ATTRACTION, COMPETITION AND REGIONAL DEVELOPMENT IN EUROPE

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Abstract

This paper deals with one particular representation of the increasing interest in regional issues in contemporary Europe: the proliferation of academic studies and consultancy reports aiming to assess the attractiveness and competitiveness of cities and regions. At the heart of the paper is a review of a number of such studies. Some of them set out to identify the 'hottest' regions for investors, often presenting their results in various forms of rankings or league tables. Others try to identify systemic transformation in the overall patterns of urban and regional change in Europe. Most studies, however, regardless of whether they see regional development as primarily driven by endogenous or exogenous processes, focus on the regions' set of factor endowments: the more richly endowed a region is, the greater is its chance to prosper in a situation where regions are seen to be engaged in a European – or even global – competition over development opportunities. In the latter part of the paper, we challenge this view. With reference to current research on industrial dynamics, we argue that sustainable regional strength is built on a continuously upgraded knowledge base, rather than on general factor endowments. Furthermore, we question the validity of the metaphor according to which regions compete with each other to develop.

Introduction: the re-emergence of the regional question

The early 1990s saw a marked increase in the number of academic studies and consultancy reports aiming to identify the most attractive or competitive regions in the integrating Europe.[1] Sometimes the results resemble sports league tables, placing regions in different 'divisions' and identifying winners and losers (Dunford 1994, Lever 1996). Consultancy reports are often presented as 'guides for investors', pointing out the hottest economic spots, the most dynamic regions, or the best locations for investments – in general or in specific types of economic activity, notably related to manufacturing, distribution or advanced services (Brunet *et al.* 1989; Empirica 1993). Academic studies, on the other hand, are predominantly occupied with the explanation of uneven urban and regional development as such (Dunford 1994, Fielding 1994).

At least three different processes have combined to bring the 'regional question' to the fore of academic and political debates in recent years. One is related to the belief that actors at the regional level – for the moment simply defined as a subnational territorial entity – are tending to become more important as a political force in the increasingly integrated (western) Europe. The notion of 'a Europe of the regions' has become the catchword for a process by which the national political centres are believed to be increasingly bypassed by direct interaction between the regions and the EU.

These partly paradoxical trends of simultaneous supra-national institution-building and regional mobilization are in many ways mirrored in the evolution of production systems, and this is the second generator of interest in regional issues. In addition, a seemingly everlasting trend towards globalization associated with growth in international trade, increasing dominance of large TNCs, and the emergence of global financial markets (Dicken 1992), is to a degree counterbalanced by a process in which the local milieu – defined in economic,

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institutional and cultural terms – is seen to gain importance in economic development (Amin and Malmberg 1992, Amin and Robins 1990, Storper 1995).

A third reason for the increased attention being paid to regional issues in Europe is the process of economic integration itself. The existence of barriers to mobility of capital, labour, goods and services has traditionally been perhaps the most important explanatory mechanism in classical trade theory as well as in theories of regional economic development. The explicit goal of the Single European Market was to erode these very barriers, and it is therefore natural that the period leading up to the completion of the Single Market raised questions about its effect on regional imbalances in Europe (CEC 1991). Would rich regions grow richer and the poor fall even further behind, or would – as classical theories on factor mobility suggest – capital flow to low-cost locations and labour migrate to high-wage regions until a state of equilibrium is reached? Issues like these have triggered a heated debate as well as some substantive research in recent years (Armstrong and Vickerman 1995, Emerson 1988, Suarez-Villa and Cuadrado Roura 1993, Venables 1994).

In addition, there is a fourth, much more prosaic, reason for the proliferation of studies of regional economic development in Europe. The integration process has, as a by-product, led to considerable harmonization in the spatial statistics produced nationally but assembled and disseminated by Eurostat – the EU bureau of statistics. This has meant that empirical material that allows, though not without certain practical and methodological complications, cross-regional comparative analysis of social and economic change in Europe has become accessible and this opportunity has indeed been exploited by quite a few researchers, research teams and consultants in the early 1990s.

In this paper, a number of studies within this field are reviewed, with the point of departure taken in the following questions:

- Which mechanisms are explicitly or implicitly assumed to underpin (uneven) urban and regional development?
- Which factors/indicators are applied in measuring regional 'attractiveness' and 'development' respectively?
- To what degree are the results of the various studies consistent or contradictory?

This review, in turn, forms the starting point for a discussion of regional development in general, although retaining a European focus. The paper is structured as follows. The next section reviews a number of more or less well known and influential studies dealing either with the issue of attractiveness (which regions offer the best investment opportunities?) or uneven development (which regions are winners and which are losers in the contemporary process of economic restructuring, and is regional convergence or divergence the main trend?), or both. We then go on to introduce some ideas which have emerged from research in the field of industrial dynamics and competitiveness. Recent insights into the way in which local or regional conditions may foster industrial competitiveness are contrasted with the views on regional attractiveness/competitiveness that form the basis of the studies presented earlier. Subsequently, we take on the issue of regional competitiveness, arguing that the widespread metaphor that regions 'compete for development' in much the same way as firms compete for market shares is basically misleading. In the final section we argue, by way of conclusion, that the primary goal of regional development policies should not be to make a region attractive to investments from outside but rather to create institutional conditions in which firms can develop their competitive strength by improving their learning ability.

Attraction and dynamism: the premier league of European regions?

In this section we review a number of studies on regional development trends and tendencies, primarily in western Europe. The studies are different with regard to: (1) their objectives and intent; (2) what indicators they see as most appropriate for capturing and illustrating this new development and the methodological approaches adopted to describe it; (3) how they describe the general trends of regional change in a context of European integration, internationalization and economic transformation; and (4) what underlying

Objectives	*Methods*	*Patterns observed*	*Perceived driving forces*
Identify hot-spots	Composite index	Divergence (polarization)	Dynamism (internally generated)
Identify systemic transformation	Simple indicators	Convergence	Attraction (external focus)
Guide for investors in different markets	Rankings, league tables	Mosaic	Competition
Explain uneven development	Divergence measures	New Euro-hierarchy	Independent

Figure 1 Aspects of studies on European regional development: Objectives, methodology, results and underlying forces.

forces they see as propelling the development outlined. The section covers all these matters, following the structure outlined in Figure 1. In many ways, the different aspects of the studies, as well as their assumptions and conclusions, should be seen as overlapping rather than exclusionary. Thus, the intention with the categorization in Figure 1 is primarily to structure the discussion to follow.

Objectives and methodology of the studies under review

The studies we focus upon in this section are of different types as regards their objectives. A distinction may be identified between studies which are concerned more or less solely with the identification of the economic hot spots of European regions and those which are primarily interested in identifying a process of transformation in the urban or regional system in Europe. The former are more often consultancy reports aiming to function as guides for investors, while the latter are predominantly based on academic work, often with the additional aim of forming the point of departure for theoretical considerations related to shifts in the overall urban and regional structure of Europe and the explanation of uneven regional development.

In the studies focused on here, there are two dominant ways of addressing empirically the broad-scale assessment of the attractiveness or performance of regions in the European context: either, the measurement of what are believed to be the most important aspects of a region's factor endowments; or the measurement of the outcome of these endowments in terms of actual economic performance. Both models are of course confronted with some serious problems.

In the first case, there must be some theoretically derived knowledge as to which factors may be considered important. The Empirica report (1993), which will be discussed in some detail below, uses for example 31 different indicators to construct five major 'factors' that together make for the overall measure of 'regional quality'. The five factors are called: qualification and skill potential; centrality/market potential; business climate and dynamics; cost structure; and quality of life. The empirical basis of the well-known DATAR study (Brunet *et al.* 1989) is less clearly described in the report but is not that different, as it includes indicators such as: population size and growth; R & D infrastructure; number of TNCs and financial institutions; accessibility by various means of transport and communication; cultural attractiveness and mass media resources; telecommunications resources; number of fairs and congresses over a certain size; and the existence of regional 'specialities'. The problem is, of course,

Table 1. Europe's top ten regions for investors with different priorities.

Rank	Manufacturing	Distribution and logistics	Communication
1	Ireland (IRL)	Limburg (NL)	Zürich (CH)
2	Andalusia (ESP)	Limburg (B)	Oberbayern (D)
3	Norte (POR)	Navarra (ESP)	Ile de France (F)
4	Lorraine (F)	Champagne-Ardenne (F)	Lombardia (I)
5	Basse-Normandie (F)	Lombardia (I)	Emilia-Romagna (I)
6	Overijssel (NL)	Zeeland (NL)	Hannover (D)
7	Bassilicata (I)	Franche-Comté (F)	Noord-Holland (NL)
8	Puglia (I)	Emilia-Romagna (I)	Piemonte (I)
9	Islas Canarias (ESP)	Hannover (D)	Genève (CH)
10	Highland & Islands (GB)	Veneto (I)	Darmstadt (D)

Source: Compiled from Empirica (1993)

whether these assumptions are valid, or whether there is a totally different endowment (or a factor located outside the region itself) that is affecting the economic performance observed. To a degree this problem may be circumvented by the use of multivariate analysis, where different variables are tested against some 'neutral' measure of economic development, typically the regional Gross Domestic Product. In many instances a number of different variables are tested and the 'explanatory value' of each variable is assessed. Still, there may be a problem of causality: there are no guarantees that, at the end of the day, observed covariation is not being caused by a totally different and 'hidden' factor.

The second case is based on an inductive principle, by which an indicator of economic growth or development is used to indicate the regions' attractiveness or competitiveness. Examples are the studies on the location of different economic functions, e.g. the location of TNC-headquarters or European organizations (Palomäki 1991, Rozenblat and Pumain 1993). In some studies both these methods are combined to produce a map of regional dynamism or attractiveness (e.g. Brunet *et al.* 1989). In the studies focusing on European regional change from the point of view of systemic transformation (e.g. Cheshire 1990, Dunford 1993, Lever 1993), the problem is reflected in the dilemma of which indicators most adequately measure economic performance.

In search of European 'hot spots': guides for investors

The German consultancy report *Zukunftstandorte in Westeuropa. Ein Regionalführer für Investoren in EG und EFTA* (Empirica 1993) is, as its title suggests, explicitly designed as a guide for investors. In this study, investors are considered to have three different priorities related to: distributive and logistic-intensive activity; communication-dependent activity; or manufacturing processing. For each of these priorities the report presents a list of Europe's top regions (see Table 1). Ireland heads the league for investors who are emphasizing manufacturing processes, ahead of other low-cost regions, primarily in southern Europe. Individual regions in north-western Europe also manage to make the top ten list. For distribution and logistic-intensive activities, investors are requested to look for an entirely different set of regions. These are to a higher degree concentrated in the geographical core of western Europe. The same is to an extent true also for activities that are communication-intensive, but since this priority also reflects the importance of having access to more sophisticated information, the list includes regions which are better situated in relation to larger European centres of information. The Empirica report has had a number of parallels around the world (e.g. IMD 1993, Moran, Stahl and Boyer 1994). In this category, however, the

Empirica report represents the most thorough attempt to address the issue of which given properties are sought by investors and thereby also have the potential for generating economic growth.

The French study *Les Villes 'Européennes'* (Brunet *et al.* 1989), perhaps best known as the DATAR study which gave birth to the notion of the Europe of the blue and the green bananas, also aims to identify European urban regions with good future prospects, but with the further intent of interpreting the result in terms of general development trends in the European urban and regional system. The difference between the DATAR and the Empirica reports may perhaps also be caught in a distinction between a perspective of 'good life' and of 'efficient production', respectively.[2] In the DATAR report a much stronger emphasis is placed on the largest city-regions. London and Paris are considered to make up a 'division' by themselves as the most richly endowed regions in Europe. They are followed by a number of large European cities, such as: Milan, Madrid, Munich, Frankfurt, Rome, Brussels, Barcelona, and Amsterdam, in divisions two and three. Further down the hierarchical divisions we find regional and industrial centres such as Liverpool, Thessaloniki, or Parma in division seven, and Aarhus, Lübeck, Aberdeen, or Charleroi in the last and eighth division.

Other studies observe the actual outcome of location decisions as the indicator for identification of regional hot spots. In these studies the general criterion of attractiveness is for the regions to have a large number of headquarters for international organizations or transnational corporations (e.g. Palomäki 1991, Rozenblat and Pumain 1993). The results produced in the rankings from these studies differ somewhat from both the Empirica report and the results of the DATAR study. The capital cities of Europe play a much more prominent role than they do in the Empirica report. But compared with the DATAR study some of the medium-sized European capitals rank relatively higher due to their being fairly strong economic and financial centres, such as Amsterdam, Stockholm, and Frankfurt, or important centres for international organizations, such as Rome, Vienna and Geneva.

Divergence or convergence, mosaic or new hierarchies

With very few exceptions – mainly those that are exclusively concerned with producing investors' guides – the studies reviewed produce some postulates as to the main direction of the transformation of the urban and regional system of Europe. Thus, a number of studies are concerned with whether the economic and social disparities at the regional level are increasing or not. Among the studies most explicitly concerned with this question is Dunford's (1993) elaboration of Eurostat's REGIO database. Dunford shows how the tendency for divergence – evident in the 1960s – was broken around the mid-1970s and replaced by a tendency for convergence. This, in turn, was again countered in the mid-1980s when the economic performance of Europe's regions once more entered on a path of divergence. Dunford demonstrates the importance of scale for whether convergence or divergence will appear, and illustrates this point by showing how inequalities have increased at the regional (sub-national) levels, while at the same time we have witnessed a tendency for convergence at higher levels of aggregation (e.g. at the level of nation-states). He also draws attention to the different levels of disparities between the regions within different national contexts. An interesting conclusion here is that the richest nations also present the highest level of inter-regional disparities.

A further issue related to the overall pattern of regional change concerns the spatial structure of regional development, notably the degree to which there is a hierarchical, or centre-periphery, dimension to the pattern of uneven development. Two main conclusions dominate in this context. They both claim that national barriers to regional development are constantly being eroded, but otherwise they differ completely. Thus, several studies claim that 'the Europe of the regions' is increasingly becoming a European mosaic of regions, with regards to their economic performance. One of the most explicit studies reaching a conclusion of this kind is the study by Illeris (1993: 126), claiming that 'a mosaic of dynamic and stagnating regions . . . has replaced the former uniform concentration of economic growth in the national core areas' . This observation is also

intimately linked to a claim that 'local economic development largely depends on local conditions. It follows that the possibilities of influencing the process are increasing, since many local conditions can be influenced . . .' (p. 132).

In a similar vein, Hall (1993) concludes that the national context has become less important for the performance of urban regions. However, he identifies an emerging new hierarchy of regions, within which different categories of regions may develop differently but are 'restrained' in their possible development by their position in this hierarchy. Amin and Tomaney (1995) raise the question of the role of nationally-orchestrated regional policy in the context of regional disparities and the emergence of a new economic geography of Europe. They claim that the new 'freedom' of the regions is strongly related to a nation-state retreat from policies of inter-regional redistribution and/or growth-generation, which is on the whole contributing to a strong tendency for increasing inter-regional disparities and for greater variance in the potential for internal regional proactivity.

One group of studies comprises work by Cheshire and different colleagues (Cheshire 1990, Cheshire *et al.* 1986, Cheshire and Hay 1989) and to some extent by Lever (1993). These studies differ from, for example, Dunford's in that they use a quite different methodological approach, which has also produced quite different sets of results. While Dunford primarily examines only the development of one variable – the regional domestic product – Cheshire examines the performance of urban regions from a set of indicators measuring what is called the occurrence of urban problems (Cheshire 1990, Cheshire *et al.* 1986, Cheshire and Hay 1989). Cheshire constructs a composite-index called the Urban Problem Index (UPI):

> The problem index is conceptually not an input based, or production function, approach. The number of symphony orchestras, the quality of transport systems and other inputs to urban health are not measured. Rather, it is an output-based measure of urban problems where those are conceptualised essentially as problems of adjustment as an urban area's adaptive capacity interacts with the pressures for change with which it is faced.
>
> (Cheshire 1990: 312)

High problem scores indicate a high prevalence of urban adaptability problems. The time-span through which the indicators are assessed is intended to focus the problem index upon what Cheshire calls 'long run structural problems' (Cheshire 1990: 315).

The UPI is built up from data covering a rather long time-period (1971–88). At the 'top' of the ranking produced are the city-regions which have the least problems of adaptability (Frankfurt, Brussels, Venice, Munich, and Amsterdam), and at the 'bottom' of the league those plagued with the worst urban problems (Malaga, Cordoba, Seville, Liverpool, and Sunderland).

Two attempts to invoke a more direct dynamic approach into the study are made. First, the data from the UPI are compared with data from a previous study (Cheshire *et al.* 1986). The comparison shows that the relative ranking is fairly stable, although a large number of German regions are found in the categories which have worsened their relative positions by more than ten places. Among the regions which have improved their relative positions are many French urban regions, some Italian regions, Amsterdam and the UK urban regions of Cardiff and Edinburgh. Secondly, he divides the entire period 1971–88 into three subperiods and looks explicitly at the change in the regions' score on the UPI. By relating changes in the score to changes in a set of basic indicators of regional development, Cheshire also arrives at a residual of 'unexplained changes' in the UPI score. This residual must according to Cheshire be explained by varying success of local or regional policies.

In a further elaboration of Cheshire's UPI data, Lever (1993) highlights the relative change of the UPI score for urban regions. Lever too divides the data into subperiods, 1981–4 and 1984–8. He concludes that while there was a tendency for convergence among the European regions in the first period, the later years of the 1980s were clearly marked by a tendency for divergence.

The driving forces of regional change

The proliferation of studies of the kind reviewed in this section has clearly pointed out some of the most central problems regarding how regional

development is actually produced. We may first distinguish between studies that embrace a 'dynamism approach' (that focus on the forces of economic development which are primarily internal to the region), and those forfeiting an approach based on attraction (that see economic development as a process by which a region attracts certain producers of development from outside, either from other regions or from some undefined, 'non-geographical space').

In the study of the DATAR group, for example, there is an underlying assumption that the endowments of a region – in terms of cultural, educational and infrastructural facilities – may prove significant for an endogenous generation of economic growth as well as for the attraction of growth-stimulating economic investments from outside (Brunet *et al.* 1989). Other studies (e.g. Hall 1993, Palomäki 1991) see the main road to economic development for the urban regions as being one of attracting economic (or political) agents of one kind or another from the outside, and this is also the dominating perspective in the Empirica study (1993).

Furthermore, the symbols involved in the production of rankings and divisions are a representation of an underlying perspective claiming that regions are increasingly in competition with each other. In many of the reports the view of regional development in general, and on competing regions in particular, has come to resemble the view on firms in competition. We may say that a metaphor of competitiveness is being developed in the regional context, in a way similar to that which has long been the case for nations (see below).

The Empirica report, designed to guide investors in their locational decisions, is of course constructed bearing in mind the idea that there is some sort of mobile capital, which more or less freely scans the regional space for profitable direct investment opportunities. This view may well be valid in cases when regions actually compete over the attraction of a particular direct investment (Hallin 1995). It may also be true concerning a specific kind of direct investment, on the real estate markets. This latter observation may be of particular relevance, since the actual rise of these types of studies is linked in time to the peak of such investments in Europe. However, it also urges us to raise questions over the significance of these cases for the process of economic development in general. Presumably, investments in real estate are more comparable to portfolio investments than to direct investments, and their effect on economic development in the actual region at stake might thus be more limited. In addition, it raises the question of the general significance of direct inward investment in terms of regional development.

Industrial competitiveness and regional development

The studies referred to above generally regard regional development and regional competitiveness in a macro perspective. A region's ability to attract investment is analysed, in principle, in the same way as the competitiveness of nations is regarded in traditional economics. The comparison between regions (countries) focuses on differences in supply and cost of production factors. The country, or region, that is the most richly endowed with production factors wins the competitive game.

If this were true, we would – in a time when competition in most markets is becoming increasingly global and when barriers to flows of capital, labour, goods and services have been considerably eroded – expect capital in the form of investments to flood the most attractive locations. If the Empirica study is basically right in its approach – and thus in asserting that Ireland, Andalusia in Spain and the Norte region in Portugal offer the most attractive environments for manufacturing in Europe – we must ask: how come there is not a wide range of firms interested in locating production facilities in these regions? (In the case of Ireland, admittedly, there has indeed been such an interest.) And furthermore, if this type of attractiveness makes for regional prosperity, how can we then explain that many of Europe's richest and wealthiest regions are simply missing in the tables of European regions with strong future prospects? To answer these questions, we have to establish an alternative idea of the processes – and local conditions – that lead to industrial competitiveness, and this is the main focus of the present section.

In recent years, several approaches to industrial dynamics have been developed, according to which long-term competitiveness has less to do with cost

efficiency and more to do with the ability of firms to innovate or, in broader terms, to upgrade their knowledge base (Porter 1990). This re-orientation reflects ongoing changes in production systems as well as a recognition that such systems are not just fixed flows of goods and services but also dynamic arrangements based on knowledge creation (Maskell and Malmberg 1995, Patchell 1993). It is the ability of firms to learn, change and adapt rather than their allocative efficiency which determines their long-term success.

This new focus on learning ability, knowledge-upgrading and innovations has led to an increased focus on the role of space and place in enhancing – or blocking – such developments. Several partly contradictory and partly complementary schools of thought can be identified in this field, and we will briefly bring them into the discussion under two headings: innovative milieu approaches; and industry cluster and innovation system approaches.

The innovative milieu approaches

An innovative milieu is a local milieu which is characterized by a certain coherence based on common behavioural practices as well as a 'technical culture' – a way to develop, store and disseminate knowledge, technical know-how, norms and values – linked to a certain type of economic activity (Aydalot 1986; Coffey and Bailly 1996). Four basic characteristics of such milieux may be identified (Maillat 1995):

- a group of actors (firms, institutions) that are relatively autonomous in terms of decision making and strategy formulation
- a specific set of material (firms, infrastructure), immaterial (knowledge, know-how), and institutional (authorities, legal framework) elements
- interaction between local actors based on co-operation
- self-regulating dynamics that lead to learning, and the ability of actors to modify their behaviour and find new solutions as their competitive environment changes.

The innovative milieu approach thus emphasizes the interaction that takes place between economic, socio-cultural, political and institutional actors in a given place: the complex web of relations that ties firms, customers, research institutions, the school system, and local authorities to each other. The region, the territory, is not seen merely as a 'container', in which attractive location factors may happen to exist or not, but rather as a milieu for collective learning through intense interaction between a broadly composed set of actors. The milieu is a 'created space' that is both a result of and a precondition for learning – an active resource rather than a passive surface (Coffey and Bailly 1996). It is an environment within which physical, human and social capital is created and accumulated over time.

In a similar vein, but in different wording and with a slightly different emphasis, Andersson (1985: 20) lists five preconditions that should be fulfilled if a 'creative region' is to emerge:

- high levels of competence
- many fields of academic and cultural activity
- good possibilities for internal and external communications
- widely shared perceptions of unsatisfied needs
- a general situation of structural instability, allowing synergies.

The point of departure for this line of argument is that creativity presupposes the ability to combine relevant knowledge in a new way. The potential for such 'creative synergies' increases if many people with different competences, experience and knowledge co-operate, and the probability for such combinations increases, one may assume, with the number of people in a milieu. Thus, the creative region is described as fairly large-scale while at the same time culturally heterogenous, richly endowed with original knowledge and characterized by good communications – internally as well as externally.

Alongside the 'static characteristics' of the milieu – a reasonably rich resource endowment (defined in a broad sense), variety in knowledge and competence, good communications and widespread dissatisfaction with existing resources seen in relation to perceived demand – some form of instability is seen as necessary for the creative process to start. Stable periods and carefully regulated and planned environments are seldom creative, while true creativity is often found in more

or less chaotic contexts. When these factors are reformulated in more conventional policy terms, three elements are brought to the fore (Malecki 1991: 327): (1) a well-educated, technologically competent labour force; (2) a certain size of urban agglomeration, to allow for intense cultural activity and communication; and (3) framework conditions that make for synergy and a degree of structural instability.

Regional 'diamonds' and innovation systems

Porter (1990) argues that clusters of related industries are the relevant units of analysis when aiming to explain industrial competitiveness, and that certain spatial (national, regional) circumstances determine the innovative, and thus competitive, strength of industries or clusters of industries. There are four such major determinants. In combination, they make up the so called 'diamond model' that has been so much cited in recent years, in academic as well as in business and policy-making circles.

The first factor is related to the nation's factors of production, such as skilled labour or infrastructure. In classical trade theory, the availability of production factors – land, labour and capital – determines the comparative advantage, and competitiveness, of a country. This is not entirely wrong, but it is increasingly insufficient for understanding national differences in competitiveness. Most developed nations today have fairly well-functioning transport and communication systems as well as a relatively skilled labour force. General factors of production have therefore by and large lost their role as sources of sustainable competitive advantage. Factor advantages today are much more specialized, related to technological know-how and infrastructural systems adjusted to the needs of specific industries. They give rise to competitive advantages precisely because they are unique and difficult to copy in other places. Such factors of production are not given by nature but created by firms and institutions in historical processes. Furthermore, it is not necessarily the case that the environment with the richest factor endowment generates the most competitive industries. On the contrary, Porter claims, production factor scarcity – expressing itself, for example, in high costs for labour or energy – forces firms to innovate and may thus in the long run strengthen their competitive position. In other words, while overly-rich access to production factors might lead to inefficiencies in their use, what Porter calls selective factor disadvantages tend to stimulate innovations and thereby competitive advantage, provided that local circumstances are favourable in other respects.

The second determining factor is related to demand conditions. According to traditional wisdom, the size of the local market is important for the competitiveness of firms. In Porter's view, it is not primarily the quantity but the quality of local demand that matters. Firms which, in their domestic markets, meet sophisticated customers with advanced needs tend to improve their chances of becoming internationally competitive. This is particularly important when sophisticated local demand in some way anticipates what will be general demand on the global market later on.

The third factor is the existence of related and supporting industries in the local environment. This is not the general story of benefits (in terms of lower transaction costs) following from having suppliers nearby; rather, it suggests that suppliers of specialty inputs in the local environment may contribute to innovation and knowledge upgrading through the development of various co-operative relations.

The final factor – strategy, structure and rivalry – draws attention to the conditions in the nation that determine how companies are created, organized and managed, and the nature of domestic rivalry in a particular industry. Local competitors in an industry tend to force each other to innovate. One reason for this is that local rivalry adds an almost emotional dimension to the competitive struggle, and that this tends to give rise to especially intense efforts to improve firm performance. Another reason is that information and knowledge tend to spill over from one firm to another in the local milieu, even in cases where two competing firms are bitter rivals.

Contrary to what is sometimes claimed, the concept of clusters of industries is not a functional but also an intrinsically territorial concept. In Porter's view, the operation of the diamond and the phenomenon of clustering are underpinned by flows of information about needs, techniques and

technology among buyers, suppliers and related industries. Such flows are greatly enhanced by the proximity and affinity that characterize shared nationality. Thus, for Porter, the industry cluster is defined nationally. There can be no such thing as a global cluster. Proximity/affinity is at the very heart of the definition of the cluster concept, and the nation is seen as a proxy for this territoriality. Porter goes further, however, and makes a major point of the fact that there is often an even stronger localization element involved, and that immediate physical proximity of world-class rivals is so common across nations as to hold important insights into the process of competition. Domestic rivals tend to be located in areas with concentrations of particularly sophisticated and significant customers and suppliers (Porter 1994).

Lundvall (1992) maintains that the national level is most appropriate when trying to understand the structuring of innovative behaviour. The focus upon national innovation systems reflects the fact that national economies differ regarding the structure of the production system and the general institutional set-up. Specifically, Lundvall assumes that basic differences in historical experience, language, and culture will be reflected in national idiosyncrasies in internal organization forms, interfirm relationships, role of the public sector, institutional set-up of the financial sector, R & D intensity and organization. Similarly, Whitley (1995) defines national business systems as particular arrangements of hierarchy-market relations which become institutionalized and relatively successful in particular contexts, and argues that despite the increasing internationalization of some industries in the past decades, there is evidence that national institutions remain quite distinct and that they reproduce forms of economic organization which vary between countries.

Localised learning or investment attraction

The point of presenting these various approaches here is not to suggest that they are identical or even fully compatible in all respects. Still, we argue that they share a number of common threads which make them important for the line of argument put forward in the following. Thus, common to all the approaches briefly presented above is that they emphasize the systemic nature of industry; the role of learning and innovation in industrial dynamics; and the spatially embedded character of industrial change.

The picture that emerges – in slightly varied versions – is this. An individual economic activity, a firm for the sake of simplicity, is embedded in a networked structure of customers, suppliers, competitors and institutions. This very structure provides both the pressure and the enabling resources for knowledge-upgrading and innovation, defined in a broad sense. Product innovations, new forms of organization or new skills, are arrived at in interactive processes within such industrial systems. Such systems, in turn, are embedded in a broader cultural and institutional context, that is in space. Shared spatial embeddedness – proximity, affinity and well-established trustful relations – contributes profoundly to the successful outcome of these processes.

These are approaches to industrial change and not theories of regional economic development. Still, most theories of regional economic development start out postulating that the wealth of a region is dependent on its ability to attract or generate sufficiently profitable economic activity – which means competitive industry. If the competitiveness of industry is intimately related to spatially embedded networked systems, this is an insight that we should by all means try to bring in to the analysis of regional economic change.

Let us therefore turn back to the regional 'league tables' reviewed earlier, and see to what degree they are compatible with the idea that it is the ability of firms to innovate which is critical, and that innovative capacity stems from interactions within spatially embedded industrial systems. Rather than a map of Europe where different regions offer more or less attractive conditions for investments or production in general, a picture emerges where a number of regionally-embedded, specialized industrial systems are more or less successful in upgrading their knowledge base.

Thus, the general conclusion to draw at this stage is the following. No region can be 'the most attractive' for all kinds of investment or activity. Also, the division in the Empirica report (1993) into three types of activity – related to manufacturing, distribution/logistics and communication

respectively – is much too crude. If a firm wants to develop and sustain long-term competitiveness it should rather look for the most demanding and stimulating environment, provided that it is at all possible to get into such a milieu as an 'outsider'. From this it follows that it is far from certain that such a milieu would rank high in a table based on factor endowments. A concept like selective factor disadvantage will hardy find its way into the 'guides for investors' presented above. The basic idea behind these is, as we have seen already, that the region that is 'best endowed with everything' tends to win the game. Correspondingly, a large market is normally seen as a major attraction. This is captured in the centrality factor in the Empirica report, where market potential (number of people reached within eight hours' road transport) was one indicator. From a Porterian perspective, for example, the size of the market is less important than the ability of the local customers to express sophisticated demands.

Presumably, the regional league tables might give some advice to a firm which already possesses a specific advantage (in the form of already developed knowledge) and wishes to exploit it on a large scale, rather than to the firm that strives to increase or sustain its innovative potential. Many of these studies certainly seem to have a specific type of branch plant investment as a model for their construction of rankings. As was suggested above, another possible explanation for the obviously expanding demand for 'league table studies' is that they provide valuable information to those who intend to invest in real estate, rather than to firms engaged in the development and production of goods and services.

In what sense do regions compete?

In most of the studies reviewed above, the underlying assumption seems to be that regions are in competition with each other over economic development. In this section we question whether this assumption is valid. The idea that nations compete in the world market in more or less the same way as firms compete has become widespread in recent years (D'Andrea Tyson 1992, Thurow 1992) and in the last few years we have seen studies specifically dealing with inter-city or inter-regional competition in Europe (e.g. Jensen-Butler *et al.* 1996). In a paper titled 'Competitiveness: a dangerous obsession', Krugman (1994a)[3] fiercely attacks those who advance the idea that nations compete with each other. We will here pick up some of Krugman's main arguments, assuming that they at least partly apply to the notion of regions – or cities – in competition as well.

The idea that nations compete more or less in the same way as do firms – and that national (regional) competitiveness is roughly the same as firm competitiveness – has an intuitive appeal. Still, according to Krugman, it is not only theoretically illegitimate but also empirically wrong. A firm that cannot make ends meet will simply go out of business. Nations do not. They may have a more or less favourable economic development, but there is no simple way to assess their economic performance. Krugman rejects the idea that, for example, the trade balance could function as a bottom line for a nation's economic performance. Both in theory and in practice a trade surplus may be a weakness and a trade deficit a sign of strength.

Most people would argue that national competitiveness is something more than a trade surplus. Krugman quotes D'Andrea Tyson (1992), who defines national competitiveness as a country's 'ability to produce goods and services that meet the test of international competition while [its] citizens enjoy a standard of living that is both rising and sustainable'. However, this definition also turns out to be deceptive. Krugman shows how the standard of living over the last 30 years in countries like the US or Japan is predominantly determined by domestic productivity growth, not productivity growth relative to other countries. Despite the fact that world trade is larger than ever, national standard of living is predominantly determined by domestic factors. One argument is that the share of the value added that is exported is relatively modest in large national economies like the ones mentioned. This argument, however, is seriously weakened if we apply it to regions of the size focused on in this paper. The second, major argument, however, applies to small regions at least as much as to large countries. Thus, Krugman writes:

> Moreover, countries do not compete with each other the way corporations do. Coke and Pepsi are almost purely rivals: only a negligible fraction of Coca-Cola's sales go to

> Pepsi workers, only a negligible fraction of the goods Coca-Cola workers buy are Pepsi products. So if Pepsi is successful, it tends to be at Coke's expense. But the major industrial countries, while they sell products that compete with each other, are also one another's main export markets and each other's main suppliers of useful imports. If the European economy does well, it need not be at U.S. expense; indeed, if anything a successful European economy is likely to help the U.S. economy by providing it with larger markets and selling it goods of superior quality at lower prices.
>
> (Krugman 1994a: 34)

The point, of course, is that trade is not a zero-sum game. If productivity increases in one country, or one region, the main effect is that real wages will rise there, while real wages in other regions will only be modestly affected. Furthermore, if they are at all affected, they are much more likely to rise than to fall. Krugman argues that the competitiveness metaphor, when applied to nations, is dangerous for at least two main reasons. First, it might lead to public resources being spent on various policies that will have no effect. For example, it tends to support the directing of the lion's share of industrial policy towards R & D programmes related to certain high-tech industries (that compete on global markets) while the service sector (where there is a large potential for productivity increase) is neglected. Secondly, there is a risk of it creating protectionist attitudes that might threaten the global economy.

The goal for a national, or regional, development policy should, in other words, not be to make every sector of the economy internationally competitive, but rather to aim at increasing productivity in the total economy. Krugman's conclusion is categoric: 'So let's start telling the truth, competitiveness is a meaningless word when applied to national economies. And the obsession with competitiveness is both wrong and dangerous' (1994a: 44).

If this line of argument has a meaning at the national level, it is certainly worthwhile to consider if the belief that regions compete is in any way more valid than the misconceived 'nations-in-competition' metaphor. Maybe we should stop using this metaphor – except for the specific but relatively unusual cases when regions actually engage in competitive bidding for a specific corporate investment (for instance a Japanese transplant), a public institution (such as a particular EU office) or a spectacular event (a world expo or the Olympic Games) – and rather intensify the discussion of how a region develops, economically and socially, in more general terms. The perspective according to which regional development has more to do with innovative potential than 'general attractiveness' is in line with such a re-orientation of research focus. Regional wealth-creation is related to the degree to which firms in the region are able to upgrade their performance – through innovations and productivity increases – rather than to the ability of the region to compete with other regions for investments from outside.

Conclusions

The integration process in Europe affects the long-term framework conditions for economic development in this part of the world. It is tempting to assume that this process, by triggering a restructuring of the European economy, will radically change the preconditions for regional development in Europe. Maybe we tend to forget, sometimes, that we are dealing with processes of change which work their way at very different speeds. Political regimes may be overthrown overnight, and institutional systems may shift dramatically in a fairly short time – which we have learnt, if not before, from recent developments in Eastern Europe. The real economy, the production and trade of goods and services, changes in a much more inert way, however (Nilsson and Schamp 1996). Here we find restructuring processes that are measured in years, not weeks and months. Where settlement patterns and the built environment are concerned, decades seem to be a more appropriate yardstick if we are interested in structural change (Malmberg 1996).

A general characteristic of many of the studies which have been reviewed in this paper is that they seem to exaggerate the speed of the anticipated regional shifts in Europe. There is an element of rush – almost as if the benefits of European integration will be grabbed by those able to react most quickly. When national barriers for economic interaction are eroded, the regions face both opportunities and threats: on the one hand, the regions find themselves unprotected from foreign

competition; on the other hand, they may be able to attract investments from outside. In both cases there is a need to adjust immediately.

At least two arguments could be raised against such a line of reasoning. First, the issue of attractiveness is double-edged. On the one hand, most regional – or national – actors in the policy arena would regard the ability to attract foreign investment both as a goal for policies and as a confirmation that they have been successful. On the other hand, once investments arrive, worries tend to emerge over the effects of regional/national economic activity being taken over by 'aliens'.[4] Secondly, developing a region means much more than making it attractive to investments from outside. Policies for regional economic development should primarily aim at creating the conditions in which firms may develop their competitive strength, through knowledge-upgrading in a broad sense. Competitive firms contribute to regional wealth by making investments in goods production, services, retail and other sectors, in order to generate income in the regional economy by providing employment.[5] A competitive region, from this point of view, is not primarily a region that attracts investment from the outside, but a region that is able to attract knowledge and apply it in the form of new economic activity. In this paper, we hope to have provided some arguments for a redirection of research efforts in the area of regional development in Europe, from a narrow focus on attractiveness, to a broader view of the preconditions for economic prosperity.

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Notes

1 This paper draws on a report (Hallin and Malmberg 1996) that was published in Swedish as part of a research programme on 'Regions in International Competition'. In that report, some twenty surveys, consultancy reports and research papers were reviewed and examined.

2 Whether the differences between the Empirica and the DATAR study have something to do with their national origin is a matter for speculation. In general terms, it should be noted that the majority of studies under review in this section are north-west European in their origin: in addition to the two studies already mentioned, a handful come from the UK, a few from France and a few from Scandinavia.

3 This paper has recently been reprinted as Chapter 1 in Krugman (1996). See also the discussion on 'Strategic trade policy' in Krugman (1994b).

4 See Servan-Schreiber (1968) for an early account of the effects that an inflow of FDIs may cause. See Malmberg (1990) for a review of the literature on 'external control'.

5 In this context, we should not forget that some regions may be more successful than others in maintaining a continuous inflow of publicly-transferred funding in order to produce and develop various types of advanced services. This aspect of regional wealth creation is perhaps most obvious in countries with, for example, high military spending or far-reaching public programmes for higher education and R & D.

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