Regional Cluster Policies: Learning by Comparing?

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I. INTRODUCTION

Over the past ten years the concept of regional clustering has gained much popularity in business, government and the academic world. In general, geographically concentrated cooperation is viewed as an organisational survival strategy in today’s intensely competitive business environment. Some authors even suggest that regional clustering is part of a new industrial order (‘alliance capitalism’), in which competitiveness depends on the continuous collaboration of organisations with external sources of knowledge (Best 1990, Dunning 1997, Dicken 1998, Porter 1998). Hence, the paradoxical situation has come into being that nowadays firms have to cooperate in order to remain competitive. Success stories of regional clusters, in which competition and cooperation coexist with an innovating economy, show that firms are able to solve the paradox. Illustrations of this can be found in regions such as Emilia-Romagna (Italy), Baden-Württemberg (Germany) and Silicon Valley (US). Inspired by these classic examples, researchers have tried to identify similar cases in a variety of regions across the world, among others Cambridgeshire (UK), Route 128 (US), Sophia Antipolis (France), Wales (UK), Basque Country (Spain), Toyota City (Japan), Sinos Valley (Brazil), Daegu (Korea), Silicon Glen (Scotland), Flanders Language Valley (Belgium) and Bavaria Valley (Germany).

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1. Regional Clustering

In spite of its current popularity, regional clustering is not new. For example, the textile industries in the Dutch regions of Twente and North Brabant of the 19th century derived much of their competitiveness from the well-developed cooperation of producers with suppliers of machines and transport facilities (Mokyr 1976). What is new, however, is both the aim and the complexity of modern cooperative efforts. Often, they are aimed at collaborative research and development (R&D) needed for the realisation of innovations. The technology-based aim of clustering involves a complex interplay of different local parties (e.g., firms, universities and business associations) that provide each other with complementary knowledge. This kind of cooperation has led to the emergence of regional clusters, being geographically concentrated networks and value chains of suppliers, customers and/or knowledge institutes with the aim of developing innovations (OECD 1999). In reality, regional clusters are rather complex cooperatives. Each cluster is composed of several parties (for instance firms and public organisations) and must be understood as a combination of different dimensions (Jacobs and De Man 1996). Examples of such cluster dimensions are the geographical dimension (on which geographical scale does the cluster operate?), the vertical dimension (what supplier-customer chains can be identified in the cluster?) and the horizontal dimension (are there competitors cooperating in the cluster?).

2. Regional Cluster Policy

Regional clusters often emerge in the market spontaneously without much government intervention. A well-known example of a mainly market-induced clustering process is that of the watchmaking cluster in the Swiss Jura Arc (Maillat 1995a). The emergence of this cluster is not due to public policy, but can be related to the existence of a centuries-old tradition of producing watches in this region. Nevertheless, in an increasing number of OECD-countries governments actively pursue cluster-based policy as a means to foster regional economic development (Lagendijk 1999, OECD 1999, OECD 2000). Regional cluster policy refers to all those efforts of government to develop and support clusters in a particular region.

When browsing through national and regional policy documents and innovation-based programs one striking point immediately emerges: governments continuously stress the importance of regional clustering as a means to dynam-
ize firms and guarantee a high-technology economic future\textsuperscript{1}. Policy initiatives range from performing cluster studies, setting up platforms for dialogue, providing subsidies for cooperation and establishing brokering and networking schemes. Besides policies at the national and regional level, there are also supranational programs promoting regional clustering. Examples are the Regional Innovation Strategies (RIS)-program of the European Commission and the OECD’s Focus Group on Clusters, whose task has become mapping the multitude of cluster-based initiatives of its member countries. Regional cluster policy can be seen as part of a new ‘heterodox’ economic policy framework in which significant dimensions of economic policy at large are being reformulated in terms of regional policy (Storper and Scott 1995). This explains why cluster policy can be hardly isolated from other policy areas. Public initiatives in the field of clustering can be found under several headings in documents and statistics, such as industrial policy, science and technology policy and regional development policy. Therefore, despite of all subsidy and other public support programs, it is difficult, not to say impossible, to assess how many governmental resources are actually invested in regional clustering.

The popularity of regional cluster policy has led to a strong interest among policy makers in comparing or even benchmarking regional cluster policies (CPB 1997, OECD 1999). By identifying and mapping ‘best practices’, authorities hope to learn from the experiences of their colleagues elsewhere. Comparing public policy is viewed as a useful activity, as:

‘The foreign economy may act as a mirror, which enables policy makers to take a fresh look at current domestic practices and institutions, to reappraise their strong points and to think of ways to improve their imperfections’ (CPB 1997, p. 2).

Contrary to the interest governments have in pursuing and comparing cluster policies, little attention has been paid to the theoretical issues which may arise in this respect. How can regional cluster policies be compared and what can policy makers actually learn from this comparison? The present paper is a first step to answer this question. Instead of just discussing well-known examples we try to offer a more general analysis on lesson-drawing in regional clustering and cluster policy. Readers who are interested in specific case studies, such as those on Emilia-Romagna, Silicon Valley and Baden-Württemberg, can draw on an impressive amount of literature (see, for example, Best 1990, Hassink

\textsuperscript{1} It is beyond the scope of this paper to mention all the cluster initiatives that governments undertake at present. For a list of countries and organizations developing such initiatives, see OECD (2000).

3. Outline of the Paper

The paper is organised as follows. Section II deals with the arguments and examples that are regularly found in the literature on regional clustering and cluster policy. In Section III we turn to the ‘contingencies’ of lesson-drawing, being the preconditions that affect whether a policy initiative can be transferred from one place to another. We will see that in particular an area’s structural and cultural specificities may hamper the possibilities of learning by comparing. In Section IV and V it is argued that exactly those specificities play an important role in explaining the success of regional clustering and, thus, that the possibilities of lesson-drawing are rather limited. The concluding Section discusses the implications of our rather pessimistic finding for the agenda of policy makers and researchers.

II. REGIONAL CLUSTER POLICY: LOGIC OR RETHORIC?

Regional clustering increasingly seems to act as a ‘mantra’ for policy makers who want to stimulate regional economic development. In particular the work of well-known authors such as Porter and Krugman has contributed to the popularity of this mantra. In this section, we summarize the main arguments for the case of regional clustering and cluster policy.

1. Michael Porter: Clustering for Competitiveness

Often, the American business economist Michael Porter is seen as the founding father of the cluster concept. In particular his book *The Competitive Advantage of Nations* (1990) inspired policy makers all over the world to adopt cluster-based policies. In his more recent work *On Competition* Porter (1998) explicitly stresses the importance of clustering to realise national competitive advantage. The author gives the following definition of a cluster:

‘A cluster is a geographically proximate group of interconnected companies and associated institutions in a particular field, linked by commonalities and complementarities’ (Porter 1998, p. 199).
Porter (1998) argues that clusters stimulate the competitiveness of firms, regions and nations in three different ways. First, participating in a cluster allows firms to operate more productively. They have a better access to means needed for carrying out their activities, such as technology, information, inputs, customers and channels, than they would have when operating in isolation. Second, this easier access will not only enhance the participants’ productivity, but also their ability to innovate. Third, an existing cluster may provide a sound base for new business formation, as its relationships and institutions will confront entrepreneurs with lower barriers of entry than they will meet elsewhere.

According to Porter, government has an important role to play in clustering. Public policy may be needed to upgrade an existing cluster or to develop a cluster in its infancy. Obstacles, constraints and inefficiencies in an existing cluster may hamper its development and innovative capacity. In such a case, public intervention to ‘upgrade’ the cluster may be a useful activity.

2. *Industrial District Theory: Agglomeration Economies*

Although Porter often gets the credit for having ‘invented’ the cluster concept, the notion of clustering goes back to Alfred Marshall. He used the term ‘industrial district’ to describe the structure of the cutlery industry in Sheffield and surroundings in his famous handbook *Principles of Economics* (1890). About a hundred years after Marshall, Piore and Sabel (1984), Best (1990) as well as Krugman (1991) revitalized the ‘industrial district’ concept. Among economists, especially Krugman’s work has attracted attention, because he formalised Marshall’s original ideas on regional clustering.

The development of geographically concentrated clusters, that Marshall called ‘industrial districts’, can be explained by three factors: specialised labour, specialised intermediate inputs and knowledge spillovers (Krugman 1991). To start, firms are attracted to a particular location by a labour market with highly skilled workers. These workers do not only possess specialised technical skills, but also knowledge about people and their activities in the district. Furthermore, location near a pool of specialised intermediate inputs can provide the firm with equipment, tools, technologies and services from supporting industries. Finally, firms can absorb knowledge spillovers in an industrial district, because it is assumed to be easier to realise information exchange within the same location than over great distances. While exchanging specialised inputs, labour and knowledge, firms within the district can learn from each other. Thus, they can profit by ‘agglomeration economies’. Once established, these externalities tend to follow a certain path in time developing through a
process of increasing returns. This pattern of cumulative causation has been called ‘path dependency’ (Krugman 1991).

Though firms should be highly motivated to exploit the positive externalities of cooperation, it is argued that ‘market failures’ may prevent companies to devote as many resources to clustering as would be socially optimal (see, for instance, Veugelers 1998). Apart from uncertainty and a lack of economies of scale, particularly the fear a firm will have for free riding by other parties to which its knowledge will leak out (‘spill over’) is seen as a barrier to cooperation. Here, corrective public intervention may be needed. By pursuing cluster policy, government may correct some of the market failures.

3. Learning Regions, Innovative Milieus and Innovation Systems

Recently, regional cluster policy has also been defended by concepts like ‘learning regions’, ‘innovative milieus’ and ‘regional innovation systems’. These concepts subscribe to the view that clustering may be an important tool to improve a region’s knowledge base and innovativeness. The idea of a ‘learning region’ stresses learning as a key factor of regional competitiveness (Florida 1995, Morgan 1997). Florida (1995) defines such regions in a functional way:

‘These learning regions function as collectors and repositories of knowledge and ideas, and provide an underlying environment of infrastructure which facilitates the flow of knowledge, ideas and learning’ (Florida 1995, p. 527).

An approach that resembles that of the learning region is the ‘innovative milieu’ approach (Maillat 1995b, Malmberg et al. 1996). The authors last mentioned identify three characteristics of an innovative milieu. First, local actors like firms and institutions are relatively autonomous in terms of decision making and strategy formulation. Their interaction contains an element of both cooperation and rivalry. Second, the local milieu is characterized by a specific set of material elements (infrastructure), immaterial factors (knowledge) and institutional arrangements (legal framework). All of these elements make up a complex web of relations within the innovative milieu. Third, the interaction leads to collective learning processes and improves the ability of actors to cope with the dynamics of their environment.

The idea of ‘regional innovation systems’ is related to the innovative milieu approach. Authors working in this field regard innovation as a geographically concentrated cumulative, interactive and learning process (Cooke et al. 1998, De La Mothe and Paquet 1998). For the development of innovations firms need
various private and public organisations in their neighbourhood. Together, these market and non-market parties constitute a regional system of innovation. If there are mismatches between its parts (e.g., a lack of cooperation between firms and universities), the system performs below its potential and regional cluster policy may be needed to correct these so-called ‘system failures’.

4. ‘Best Practices’ of Regional Cluster Policy

In rationalising policy efforts towards regional clustering governments frequently refer to success stories of clustering in other countries. In a number of places across the world cluster policies have been pursued over the years, for example in Wales (Technology Clubs), Spain (Basque country), Flanders (Flanders Language Valley), Korea (Daegu) and Brazil (Sinos Valley). Nevertheless, time after time public authorities end up with the same three ‘best practices’: Emilia-Romagna, Baden-Württemberg and Silicon-Valley (Sternberg 1996, Cooke 1996, Di Giovanna 1996). By now, we could call these examples the ‘classics’ of regional clustering.

Storper (1993) notes that the story of industrial growth in Emilia-Romagna has been told many times. Throughout this region, located in the northern part of Italy (‘Third Italy’), clusters producing machine tools, ceramic tiles, knitting and footwear abound. Regularly, the fact that Emilia-Romagna has developed to one of the richest areas in Europe is explained by a local tradition of clustering and cluster policy. The local government in Emilia-Romagna has contributed to the development of these clusters by consensus-building (‘brokering’) and by providing social and business services.

Besides Emilia-Romagna the German region of Baden-Württemberg is widely seen as one of the biggest industrial success stories within Europe over the past 30 years. The region’s success is based on the presence of a strong engineering cluster dating back to a pre-industrial tradition in crafts. The regional state has been pro-active in promoting cooperation between ‘state, industry and science’ (Cooke 1996). A lot of state-sponsored programmes have been designed to help market parties in the process of clustering, such as a technology transfer system known as the Steinbeis Stiftung.

Perhaps the most famous example of regional clustering, however, is Silicon Valley within California’s Santa Clara Country. In this micro-electronics cluster, firms produce semiconductors and computer chips that are sold world-wide to other component or system manufacturers. Often, the combination of competition and cooperation among its firms is held to be responsible for Silicon Valley’s successful economic performance (Saxenian 1994). At this moment,
government agencies all over the world still organise travels to Silicon Valley ('policy tourism') to watch the 'miracle' of this region. What, however, can policy makers really learn from such success stories of regional clustering? It is this question to which we will turn our attention now.

III. LESSON-DRAWING IN REGIONAL CLUSTER POLICY

The rhetoric of clustering has led to a strong interest among policy makers in comparing, even copying regional cluster policies. By investigating 'best practices' they hope to learn from foreign experiences with developing and supporting regional clusters. To identify the elements that determine the possibility of 'learning by comparing', we make use of the literature on comparative public policy. One of the leading texts in this field defines comparative public policy as 'the study of how, why, and to what effect different governments pursue particular courses of action and inaction' (Heidenheimer et al. 1990, p. 3). Broadly, the goal of such an approach is to find major similarities and differences in policies between countries or regions. Studying public policy in this way has several advantages, the most important being that it can be a helpful tool for drawing lessons for policy makers (Heidenheimer et al. 1990, Rose 1993, Hague et al. 1998). In short, by comparing policy makers may broaden their understanding of a current situation as well as of the constraints and options they face.

1. Contingencies of Lesson-Drawing

In his book Lesson-Drawing in Public Policy Richard Rose (1993) argues that the possibility of learning by looking abroad ('learning-by-comparing') is a matter of degree. In his view, there are seven so-called ‘contingent’ influences on lesson-drawing. They can be seen as preconditions that affect whether a policy initiative can be transferred from one place to another. In general, the fewer conditions are fulfilled, the more difficult it may be for policy makers to learn from policies pursued by other governments, or in the words of Rose, ‘the less fungible’ these policies are. According to Rose there are seven contingencies of lesson-drawing, which he presents both as preconditions and as hypotheses. These are the degree of uniqueness of a problem, the availability of resources, the interdependency between the areas compared, the complexity of a policy, the scale of change an initiative involves as well as the proximity of institutions.
and values of the areas compared. In our view, these contingencies can be reformulated to three groups of conditions that jointly determine to what extent policy makers can learn from experiences elsewhere.

- **Contingencies being necessary, but not sufficient:** These conditions must be fulfilled if policy makers want to draw any lessons from a policy initiative at all. Therefore, we could call them the ‘necessary’ contingencies of lesson-drawing. They contain Rose’s contingencies of uniqueness, resources and interdependency. Firstly, the policy from which one tries to learn should not address a unique problem. The fewer the elements of uniqueness a policy initiative has, the more transferable it is. Secondly, governments have to dispose of sufficient resources in terms of money, public personal and laws in order to adopt a policy that worked somewhere else. The greater the equivalence of these resources between states, the more fungible an initiative is. Thirdly, the countries or regions compared have to be interdependent in some way. The greater the interdependency between these areas, the more likely it is that lessons can be drawn. In cases where these conditions are fulfilled, lesson-drawing is not guaranteed, though.

- **Structure-based contingencies of lesson-drawing:** The conditions belonging to this category are Rose’s contingencies of complexity and scale of change. The contingency of complexity stresses that the policy initiative in question should not be too complex. The clearer the cause-and-effect structure of a policy, the more transferable it is. Moreover, the scale of change the policy implies has to be relatively small. The smaller the scale of change the adoption of a programme involves, the more likely it is that policy makers can learn from it.

- **Culture-based contingencies of lesson-drawing:** These preconditions encompass Rose’s contingencies on values and institutions. They refer to the social and political characteristics of a country or a region, such as the present norms, conventions, customs, degree of trust and political ideology. A policy must not be dependent on unusual institutions or values. The more similar the set of institutions and values in the areas compared, the more fungible a policy action is.

As Rose (1993) notes, the aim of comparative public policy should not be to assess these influences on lesson-drawing in general, but to identify which contingencies are significant in a certain place and which are not. Here, we will apply the list of contingencies on regional clustering and cluster policy.
2. The Contingencies Applied to Regional Cluster Policy

When looking at the three groups of contingencies, we think that in the case of regional cluster policy the necessary but insufficient conditions are fulfilled. To start, regional cluster policy programmes are not one of a kind. At present clustering is not limited to one or a few regions, but has become a pervasive phenomenon across the world (see for instance Lagendijk 1999, OECD 1999, OECD 2000). Furthermore, most regions that want to learn from success stories of clustering are advanced economies. They are relatively wealthy, employ qualified civil servants and have more or less comparable systems of drafting and interpreting laws. Therefore, these regions will have similar resources as ‘benchmark’ regions such as Emilia-Romagna, Silicon Valley and Baden-Württemberg. Finally, the trend of globalisation has created interdependency between cluster policies, which increases cross-region learning. Remarkably, this interdependency can be observed when looking at regional policy focused on ‘high-tech’ clusters, such as micro-electronics, that often is pursued to ‘match’ policy efforts of other governments (Jacobs and De Man 1996). Here, potential for lesson-drawing exists.

Although we expect that the first group of contingencies will be met, the likelihood that the other conditions are fulfilled is highly questionable. We feel that the classic examples of regional clustering mentioned earlier are too much based on structure- and culture-based contingencies to transfer them easily from one place to another. In Rose’s words, these ‘best practices’ are too complex, require a too big scale of change and are too much dependent on specific institutions and values. In the next sections we elaborate on this rather pessimistic statement.

IV. UNIQUENESS OF THE REGIONAL ECONOMIC STRUCTURE

Structure-based contingencies may limit the possibilities of lesson-drawing in regional cluster policy. To start, the examples of regional cluster policy most often used are complex in that they do not have a simple cause-and-effect structure. The goals of cluster policy are vague and often can only be achieved as the joint outcome of different factors, while its effect on regional economic develop-

2. As Rose (1993) argues, potential differences in the legal system between areas with an English common-law tradition (the UK, the US and Canada) and Roman law areas (other advanced economies) are not likely to influence policy choices substantively.
opment is diffuse and hard to measure empirically. Next, adopting one of the ‘best practices’ can involve a large change within the economic structure of a region. The specificities in the economic structure of regional success stories may act as a brake on policy borrowing. Often, these regions have structural assets that are not always available in areas that want to learn from them. Examples are the presence of a long tradition in particular economic activities (crafts in both Baden-Württemberg and Emilia-Romagna) or the availability of a specialized ‘stock’ of human capital (Silicon Valley). These unique regional elements are often neglected by policy makers, especially when they are trying to establish high-tech clusters in a particular region.

1. The Danger of Clusters Ending as ‘Cathedrals in the Desert’

In practice policy makers are inclined to devote much effort to develop and support so-called ‘high-tech’ clusters. In particular clusters in the field of biotechnology, information technology and recently also multimedia are expected to be the growth poles of the future (Fuchs and Wolf 1998, OECD 2000). Policy directed at such clusters is offensive in that it ‘picks winners’. In developing high-tech clusters public authorities often ignore the question if the preconditions for such clusters are present in a region. If not, these clusters may end as ‘cathedrals in the desert’ (Hassink 1992). In their book on the most significant high-tech areas in the world economy, Castells and Hall (1994) show that starting new clusters from scratch (ex nihilo) is very difficult. Generally, the costs of such a policy are high and, if successful, the clusters will need a long time before they are embedded in their environment.

Circumstantial evidence of policy failure in this field is provided by cases such as Akademgorodok (Russia), the Mezzogiorno (Italy) and to a lesser extent Wales (UK), Sophia Antipolis (France) and Flanders Language Valley (Belgium). Inspired by a visit to Silicon Valley in the late 1950s Khrushchev and his advisors wanted to create their own high-tech area, resulting in Akademgorodok, a place in the middle of nowhere (Josephson 1997). Although this ‘City of Science’ still exists, it has had severe problems to survive due to its lack of embeddedness in the region. A similar case can be found in the southern part of Italy, also known as the Mezzogiorno. The dominant role of national policy makers in setting the priorities and dividing the resources was one of the main reasons why policies towards this region failed in the 1970s. The national government’s ignorance of regional specificities resulted in a construction of industrial complexes that did not fit into the existing structure of southern Italy (Leonardi 1995).
Another case, although less dramatic, is Wales, where the Welsh Development Agency (WDA) has undertaken cluster policies during the 1990s as well as a range of activities to attract and embed foreign investments in the region. The effects of these initiatives on the economic development of Wales are controversial. But at the moment it is clear that most of these policies ‘do not reach very deep into the Welsh economy’ (Lagendijk and Charles 1999, p. 18). In our view, similar criticism applies to the French information and biotechnology centre Sophia Antipolis as well as to Flanders Language Valley, being a group of firms specialising in speech and language technologies concentrated around the core firm Lernout and Hauspie Speech Products (Longhi 1999, Wintjes 1999). The crucial point is what the overall impact of these regional clustering attempts will be in the long term. The fact is that in general ‘time, indeed, is the problem with such *ex nihilo* creations as Sophia Antipolis’ (Castells and Hall 1994, p. 93).

2. The Risk of the Bandwagon Effect in Cluster Policy

The mismatch of a cluster to the regional economic structure is not the only danger of policy aimed at high-tech clusters. In a lot of regions governments select similar clusters for support. The result is that the possibility of gaining profits from the innovations originating from these clusters could be limited. Thus, ‘matching’ policy efforts of other governments involves the danger of excessive investment in the same economic activities. This risk has been called ‘the bandwagon effect in governmental policy’ (Jacobs and De Man 1996, p. 430). Currently, this effect can be seen in almost all areas in which regional cluster policies are pursued. In this respect, the frequent use of the term ‘Valley’ for these areas – indicating governments’ dream to create their own Silicon Valley – is illustrative.

Instead of propagating high-tech clustering some authors recommend governments to depart from the present strengths of the economy (Porter 1998, Boekholt and Thuriaux 1999). In following this advice too literally in pursuing regional cluster policy, however, public authorities may run a risk as well. Here the danger of a policy of ‘backing losers’ lies in wait. The process of ‘path dependency’ clustering involves could lead to ‘lock in’ effects in the regional economy (Krugman 1991, Arthur 1994). The pattern a cluster follows is an accident of history and thus not necessarily optimal. Once established, the initial path may become quite rigid (‘locked in’) and delay a reorientation of the region into new economic activities. Examples of such economic inertia can be found in regions with a tradition in heavy industries (coal and steel), like Wal-
Ionia (Belgium), Lille (France) and the West Midlands (UK). For many years these and other old industrial areas have shown problems in adapting to the changing demand and supply pattern that has come about in the world market (Hassink 1992, Boekholt and Thuriaux 1999). Thus, governments exclusively focusing their attention to traditional activities may run the risk of delaying economic restructuring which may be needed for a region to remain competitive.

Apart from this risk of ‘lock in’, however, cluster policy that departs from a region’s existing economic structure still has more chance to succeed than a policy that indiscriminately follows other regions in the trend of high-tech clustering. The examples of ‘cathedrals in the desert’ that are mentioned in this section show that every region’s economic structure is unique and that public authorities should pay attention to this uniqueness. Specificities in the regional economic structure may not explain conclusively the success or failure of regional clustering though. Increasingly, regional economists emphasise the importance of cultural elements. In our view, these elements can be related to Rose’s (1993) culture-based contingencies of lesson-drawing, being institutions and values. In the next section we assess the influence of these cultural conditions for the possibilities of learning by comparing in regional cluster policy.

V. UNIQUENESS OF THE REGIONAL CULTURE

Institutions and values both have to do with the fundamental cultural characteristics of an area. They refer to the ‘soft’ factors in a community such as its customs, norms, political ideologies, conventions and the degree of trust. To include all those factors some authors simply use the term ‘institutions’. North (1991, p. 97), for example, describes institutions as

‘the humanly devised constraints that structure political, economic and social interaction’.

Here, we use the term ‘culture’, which in our view, constitutes the fundamentals of both local social values and political institutions. These two culture-based contingencies imply a need for cultural proximity of regions that want to draw lessons from a specific example. Both by their absence and by their presence cultural factors may affect the possibility of lesson-drawing. Like some other authors (e.g., Di Giovanna 1996, Amin 1999) we think that the cultural dimension is highly relevant in explaining the success of regional clusters. In our view, the cultural uniqueness of ‘best practices’ limits the possibilities for policy borrowing heavily.
1. Embeddedness, Trust and Social Capital

Alfred Marshall (1890) already recognized that the achievement of agglomeration benefits in the process of regional clustering was by no means an economic regularity. In his view, the realisation of these benefits depended on the existence of close social relationships within an industrial district creating an ‘industrial atmosphere’.

About one century after Marshall, the interest for ‘soft’ factors has resurfaced among economists, perhaps because of the persistent lack of explanatory power of mainstream economic models. Granovetter (1985) has introduced the notion of ‘embeddedness’ to explain the relationship between culture and economic action. Societal norms and expectations, he argues, may constitute embedded institutions that influence the functioning of an economy. A similar line of reasoning can be found in the influential study ‘Making Democracy Work’ by Putnam et al. (1993)3. These authors distinguish ‘social capital’ as an element that makes up a society. They define social capital as

‘features of social organization, such as trust, norms, and networks, that can improve the efficiency of society by facilitating coordinated actions’ (Putnam et al. 1993, p. 167).

In short, we might say that social capital is a culturally determined asset that refers to the degree of trust in social relations. Social capital can be built through networks and civic engagement, but not from scratch. The ease of building it depends on the initial ‘stock’ of trust in a society and is a process that can last centuries. To illustrate the importance of social capital in regions, Putnam et al. (1993) refer to the persistent difference in economic development between the northern and southern part of Italy. According to them, the economic success of North-Italy can partly be explained by the emergence of the Renaissance in this area. As a consequence, in regions like Emilia-Romagna (‘Third Italy’), a culture could develop in which citizens were willing to cooperate – even until today. It is this centuries-old tradition of cooperation that can be seen as one of the explanatory factors for the good performance of this region (Di Giovanna 1996). Likewise, Saxenian (1994) shows that Silicon Valley has social specificities. Here, interdependencies between engineers are based not only on ‘input-output’ relations, but also on close contacts leading to social capital.

3. However, there is a difference between Granovetter (1985) and Putnam et al. (1993). Granovetter discusses embeddedness as part of ongoing social relations, presenting a primarily relational and process-based account. This view differs from Putnam et al.’s more structural account on embeddedness.
Although the concept of social capital is intuitively attractive, it is less clear what it is and how it can be measured properly. Apart from this definition problem, closer analysis shows that the relation between social capital and regional economic development is a complex one (Beugelsdijk 2000).

2. The Role of Political Institutions

The social characteristics of a region are highly interconnected with its political system. Besides factors like the dominant political ideology, political participation by citizens in the community and the elected political class, it is especially the role of the local state in which the degree of regional uniqueness is reflected.

The three classic examples of regional clustering clearly show the differences between political institutions and their specific function in the process of cluster development (Di Giovanna 1996). These differences are particularly striking in the cases of Emilia-Romagna and Silicon Valley. Whereas in the first case the left-wing government headed by the communist party has heavily intervened by providing social services and establishing business service centres, in the latter case the regional government has mainly taken a liberal, laissez-faire approach. In both cases, however, these political specificities are likely to have contributed to the regions’ economic success (Saxenian 1994, Cooke and Morgan 1998). This has been also the case in Baden-Württemberg where the Land government has had a relatively autonomous position in education, research and technology policy, which can be traced back to the historically grown federal political system of Germany. The christian-democratic Land government in Baden-Württemberg has been pro-active in promoting regional development, particularly in the field of training, education and marketing of the region to attract investment (Cooke 1996). Here, the personal efforts of the direct elected former minister president Lothar Späth have to be mentioned. This ‘political entrepreneur’ himself has definitely contributed to the emergence of Baden-Württemberg as a classic example of regional clustering. As part of the culture-based contingencies, such political specificities add to the uniqueness of regional culture. As such, these factors limit the possibilities of transferability of success stories of clustering.

In our view, the importance of social capital and political institutions in regional clustering cannot be stressed enough. If anything, it is clear that regional success stories cannot be explained by agglomeration economies alone. It will be often the cultural uniqueness of a region, resulting from a specific set of social and political factors, that determines the particular course of regional economic development.
VI. CONCLUSION: COPYING THE UNIQUE?

In this paper we discussed the current popularity among governments to compare policies directed at regional clustering. The question was asked what actually can be learnt from these experiences. We saw that the possibility of drawing lessons depends on several ‘contingencies’. These preconditions present both opportunities and difficulties in transferring a particular cluster-based initiative from one area to another. We found that in particular the contingencies related to specificities of an area’s economic structure and culture may hamper the possibility of ‘learning by comparing’ in regional cluster policy. The uniqueness of regional success stories makes lesson-drawing difficult, if not impossible. Hence, an intriguing paradox can be observed in today’s regional economic policy making: whereas unique local factors are increasingly seen as the determinants of regional economic success, simultaneously more and more governments try to copy policy experiences that proved to be successful in a particular region.

1. Implications for Policy Makers

Successful examples of regional clustering cannot be transferred mechanically. Consequently, governments should try to develop as much as possible unique cluster-based strategies based on an assessment of region-specific structural and cultural characteristics instead of just trying to copy successful cluster policy programs from abroad. If the preconditions for clustering in a region are absent, governments should not try to create a cluster from scratch.

In our view, the starting-point for an effective cluster policy has to be found in the existing structure and culture of the regional economy. In that respect, ‘best practices’ of clustering should be seen as inspiration sources rather than as recipes for successful regional economic development. Within the structural and cultural specificities of a region governments may try to identify clusters with opportunities for innovation and growth (given that policy makers are able to see chances in the market, which can be questioned). We think that opportunities for such regional high-tech clusters can be found in – paraphrasing Schumpeter’s (1934) term for innovations – ‘new combinations’ of existing clusters. Governments should search for these Schumpeterian new combinations in regional clustering. The fact is that new clusters regularly are spin-offs of existing ones. For instance, the recently established multimedia cluster in Baden-Württemberg has its roots in the infrastructure and activities of the traditional engineering cluster in this region (Fuchs and Wolf 1998).
Thus, joining traditional strong clusters within a region could be the way-out from the dilemma for policy makers what clusters to develop and which not. Here, too, possible ‘best practices’, such as the experiences in Baden-Württemberg, should be viewed as nothing more than sources of inspiration. In addition to these inspiration sources authorities could possibly learn from ‘worst practices’. So far, most policy makers tend to focus in particular on success stories of regional clustering. We feel that studying examples that were unsuccessful might be more productive in terms of possibilities for lesson drawing. Earlier we mentioned the dangers of clusters becoming ‘cathedrals in the desert’ or ‘locked in’. These dangers may be seen as the pitfalls of regional cluster policy. In that sense, when looking at failures of regional clustering, Akademgorodok in Siberia and the Italian Mezzogiorno being extreme examples, learning by comparing may be possible.

2. Implications for Researchers

The conclusion that the opportunities for lesson-drawing in regional cluster policy are limited is not only relevant for policy makers. Researchers too should be concerned about the rather limited possibilities of learning. It is difficult to reconcile the pursuit for general theories on regional clustering on the one hand and the need for empirical relevance in specific cases on the other hand. This tension between generality and specificity creates a dilemma for researchers what research path to follow and what not. Hodgson (2000) acknowledges this problem and writes:

‘A more sophisticated position has to be found, recognizing a significant role for general theories but also their limitations. Some kind of middle range theory is required to bridge the general with the empirical’ (Hodgson 2000, p. 26).

Although Hodgson focuses on economics in general, his claim also holds for regional economics, including research on regional clustering. In order to bridge the gap between the general and the empirical, researchers should rather focus on the procedural aspects of regional cluster policy. The fact that the outcome of a learning process may be unique does not exclude the possibility that such a result may be achieved through more general scripts. However, many researchers do not seem to be able to do so. This is made clear by Lovering (1999), who critically reflects on contemporary trends in regional economics. He argues that this discipline fails to explain today’s regional economic development in general. Correspondingly, it turns out to be a poor general guide to regional policy formation. Lovering pushes his argument even further when he says:
'It is impossible to resist the conclusion that the policy tail is wagging the analytical dog and wagging it so hard indeed that much of the theory is shaken out' (Lovering 1999, p. 390).

Rees (1998) makes a similar argument. According to him, regional economists are perhaps too embedded in elite circles of policy makers. Gradually, these cozy inter-human relationships are starting to create negative externalities, resulting in less room for critical reflection and ontological and epistemological considerations in regional economics. Likewise, we feel that it is not a new research agenda that is needed for studying regional clustering, but a way-out from the problematic characterization of this type of regional economic research as an

‘eclectic mishmash of old and new, pertinent and irrelevant, the quirky and incomplete’ (Dear 1988, p. 263).

A solution to this problem might lie in a reconsideration of the central objects and theoretical issues with which researchers on regional clustering currently are concerned.

REFERENCES

REGIONAL CLUSTER POLICIES


This paper deals with an intriguing paradox that can be observed in today’s regional economic policy making: whereas unique local factors are increasingly seen as the determinants of regional economic success, simultaneously more and more governments try to copy policy experiences that proved to be successful in a particular region. A good example here is the use of ‘best practices’ in the field of regional cluster policy. Cluster programs are becoming like ‘mantras’ for policy makers who want to stimulate regional economic development. Given this paradox, in the present paper we address the question what lessons can be drawn from comparing success stories of regional clustering. To answer this question, we combine insights from regional economics and comparative public policy. To start, we discuss the literature that has led to the popularity of the cluster concept as a learning device among policy makers. After that, we identify the preconditions (‘contingencies’) that affect whether these cluster policy initiatives can be transferred from one place to another. We find that some of the contingent influences, especially those related to the degree of uniqueness of an area’s economic structure and culture, hamper the possibility of ‘learning by comparing’ in regional cluster policy. It may even be argued that exactly those regional specificities explain the success of cluster-based policy efforts. Thus, we have to draw the rather pessimistic conclusion that the possibilities of lesson-drawing in regional cluster policy are limited. In our view, at best ‘best practices’ should be seen as inspiration sources rather than as recipes for successful regional economic development.

ZUSAMMENFASSUNG

Dieser Artikel setzt sich mit einem erstaunlichen Paradoxon auseinander, das in der gegenwärtigen regionalen Wirtschaftspolitik beobachtet werden kann: während einmalige örtliche Faktoren immer mehr als die Determinanten eines regionalen wirtschaftlichen Erfolges angesehen werden, versuchen...
REGIONAL CLUSTER POLICIES


RÉSUMÉ

Notre présentation traite un paradoxe intriguant dans les processus de la politique économique régionale d’aujourd’hui: alors que les aspects locaux spécifiques sont considérés de plus en plus comme des facteurs déterminants de la réussite économique régionale, il est évident qu’au niveau des gouvernements on a de plus en plus tendance à se mettre à l’unisson des expériences politiques régionales spécifiques réussies. Un exemple pertinent dans ce domaine est l’adoption des ‘potentielles optimales’ (best practices). La politique régionale par systèmes productifs est en voie de devenir une sorte de formule magique pour les agents politiques désirant optimaliser le développement économique régional. Dans les confins de ce cadre paradoxal, nous entendons développer dans notre présentation ce que la comparaison de programmes régionaux par systèmes productifs ainsi peut nous apprendre. Afin d’éclaircir ce problème, nous rapprochons des données d’économie régionale de données de politique publique par analogie. En première instance, nous interprétons les études qui ont entraîné la popularité du concept de systèmes productifs comme outil d’apprentissage entre les mains d’agents politiques. Ensuite, nous identifions les conditions nécessaires au transfert du concept d’un endroit à un autre. Nous en venons à observer qu’un certain nombre de ces conditions de base, surtout celles qui sont reliées à l’unicité des caractères économiques et culturels d’une région, risquent de rendre l’apprentissage par l’analogie difficile dans ce domaine. On oserait même statuer que c’est justement en raison des caractères régionaux spécifiques que s’explique le succès des efforts basés sur la formule de la politique régionale par systèmes productifs. Ainsi, nous sommes amenés à la conclusion tant soit peu pessimiste qu’au niveau de la politique régionale d’analogie des programmes, l’effectif de l’apprentissage par le vécu est, en réalité, restreinte. À notre sens, les best practices devraient, à la limite, être adoptées davantage comme des sources d’inspiration que comme des formules miracle pour le développement économique régional.