activities in rural and peripheral regions.

iv) Then, more attention has been given to the development problems and growth potentials of incumbent small firms as well as a stronger focus on entrepreneurship and new firm formation. This was due to the fact that less developed regions often had high shares of small and medium-sized firms in traditional sectors which did not benefit from the top-down strategies. The formation of new firms, on the other hand, was seen as key for generating growth and renewal in those regions.

v) Innovation has received a more prominent role than in the top-down approaches. Innovation was broadly defined, including technological, business and social innovations. The intention was to escape cost competition from low-wage countries through a
high quality of products and processes. Innovation, however, was also aimed at the solution of broader social and other problems and not confined to technology aspects of companies only.

vi) Regional specificities in culture, local demand and economic structure were regarded as relevant contexts and factors to be taken into account. Such peculiar local and regional characteristics cannot easily be copied by competitors, and are therefore seen as a source of unique competitive advantages for regional firms. In this context a certain level of “regional identity” was seen as a favouring factor for regional development. In business this took the form of branding of regional products, and of using new ways of marketing such as direct selling (e.g. of agricultural or handicraft products).

vii) Beyond narrow economic factors, social and political forces were pointed out to be relevant for local and regional development. This includes activities of social agents and the engagement of civil society triggering and supporting processes of self-help, local initiatives, and social movements aiming at the improvement of living conditions in particular regions. Decentralised decision making and policy competences at the local and regional levels were seen as favourable for economic development since it was assumed that there was a better understanding of problems, barriers and potentials for regional development at those lower levels and since it allowed a fine tuning of development strategies to the needs and goals of the regional population.

Endogenous approaches to local and regional development are based on bottom-up processes, initiated and carried out by local and regional actors, influenced and shaped by local and regional institutions and policy (Cooke and Morgan 1998). Space in this context is conceived as “territory”, representing the clustering of social and economic relations, and having specific cultural and other features (Garofoli 1992). These relations and institutions lead to specific patterns of local and regional development or to different “worlds of production” (Storper 1997) instead of a uniform development model. Endogenous approaches to local and regional development, thus, take account of and build upon economic, social and institutional particularities in geographical space.

Key mechanisms for generating such a bottom-up process are development initiatives started and implemented by local and regional actors, using mainly regional resources and aiming at regional benefits (OECD 2003). They respond to the needs of the regional population and are created and controlled by individuals and groups of the respective community. Central objectives are often the creation of viable and worthwhile employment or the improvement of regional living conditions. An underlying hypothesis of this approach is that the basic prerequisites of development — initiatives and entrepreneurship — are available or latent in most regions. Actions initiated at the local and regional levels are seen to have several advantages compared to central or top-down approaches such as a direct problem perception, a high intensity of interaction, regional synergies, regional strategy formulation, and collective learning within regional networks.

It should become clear, however, that regional development is never the result of endogenous forces only. It is always the outcome of both endogenous and exogenous factors and processes, and their interaction. This leads to a plurality of development paths and of development models, partly also due to the effects of different economic policies. Furthermore, individual regions have a different capacity for endogenous development and therefore a differentiated need for central
or external development inputs and efforts. It is a kind of paradox that peripheral and disadvantaged regions, which were often the target of endogenous regional development strategies, have a rather low potential for such strategies and require more external resources and support for triggering a dynamic regional development (Hadjimichalis and Papamichos 1991).

Specific routes of endogenous local and regional development

Endogenous approaches to local and regional development were inspired by and further developed since the 1980s in related concepts such as industrial districts, local entrepreneurship, regional learning and regional innovation systems. First, studies on industrial districts such as “Third Italy” (e.g. Emilia Romana, Toscana, Veneto), Baden-Württemberg and other regions of Europe (Garofoli 1991, Cooke and Morgan 1998, Asheim 2000, Amin 2003) have advanced the concept of endogenous local and regional development. These districts were often specialised in traditional sectors such as textiles and clothing, leather and shoes, furniture, and machinery, and they were characterised by competitive small firms, entrepreneurship and flexible specialisation. Although these firms have often been competing fiercely, they have also maintained cooperative links and subcontracting relations at the local and regional levels. It has been demonstrated that firms in such districts were strongly embedded into the respective local and regional economies through input–output links, knowledge exchange and collective learning, and various kinds of social relationships such as family ties, relations to local unions and other interest groups. There were also elements of collective action, institutions and of policy support, such as the provision of services in the fields of R&D, product development, technology upgrading, sales and distribution, and marketing. Due to an ongoing process of globalisation, however, local and regional relationships have been substituted by global market links and by production relocations to low-wage countries.

Industrial districts were often regarded as a role model for endogenous local and regional development, since they combined several relevant elements: local entrepreneurship, indigenous small firms in traditional sectors, competing successfully on the world market through a high quality of products, incremental product innovation and continuous upgrading of technology, cooperation with customers and suppliers (vertical) and competitors (horizontal), as well as collective action and policy support at the local level. As a consequence, they were copied by policymakers in many regions across the world, even if the respective qualities such as a certain entrepreneurial potential, social capital and trust as preconditions for cooperation, and supporting institutions did not exist in many localities and regions (Storper et al. 1998). Furthermore, industrial districts have been strongly challenged by the emerging economies in Asia, Latin America and in Eastern Europe, which have been catching up rapidly in some of these sectors. Industrial districts and their firms have reacted in various ways to this challenge: some have been relocating production activities abroad to low-cost countries, whereas others have undergone a process of mergers and takeovers by incoming foreign firms hollowing out the original model. Another strategy was the upgrading towards high-end product segments or towards activities such as design, R&D and marketing. The literature on industrial districts, thus, has demonstrated some key problems and issues of endogenous regional development. First, only a few regions have really good preconditions for an endogenous development route and strategy. Second, even regions showing good conditions are continuously challenged by globalisation and changing external conditions such as new competitors, and the change of markets and technologies. Third, due to these
challenges, external factors and strategies of
development are increasingly used and com-
bined with endogenous elements. In this
process, endogenous and external factors
become more and more interrelated and
inserted into complex and multi-scalar webs
of social and economic interdependencies
(Amin 2004, McLeod and Jones 2007, Pike
2007).

Endogenous approaches to local and
regional development policy have since the
1990s also been stimulated by research and
policies of local entrepreneurship (Malecki
1994, Reynolds et al. 1994, Acs and Storey
is a key element in endogenous policy
approaches because new firms usually origi-
nate from the region, they use local talent
and labour, and have more local and regional
input–output and knowledge links than
external firms. Furthermore, they have their
management and other key functions within
the region. They, thus, are often strongly
embedded in local social and economic net-
works. There have been a number of studies
on local conditions and regional differences
of entrepreneurship and new firm formation,
effects on local and regional development in
terms of employment and economic growth,
barriers for the setting up of new firms, and
related policies and their results. This research
also shows the limits of the entrepreneurship
approach to local and regional development.
In particular less favoured regions have usu-
ally a limited entrepreneurial potential and
there are many other barriers (Fritsch 1992,
Reynolds et al. 1994, Armington and Acs
2002, Tödtling and Wanzenböck 2003). Furth-
more, effects on local and regional development in
terms of employment generation and economic growth remain often
small, due to the small size and slow growth of
many such companies. More recently local
entrepreneurship has received strong attention
in approaches to the regional knowledge
economy (Keeble et al. 2000, Cooke
et al. 2007, Julien 2007). In these studies and
respective policies local spin–offs from uni-
versities and research organisations, venture
capital and the mobility of highly qualified
people within the local labour market are
put into the centre. Policy experiences
regarding local entrepreneurship are summa-
rised in OECD (2003) and OECD (2007). It
has been pointed out that enterprise promo-
tion as a local development strategy can be a
critical component of a development strat-
egy, but it does not constitute a development
panacea. It favours those individuals who
possess human capital, financial and other
assets, and it cannot address all problems of
disadvantaged regions. It also needs an
extended time horizon of such policies to be
successful.

Regional learning has been another route
of endogenous local and regional develop-
ment (Morgan 1997, Lundvall and Borràs
1998, Rutten and Boekema 2007). The cen-
tral argument here is that globalisation
increasingly challenges local and regional
economies through rapid shifts of markets,
production and technologies requiring fast
adjustments. Furthermore, in a world of
modern information and communication
technologies and global flows of codified
knowledge, the sources of competitive advan-
tages become increasingly rooted in unique
local competences, skills and tacit knowledge
(Malmberg and Maskell 1999). Informal
relationships and “untraded interdependen-
cies” (Storper 1995) are key for the exchange
of such local competences and skills. There
are some preconditions for local learning,
however, such as a common understanding
of problems and issues, or the existence of
trust for engaging in networks and know-
ledge exchange. As in the case of entrepre-
neurship such conditions cannot be found
in every region (see Storper et al. (1998)
for learning problems in the case of “late
comers in the global economy”). Regional
learning is strongly related to endogenous
regional development since it builds on local
competencies and skills, and the sharing of
knowledge and of best practices. Regional learning approaches aim at a collective enhancement of know-how, and an upgrading of practices and technologies as has been demonstrated for selected industrial districts, clusters and in innovative milieux. Key mechanisms of regional learning are the mobility of qualified labour, knowledge exchange through cooperation and informal networks, and the setting up of spin-off companies. A certain limitation of local learning as a regional development strategy is that it often leads to incremental innovation only, less often to more radical innovations (Cooke et al. 2007). This tends to keep firms on their existing technology paths and runs the risk of leading to “lock-in” (Grabher 1993, Hassink and Shin 2005).

Finally, ideas of endogenous local and regional development show up in innovation approaches such as regional innovation systems and policies (Cooke et al. 2000, Doloreux 2003, Tödtling and Tripl 2005, Nauwelaers and Wintjes 2008). Here, innovations such as new products, processes or organisational practices are regarded as key drivers of local and regional development. These are often based on local knowledge or competencies. Key endogenous actors in regional innovation systems are R&D performing and innovating firms, universities, research organisations, and education institutions. Also, organisations for knowledge transfer, innovation finance and support organisations have an important role to play. Like in industrial districts and in regional learning an intensive interaction between firms (knowledge exploitation) and research organisations (knowledge generation) is seen to be required for a good performance. However, it should be pointed out that regional innovation systems are not only relying on endogenous actors and institutions. They are highly open and often multi-level systems, strongly related to the respective national innovation system as well as to international firms and institutions. Regional innovation policies cannot be of a “one-size-fits-all” type for every region (Tödtling and Tripl 2005). In particular core regions and large cities often have better conditions for innovation, whereas less favoured regions frequently have severe constraints and regional innovation system deficits. Peripheral regions are often lacking industry clusters and organisations of knowledge generation and education (universities and research organisations). Their economies are based on SMEs facing many innovation barriers (Asheim et al. 2003). Old industrial areas on the other hand have industrial clusters as well as universities, schools and R&D organisations. However, these organisations and institutions are oriented on old clusters and technologies, and often re-enforce problems of lock-in. This implies that “endogenous” innovation strategies take different routes in distinctive regions since they have to be tailored to the specific innovation problems and barriers of such regions.

Endogenous local and regional development concepts have been applied in a number of policy programmes and development initiatives, supported by international organisations such as OECD, ILO and the European Commission. Examples are the LEADER and RIS/RITTS programmes for regions of the EU or the LEED programme by the OECD. Key ideas of this approach have also been integrated into the recent report regarding a reform agenda of the EU cohesion policy (Barca 2009). The concept has been promoted also by ECLA (Economic Commission for Latin America) in South America and has been applied in countries such as Guatemala, Costa Rica, Venezuela and Brazil. In Asia it was taken up by countries such as India and Pakistan. In most of these more recent approaches there is more emphasis on entrepreneurship, innovation and regional learning compared to earlier versions of endogenous development. Furthermore these more recent policy models take more account of global–local and multi-scalar
interactions and linkages, and depart from ideas of self-reliance or regional autonomy.

**Conclusions**

Endogenous approaches to local and regional development have come up since the late 1970s as a counter-thesis to the external regional development paradigm. Core ideas and elements are the understanding of development as a bottom-up process, a key role of local and regional actors and initiatives, including social agents and civil society, a high importance of decision-making functions, as well as of policy competences and institutions at local and regional levels. It is conceived as an integrated approach taking account of sector- and other socio-economic interdependencies, and it has an emphasis on ecological aspects and on a sustainable use of natural and other resources.

Endogenous local and regional development policy was inspired by related concepts such as industrial districts, regional learning and innovation systems. These have partly distinct features and elements as was pointed out. However, they also share common elements characterising them as endogenous development. Such common elements are the search for local and regional specificities, uniqueness and identity also as a source of competitive advantages for firms, a key role of local and regional institutions, social capital and networks, a high importance of entrepreneurship and innovation, and the view that learning and innovation are, despite globalisation and modern information and communication technologies, to a high degree local processes, based on localised tacit knowledge and its exchange.

Endogenous local and regional development, thus, can be regarded as a stimulating and influential concept evolving since the 1980s. It has responded to the problems and limits of a one-sided top-down or external development approach. It has brought attention to indigenous and endogenous forces and factors, including social and political processes, and it has emphasised the key role of local initiatives, entrepreneurship and innovation. It has prepared, thus, the ground for more recent concepts such as the fostering of entrepreneurship, regional learning and innovation. However, we should not overlook the weaknesses and limits of the endogenous development concept. It has been formulated too much as a “counter-concept” against the then prevailing top-down model and was lacking coherence as a theory of its own. It has focused initially too strongly on endogenous factors and actors, neglecting the fact that successful regional development is usually the result of both endogenous forces and external factors such as mobile capital, technologies, talent and knowledge. Basically, the concept of endogenous regional development has more or less tried to promote “islands of development” in a world of increasing social and economic interdependencies at all spatial levels. As a consequence it stands in stark contrast with and is challenged by recent, more unbound and relational approaches of economic geography.

Due to ongoing processes of European integration and globalisation, regions and countries are nowadays highly open systems with ever-increasing external flows of goods, services, finance and capital, people and knowledge. Furthermore, institutions and policies for economic development and innovation are increasingly characterised by multi-level governance, where regional actors and institutions are inserted in and strongly related to national and international (e.g. EU) levels and institutions. This was shown, for example, for Europe in recent studies on the role of Structural Funds and on regional innovation systems. Under such conditions endogenous regional development had to take new routes such as regional entrepreneurship and learning, and regional innovation policy. We have to be aware, however, that these newer variants are not applicable to all kinds of situations. Like the original model of endogenous regional
development they tend to work better in already successful locations and regions, thus further increasing the gap to those at the bottom of the league.

References


Further reading

On the concept and applications of endogenous development

On industrial districts as a model of local and regional development

On the role of formal and informal institutions for local and regional development

For a review on entrepreneurship and regional development
On the role and preconditions of learning in local and regional economies


On innovation policies and regional development
