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Conditions for 'Creative Knowledge Cities'

Findings from a comparison between 13 European metropolises

'Going creative'- An option for all European cities?

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Conditions for ‘Creative Knowledge Cities’

Findings from a comparison between 13 European metropolises

‘Going creative’- An option for all European cities?

ACRE report 9

Sako Musterd
Olga Gritsai



Accommodating Creative Knowledge – Competitiveness of European Metropolitan Regions within the Enlarged Union

Amsterdam 2010
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ACRE

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1.1 The aim of this report

From the start of the twenty-first century, challenging debates have taken place about the essential conditions for the development of new economic activities in advanced economies. In particular these have included the conditions that enable the development of creative and knowledge intensive industries in urban or metropolitan environments. Many European cities are searching for the right set of conditions with which they can compete with other cities. For that reason theories have been developed aimed at understanding the relationship between those conditions and economic development. The economic sector focus in these theories tends to be on creative and knowledge intensive industries, since these seem to offer most opportunities. These theories, however, have been developed in a rather fragmented way so far. Attention has been paid to clustering processes, classic location factors, so-called soft conditions – amenities, tolerance, and atmosphere -, deep-structural factors and pathways the cities followed, and the role of a variety of personal networks.

To what extent are cities able to attract new economic activity? What should city leaders do to help their cities forward in that respect? These and related questions are returning in urban development debates, especially during periods of fierce economic and political restructuring. And that is what European cities have experienced over the past decades and will continue to experience in the decades to come. Some have suggested that successful urban economies could easily be established or engineered by local governments and other actors; others believe that this is not such an easy thing to do. We consider ourselves to be part of the second group.

To understand the art of possible for urban policies it is important to learn more about the crucial conditions for the settlement of new economic activity, namely creative industries and knowledge intensive industries.

In the ACRE research programme (Accommodating Creative Knowledge – Competitiveness of European Metropolitan Regions within the Enlarged Union, FP 6, 2006-2010) efforts were made to include all of these perspectives simultaneously and to evaluate some of the prevailing assumptions about ‘what drives economic development’, including what drives managers, high-skilled employees, and high-skilled transnational migrants in their location settlement behaviour. In this contribution variations with regard to the development of creative knowledge cities will be presented and connected with different pathways they went through, as well as with the ‘hard’, ‘soft’, and ‘networking’ conditions. Some policy implications will be presented as well.

In this synthesis report we will summarise empirical findings of the 13 teams of researchers, working in different metropolitan regions across Europe (see ACRE reports 2-8) and explain

them from the perspective of different theoretical perspectives, challenging our initial hypotheses and assumptions. The urban regions we use as case-studies are Amsterdam, Barcelona, Birmingham, Budapest, Helsinki, Leipzig, Munich, Poznan, Riga, Sofia, Toulouse, Milan and Dublin.

This report reflects a more sustained research effort in each of them than lies behind much of the debate about creative knowledge cities. The data has been purposively generated to address basic propositions in the field and has included the examination of historical and secondary sources as well as original empirical research that begins to test assertions about the motivations of key actors in the creative knowledge industries. All of this research was designed to take full account of the relevant literature – of what was known already – and to use as far as possible common approaches so that the combination of factors that composed the unique account for each city (and its region) represented real variation and was not simply a result of the idiosyncratic ways in which the research had been carried out. So, for example the interviews referred to throughout the project were carried out to a common design and format and those selected for interview were drawn using an agreed framework and largely from the same sectors of the industries concerned. We believe that the systematic nature of this approach makes the material we have presented robust and reliable. In any international comparative research of this type, however, the individual character of each urban region and its economy, and differences between the perspectives of researchers and their resources in implementing the research design present a challenge. The discussions of the results of the research have not, therefore, claimed too much. In some respects what we have are rich urban studies generated through the application of a common template that enables comparisons of key dimensions of the competitive city and through this of the cities and metropolitan regions more broadly.

1.2 Definitions

We will not embark on the discussion about the concept of 'creativity' and its meaning as such. Instead, we focus on the varying developments of specific economic activities in (selected) creative or cultural industries and (selected) knowledge intensive industry sectors. This does not mean we do not see problems of definition. As Gibson and Kong (2005) have stated for the concept of 'cultural economy' (which is related to the concept of 'creative economy'), there are multiple ways in which that economy can be defined. In their critical review of the literature they discussed various approaches. Their conclusion after discussing these approaches was: "What this discussion illustrates is that the polyvalent nature of cultural economies means that there are myriad conceptions in the literature, and the productive task ahead is not to sink into endless efforts at defining..., but acknowledge the polyvalence and address specific research agendas from there". (p. 546). We have followed that recommendation and also taken account of other previous work including that of Pratt (1997) and Kloosterman (2004).

We have adopted a 'sector approach' in which we pragmatically define the creative industries (such as arts, media, entertainment, creative business services, architects, publishers, advertising, and designers) and knowledge intensive industries (such as ICT, R&D, finance,

and law). In comparisons where the wider categories of creative and knowledge intensive industries are regarded as important, in particular when studying pathways and the policies, we tend to refer to these creative and knowledge intensive industries in aggregate. However, where the appropriate evidence relates to opinions, attitudes and behaviour we must make more specific comparisons, because the wider sectors are internally very heterogeneous.

For the creative industries we have focused on the most creative of creative industries, and within certain sectors, like advertising, this means the most creative parts of advertising and not standardised activities, such as the production of weekly broadsheets providing details of 'dwellings for sale'. Following analysis of contemporary statistics for each of the urban regions involved, three sub sectors of creative industries were identified as most important. Two out of these three were then chosen for further research by all teams. These were:

- creative parts of computer gaming, software development, electronic publishing; software consultancy and supply;
- motion pictures, video activities, and radio and TV activities.

A third important creative industries sector in the urban region was then chosen. This was advertising if it was among the most important sectors but was another sector when advertising was not important.¹

A similar research strategy was followed for the knowledge intensive industries. Here all research teams focused on:

- law, accounting, book keeping, auditing, etc,
- finance,
- R & D,
- higher education.²

The research carried out on these specific sectors also took into account the size and location of the firm and where we sampled to identify respondents for parts of the study we adopted a sampling procedure to include self-employed persons and persons in small (1-5 tenured staff) and larger (more than 5 tenured staff) firms. We also sampled to include locations in the core of the metropolitan area and in the urban region beyond the core.

¹ NACE codes 722, 921, 922, and 744

² NACE codes 741, 65, 73, and 803

1.3 The research scheme and guiding questions

Based on debates in the literature survey we thought it would be helpful to address the main question in two steps:

The *first step* implies an analysis of the so-called *deep structural factors* that may be important to development of creative knowledge regions. Here we went into the wider and historical economic, political and societal positions of the urban regions, and into the pathways these regions have gone through and consider how these pathways and historical positions might have shaped the conditions for creative and knowledge intensive industries.

The *second step* focuses on the more *contemporary conditions* and addresses four different fields of theory simultaneously. We distinguish between hard (classic) conditions; cluster theories; the impact of networks; and of soft conditions (amenities) on settlement behaviour of those who are most directly involved in the development of creative and knowledge intensive industries in European urban regions.

The research is to a large extent dependent on the question who are the most directly involved actors in the development of creative and knowledge intensive industries. We decided to focus our attention to three so-called target groups in particular: managers of these firms, high-skilled employees, and high-skilled transnational migrants. One of the important questions we addressed is what they regarded to be important conditions for their settlement in the urban region.

The *managers* of selected firms operating within the creative and knowledge intensive firms under consideration potentially have power to make decisions about where to (re) locate and some will at least have some impact on crucial settlement decisions. What factors drive their decisions? What were the most important dimensions they considered?

Since, increasingly, we are talking about globally connected economic activities, we also investigate what the opinions and motives and considerations are of *transnational migrants* who are employed in the creative and knowledge intensive industries we focused upon. Why did they choose to live and work in a certain place? Was it because the jobs were there? Was it because they could earn most there? Or was it because of the soft conditions? Or was there some other reason?

Finally, high-skilled and *highly educated employees* play a crucial part in some accounts of the development of the sectors we focus on. They can tell us whether the soft factors identified in the literature had a major influence on their decisions over where to live and work. They can also tell us what kinds of considerations were important in their decisions and can clarify what conditions carried the most weight.

This results in three guiding questions overall:

- What are the development paths of creative knowledge regions and how are these informed by the wider economic and societal contexts?
- How important are hard (classic), cluster, network and soft conditions for the creative and knowledge intensive industries in European urban regions?

- What are the settlement considerations of managers, highly skilled employees and transnational migrants in the creative knowledge sector when they decide to settle in an urban area?

In this project we have made efforts to better understand the behaviour of key actors in sections of the creative and knowledge intensive industries. Evidence was collected on the basis of an integrated methodology, so we did not simply collect findings from individual case studies, but instead we developed joint survey-lists, item lists, interview strategies, cohorts to be interviewed, and sector selections for creative industries and knowledge intensive industries. Subsequently we applied these joint strategies in each of the thirteen urban regions involved. Although comparisons are always difficult in a diversified environment, this offered the best possible way for confronting the empirical outcomes for the urban regions with each other. It provided the opportunity to come with stronger empirical evidence about a range of assumptions that have dominated the public and academic debates in many places across the globe. The narrow theoretical foundation and the thin empirical support that form the base for current debates and interventions may already have had serious negative implications for the development of urban policies aimed at enhancing the competitiveness of urban regions. It was our ambition to come up with a broader theoretical foundation and more solid empirical analyses of the crucial assumptions, thus providing the elements for developing better understanding and more adequate policies aimed at enhancing urban economic positions in the longer run.

2 THEORETICAL APPROACHES

The key questions or challenges in this report are derived from the wider public debates on how to foster economic development in urban regions and include the following very general question: ‘What makes cities competitive?’ Since we have based this report on rich empirical material which allowed for multiple comparisons between the urban regions, we have transformed the initial question into the following manageable research question: ‘What are the key conditions for urban economic development in different regions?’ Subsequently, we reformulated the question in greater detail: ‘What are the conditions for specific creative industries and specific knowledge intensive industries in different metropolitan regions?’ These questions implied an investigation of the development of the economic sectors, what has nurtured them and what will help to develop them further.

We applied five theoretical approaches and also referred to three different categories of actors that were regarded as of crucial importance for the understanding of economic development.

2.1 Path dependence theory

Deep structural economic and societal changes may be seen as the foundation for different economic clusters. This includes structural positions of cities in history. How strong or weak were the cities 100 or 500 years ago? How did history shape the economy of the city? Although few studies go back that far, there is a growing interest in the role of historic pathways cities and their economies went through and how these could have shaped their current positions. This is the field of evolutionary economics and evolutionary economic geography (see for example Martin and Sunley, 2006; Boschma and Martin, 2007; Frenken and Boschma, 2007). In this field the key focus is on economic development paths and trajectories. Contexts, once developed, tend to have contingent impact on future developments.

These approaches offer valuable frameworks for thinking about long-term structural regional change effects. Economic transformations leave their legacies and thus construct the basis for further development. Furthermore, the models of change do not apply to the whole world in the same way. Some sections of the world do not profit from the growth. Some countries stayed longer in certain economic structures and there the shift to another structure was postponed. Some authors, like Malecki (1991), pointed at the association between specific economic structures, or regimes and the organisation and ideologies of the state. Fordist types of production tend to be associated with welfare states in which regimes have developed that are rather centralistic, subsidy-oriented, mass production and mass-consumption oriented. In contrast post-Fordist types of production are characterised by privatisation, decentralisation and entrepreneurship. The adjoining ideology is focused on individualism.

It makes sense to distinguish between economic and societal, historical and political dimensions that underlie the types of development pathways experienced in metropolitan regions.

a) The economic dimension relates to general technological change, industrialisation 'models' and macro-structural trends. This also relates to economic organisation, institutional, organisational and financial systems for business and labour market and skills development.

b) The societal dimension includes the historical, cultural, demographic, political and geopolitical dimensions in a broad sense.

Current conditions for development in the creative and knowledge-based industries are, in fact, to a large extent, dependent upon the sophisticated twists of these dimensions not just over the past fifty or two hundred years, but as said over the course of centuries. These have formed a distinctive pathway for each individual city or urban region. These pathways cannot be neatly explained by just a combination of current economic and social conditions – although these are not unimportant either, but are also often influenced by cultural change and by sudden interventions of some external factor that impacts on the trajectory (also Hall, 1998).

Based on literature that has an open eye for path dependence theory, we suggest there are at least three deep-structural factors that should be considered if we want to understand the current opportunity structure of urban regions in Europe:

- 1) The question whether the urban region has had a key political or economic decision making function. Such a function became a powerful stimulus for the development of more competitive and innovative economic structures. Those cities, which are historically known as national or regional capitals (like Amsterdam, Munich or Budapest) are mostly multifunctional cities. A multifunctional profile is a key to quick recovery and structural flexibility; it helped these cities to avoid extremes of hyper-industrialisation and it provided *a priori* the conditions for innovative development. In addition to multifunctional legacies, cities may have pluralistic legacies associated with educational and other institutions and different legacies in terms of governance and the built environment. All of these begin to build complex cities that are shaped by a variety of development elements (Gottman and Harper, 1990).
- 2) The development of the European city system, as shaped in Roman times and developed considerably in the Middle Ages. Quite a few of these cities have attractive old well preserved city centres, originated from that time and many European cities were already known as important cultural centres (Milan), university centres or trade and handicraft metropolises, growing around major seaports (Amsterdam) (De Vries, 1984; Lees and Hohenberg, 1995; Kunzman and Wegener, 1991)
- 3) The industrial revolution, which brought new developments to the existing European cities and gave birth to new ones. For some of those that experienced growth in the first wave of the industrial revolution, heavy industry later became a serious burden (Kondratieff, 1935; Gritsai, Treivish, 1990; Camagni and Capello, 2005). Martin formulated this as a change from positive 'lock-in' in which positive externalities reinforce local industrial dynamism, to negative 'lock-in', in which processes and structures built up as a result of positive 'lock-in' become a source of increasing rigidity and inflexibility, which undermine regional productivity and competitiveness (in Martin and Sunley, 2006).

Characterising *contemporary impacts*, we applied four theoretical approaches and also referred to three different categories of actors that were regarded as of crucial importance for the understanding of economic development.

- The first theoretical approach includes a view of development which puts so-called classic location theory in the central position. We call this the ‘hard’ conditions or classic conditions theory. Here the availability of capital and of labour with adequate skills, proper institutional context, tax regimes, up-to-date infrastructure and accessibility are the factors that are regarded as playing the major role in explaining the development of firms in urban regions.
- A second and strongly related theoretical approach is associated with theory about economic clusters. In this field agglomeration economies play a major role and it is assumed that activities cluster together where they use the same infrastructure, have linkages to each other and to the same environment and profit from each other’s presence and the enhanced image of the cluster. The development of clusters gets special salience in debates on pathways that urban regions have followed over time. This also relates to debates about path dependence of urban economic development.
- A third field of theory refers to the importance of networks. Personal networks of employees, entrepreneurs and managers may play a crucial role in the decision making process determining where to start a business and also where to expand. These networks can have different characteristics, ranging from very personal to business related; from small to large; and from local, to regional or global.
- A fourth theoretical approach, finally, includes views on economic development that are strongly related to ‘soft’ conditions. This is a field of thought that is nearest to the work done by Florida and followers and what seems to have become the ‘New Conventional Wisdom’, as Buck et al. (2005) have called it. The suggestion is that creating the proper conditions for the settlement of creative talent will be the key to successful development. The focus is on a range of urban amenities that are attractive to individuals - including factors such as quality of life, quality of environment and urban atmosphere, well-functioning housing markets that provide alternative types of attractive housing, and factors related to levels of tolerance, openness and diversity.

2.2 ‘Classic’ location theory (hard conditions)

The most well-known theoretical approach focuses on conditions that we call ‘hard’ conditions. We also call this field of theoretical thought: ‘classic’ location theory. In that theory key factors include the availability of capital and of a labour force with the requisite skills, an institutional context with the right set of regulations and sufficiently attractive tax regimes, the right infrastructure and good accessibility, but also availability and affordability of (office) spaces. Subsidies and/or tax abatements in less developed regions (for example the EU Regional Funds and the German regeneration programme for the former GDR) can also be included in these ‘hard’ location factors and they have frequently been shown to make a difference in company relocation decisions. In more concrete terms, this is about nearness to global financial centres, the presence of a major international airport, telecommunication services and other service suppliers and clients, as well as the availability of an international labour pool (Sassen, 1991; Sassen, 2002; Derudder et al., 2003; Scott, 2003; Taylor, 2004).

Development strategies that adopt a theoretical view in which these factors are central, tend to improving infrastructure including transport and other connections (for example, this was typically one of the big investments in Eastern European countries that entered or intend to enter the European Union), and business parks.

In the 'hard' conditions literature several authors pay attention to the importance of educational facilities, more particularly high quality public schools and universities. The presence of these facilities ensures the availability of highly skilled labour and attracts firms to these places. Glaeser and Saiz (2003) found that "for more than a century, educated cities have grown more quickly than comparable cities with less human capital" (p.1). The findings resulted from an analysis in which they controlled for a range of other variables. They also found that "skilled cities are growing because they are becoming more economically productive (relative to less skilled cities), not because these cities are becoming more attractive places to live". However, as we will see, the presence of good schools and universities typically fits all theoretical perspectives. It may be presented as a crucial 'hard' economic condition, but it may also be presented as a factor that is essential for the attraction of talented young people, and thus be labelled as an essential soft condition. Moreover, those who defend network theories and cluster theories also connect educational facilities with other cluster characteristics.

Even though other factors may have gained in importance, we do not intend to suggest that 'hard' conditions have become irrelevant today. On the contrary, today's cities and urban regions should all meet certain 'classic' location conditions. They seem to be necessary conditions, albeit not sufficient conditions. Larger cities and regions are generally able to offer essential 'hard' conditions. However, there still are differences between the regional (tele) communication networks, and other regional infrastructures such as road systems, railway-connections and accessibility through water and the air. Availability of capital, qualified labour and the wider institutional settings are still highly relevant and thus it is crucial to consider that these are not evenly distributed. Tax policies, rent levels, labour costs, and legislation regarding labour and wages remain essential factors. These offer different opportunities to urban regions (Sassen, 1991, 2002; Derudder et al., 2003; Taylor, 2004). These differences will result in unequal positions in economic competition. This may be especially relevant to the internal differentiation between European cities.

Due to the evolution of Europe after World War II, cities in Western Europe are likely to have a very good position in terms of 'classic' conditions. Over the past sixty years Western Europe has proven to be able to build a more varied infrastructure and firmer connections to the rest of the world. In general, there is a suggestion that Eastern and Central Europe have weaker positions in terms of 'hard' conditions for economic development in new creative industries and knowledge intensive industries. However, that conclusion should not be arrived at too quickly. There are a few counterbalancing factors. First of all, some of the cities in East Central Europe may regain their former central geographical position. Cities like Budapest come closer to the centre of gravity of Europe and its potential position as a spider in the web may change the status of the region. Secondly, Eastern European states have been able to create conditions in which a very large share of the population attained a high level of education. This might facilitate the transformation towards knowledge societies. Thirdly and more generally, many of the 'hard' conditions may be especially important for larger firms

but less important for smaller firms and newly established start-ups. The fact that hard conditions overall may be less developed in some contexts, therefore does not have to imply that economic development of new activities will not be possible in these contexts (Dövényi and Kovács, 2006; Stanilov, 2007).

2.3 Cluster theory

Economic cluster theory again overlaps with the other theoretical fields. The concept of agglomeration economies plays a major role in cluster theory. A key element in this theory is the fact that activities are assumed to cluster because they have linkages to each other, use the same public and private services and institutions and are connected to the same environment, while profiting from each other's presence. Together they create a (path dependent and historically embedded) cluster image.

Wu (2005) referred to specific creative clusters. These were associated with high quality universities, commercial linkages, availability of venture capital, support by public policies and good quality services and infrastructure and with quality of place.

Porter defines clusters as “geographic concentrations of interconnected companies and institutions in a particular field. Clusters encompass an array of linked industries and other entities important to competition” (Porter, 1998, p. 78).

Among these ‘other entities’, Porter mentions suppliers of specialised inputs and infrastructure, customers, manufacturers of complementary products, companies related by skills, technology or common inputs, governmental and knowledge institutions, and trade associations.

Porter's cluster concept rapidly became dominant in academic and policy discussions about urban, regional and national competitiveness. Encouraged by success stories like the knowledge intensive ICT cluster in Silicon Valley (Saxenian, 1994), the Cambridge region (Keeble et al., 1999) or the Third Italy (Bathelt, 1998), many cities, regions and countries built on this theory to develop cluster policies.

The cluster concept is of high value, but should not be seen in isolation. With Turok (2004) we share the view that city-regions need to be understood as part of wider economic systems and external business connections. The efficiency of ‘hard’ conditions such as communications and transport links should be taken into account, as well as wider national and international policies and frameworks.

Path dependence applies to the development of economic organisation and clusters, but also to the impacts of political and social and other institutional and organisational structures that are relevant to cluster formation. These structures often have their origins in the past and once developed they play a crucial role in the future attraction of certain activities and territories. The presence and functioning of place-bound formal and informal institutions is considered to be very important for cluster development perspectives. Again, (old) universities and other institutions of learning are particularly relevant historical drivers behind ongoing and future change. Cluster formation is also connected to the level of embeddedness of activities. The notion of ‘embeddedness’ was initially used by Polanyi (1944) to designate the fact that in traditional societies, commercial trade depended upon social relations. However, the concept is still alive. In a recent study Taylor (2005, p. 70) referred to embeddedness as: “the

incorporation of firms into place-based networks involving trust, reciprocity, loyalty, collaboration, co-operation and a whole raft of untraded interdependencies”.

One of the problems with economic cluster theory is that clusters may be identified at virtually all geographic scales. The question then is: to what extent can we really speak of ‘geographic concentrations’? Another question is to what extent clusters can be created by governments or through deliberate partnerships? The most well-known clusters, such as Silicon Valley seem to have emerged because there were innovative firms and individuals, fortunate events, or even coincidences (Martin and Sunley, 2003; Cumbers and MacKinnon, 2004; Boschma and Kloosterman, 2005).

Some additional caution may be appropriate in relation to the issue of scale. In urban geography textbooks smaller areas are very often designated as having a specific functional structure. In many urban regions highly complex bundles of economic and social activities can be found at a small scale. Examples in the creative industries include media-clusters, jewellery quarters, arts conglomerates and entertainment clusters. Many of these can be found in rather small areas, in specific parts of cities or urban regions where special features can be found; and their economic relations may be restricted to a small part of town. However, these new economic activities are often rather labour intensive (Scott, 2006, p. 6) and this implies that a large supply of labour may be required. Consequently, these clusters cannot exist without being embedded in larger cities or urban regions with a wide variety of professions and skills.

Cluster theory has become prominent in many national, regional and urban development strategies and will probably remain so in the coming decades. Currently, clusters related to creative and knowledge-intensive activities are among the ‘most wanted’ targets of cities, regions and countries in the advanced capitalist world. Cities and regions trying to develop, facilitate or promote concentrations of creative, innovative and/or knowledge-intensive industries in order to become more competitive, have attracted considerable interest. ‘Cluster policy’ has become one of the most common instruments to transform an urban or regional economy into a creative and knowledge-intensive economy. Different concepts of ‘cluster’ are evident in the literature. These are the creative cluster or quarter as a local and well defined physical entity and space where industries locate in one building or neighbourhood (for example the Custard Factory in Birmingham, the Westergasfabriek in Amsterdam, or Manchester’s Northern Quarter – see Mommaas, 2004); and the cluster as expressed by Porter, which is an industrial sector definition usually wider in space (Wu, 2005).

2.4 Personal networks

Hard conditions, in the form of enabling connections, and clustering processes, which are characterised by relations between partners and firms, already reveal that the division between the fields of theory we present is a relative one. Many debates about classic location factors and about cluster theory might also be positioned under a heading: network theory. Inspired by the work of Grabher (2002, 2004) and Turok (2004) we pay attention to the impact of personal ties, local relations and organisational affiliations. In some contexts these relations and networks are referred to under concepts such as ‘individual trajectories’. The application of these concepts seems most functional when trying to understand what drives various types of actors in deciding where to settle and where to stay. This introduces a criterion for differentiation on the basis of the origin and history of individuals’ personal relationships. Geographical relationships that receive special attention are the place of family, the place of birth, the place of study, including the university milieu, and the proximity to friends.

These relate to path dependence at the individual level, but also to the idea that embeddedness is a crucial concept that drives various actors. Clearly, the cluster concept is associated with network theory. As early as the end of the 1970s Italian economists (Beccatini, 1979) and French sociologists (Ganne, 1983; Raveyre and Saglio, 1984) showed that small and medium-sized enterprises specialising in the same industry were organising in a way which involved both competition and cooperation. These particular instances were based on social relations and shared conventions; personal relations and clusters went hand in hand.

Personal networks are also regarded highly important for international migrants. Most of them do not go to a new place on earth without the support of individuals or networks available at these new destinations (Epstein and Gang 2006)

2.5 ‘Soft’ conditions theory

The ‘soft’ conditions field of theory asserts the importance of specific urban amenities that create an environment that attracts people who are key to the most promising economic activities for the economic development of the urban region. The use of the concept ‘soft’ is related to the fact that it is very difficult to find adequate operational and objective definitions for the concepts that are collected under this umbrella. The soft conditions include urban ‘amenities’, such as the quality of life, urban atmospheres, housing market situations, levels of tolerance, openness and the diversity of the population. Helbrecht (2004) talked about the ‘look and feel’ of a city. The vagueness and subjective nature of these terms provides a lack of clarity but also offers flexibility and thus major opportunities for politicians and city managers. They may also favour these terms because the idea that urban amenities are good for the urban economy provides the opportunity to connect (physical) urban development agendas and social agendas with economic agendas.

The idea that investment in soft conditions is a panacea for urban economic problems has become the ‘New Conventional Wisdom’ (Gordon and Turok, 2005) in circles that aim at strengthening the urban economic base. The debate about ‘soft’ conditions has increasingly become dominated by Richard Florida (2002, 2006). He used the term ‘creative class’ to refer

to people whose presence is absolutely crucial for economic development. He refers to people with original ideas of all sorts, not just technical geniuses inventing products, but also people developing concepts and images. According to Florida (2002, p. 8) "The creative class is comprised of a 'super creative core', which consists of a new class of scientists and engineers, university professors, poets, actors, novelists, entertainers, artists, architects and designers, cultural worthies, think-tank researchers, analysts and opinion formers, whose economic function is to create new ideas, new technology, and/or new creative content". Beyond this core group, the creative class also includes a wider circle of talent working in knowledge-intensive industries. The latter industries include high-technology sectors, financial sector and juridical services. Those who are employed in these sectors are often engaged in complex problem solving that involves a great deal of independent judgement and creativity and requires high levels of education or human capital. The creative class is seen as vital for economic development and urban and regional success. Florida argued that economic growth is powered by creative people, or 'talent'. In his view it is, consequently vital to create the conditions they require. Florida has moved away from emphasising the role played by the economic activities themselves and argues that 'talent' prefers places that are culturally diverse and open to new ideas: in short places that are 'tolerant'. When this is combined with a concentration of 'cultural capital' wedded to new products ('technology'), the ideal conditions have been created. The three T's (talent, tolerance, technology) together stimulate 'business formation, job generation and economic growth'. Referring to Jane Jacobs (1961, 1969) as one of his main inspirations, Florida claims that creative and talented people prefer to live in cities with diverse populations and a tolerant atmosphere. In more recent work Florida (2006) added that "talent is not a stock, it is flow". Talent can move from one place to another. Cities might try to attract talented and creative people but they could also try to invest in 'growing' them. The latter requires a tolerant climate. "To create a growth region, you need the kind of place that people want to come to and can easily get to, where they can lead the lives they want and express themselves freely" (p. 26).

As in the work on the character of global cities (Sassen, 2002) and the studies on world city networks (Taylor, 2004), the attraction of a 'talent pool' through (inter) national migration plays a prominent role in Florida's creative class concept. The most important target groups for 'creative knowledge city' strategies are, according to Florida: higher educated graduates and employees in knowledge intensive and creative industries, managers of creative and knowledge intensive companies, and trans-national migrants.

Florida was neither the only one nor the first to come up with these ideas. Scott (2006), for example, refers to Gouldner (1979) who wrote about 'the rise of the new class' almost thirty years ago. He referred to the upper employment strata and a 'class' that combined highly educated and technology driven people. In recent years Charles Landry (2000) also asked for more attention to be given to the environment. He stressed the institutional and economic context, while Florida focused on the physical structures and public spaces where people can meet, including bars, cafes and restaurants. Both, however, regard public and semi-public spaces as relevant for a city to attract talented people.

Several other authors followed in the footsteps of Florida and provided similar types of 'recipes' for building a creative city. Montgomery (2005) for example concluded that if cities want to be successful in the future, they will need to promote artistic, design and

technological skills, back local talent, grow the creative industries, offer a good cultural and artistic life and organise services such as education to support all of this. He also stresses that “the key figures in all of this are the visionary political leaders and the artists, investors and entrepreneurs, the former creating the conditions for the latter to invest and prosper” (p. 343). Yigitcanlar et al. (2007) investigated the urban orientation of the ‘ideal knowledge worker’ and concluded that quality of life and place, urban diversity and social equity are most important to them.

Difficult to measure concepts, such as ‘urban atmospheres’ or ‘social climates’, but also slightly less vague concepts, such as the quality of the housing stock and neighbourhood and the functioning of the housing market are essential dimensions in the discussion of ‘soft’ conditions theory. It may or may not be true that potential talent will opt for another city – perhaps even another country – if an initially preferred city does not offer the right combination of conditions. If the housing market does not offer what is asked for, talented people may move elsewhere. So far, there is little work that has directly addressed what housing factors are important here. Reference could be made to price and affordability, dwelling size and mix or to innovation in style and design or to neighbourhood character. Issues related to the housing market have been discussed in relation to the city of Amsterdam. Musterd (2004) and Bontje and Musterd (2005) found that a combination of long waiting lists and rapidly rising house prices [which hardly dropped even during the financial crisis around 2009], especially in the inner city, resulted in very little effective choice available to young starters on the housing market, even if they are highly skilled. If residential or location decision making processes by creative talent are becoming much more important and if, consequently, the location preferences of managers of companies and of their employees become key factors, this would require a radical change in local and regional economic development strategies. Such a shift would also have major implications for the ambition to increase the EU’s competitiveness as a knowledge-based economy.

Florida’s ideas have met with increasing criticism, partly because of his theoretical assumptions, but especially because of the weak empirical basis for his arguments. This is also due to the application of imprecise and ill-defined operational concepts in empirical research. As argued by several geographers and economists (Sawicky, 2003; Musterd and Ostendorf, 2004; Glaeser, 2004; Hall, 2004; Peck, 2005; Storper and Manville, 2006; Scott, 2006; Hansen and Niedomysl, 2009) the existing research evidence is far from convincing and other theory cannot be set aside.

Storper and Manville (2006) noted that it is not that simple to make a city ‘cool’ and that there is a “larger difficulty of developing its ‘amenities’. ‘Amenity’ can mean many things (...). One person’s amenity is often the next person’s inconvenience” (p. 1252). They then expressed their preference arguing that “the notion that skills have driven growth, and that skilled workers locate according to some set of exogenously determined preferences and therefore determine the geography of growth, is less convincing than a theory that the preferences of firms – i.e. agglomeration economies – give rise to growth” (2006, p. 1254).

Although there are impressive examples of growth of the share of creative industries in cities such as Milan (Amadasi and Salvemini, 2005; Salvemini et al., 2005), there is as yet insufficient evidence to argue that the rise of the ‘creative class’ and the ‘creative and

knowledge intensive industries' is a long-term trend. In fact, the collapse of the financial sector may be illustrative of the potential 'hype' character of the 'soft' conditions theory. Some of the products created by 'creative talent' in the financial sector, turned out to be unsustainable.

This is not to say that there would be no place for creativity in theories of urban economic development. With all the criticism on Florida's writings, we should avoid throwing the baby out with the bath water. From a historical point of view, we know that the world's great cities throughout history have always been centres of creativity and innovation (Hall, 1998; Simmie, 2005), but we also know that not all cities could be labelled like that. Hall (2004) rightly stated that creative cities or regions can hardly be created 'out of thin air'. His criticism especially relates to Florida's suggestion that urban transformation can be realised almost 'overnight', for instance by scattering the notions of tolerance, openness and diversity over a city. He argues "...building innovative or creative cities was a long and slow, sometimes agonisingly slow process, and ... the outcome could by no means be guaranteed or ordained in advance" (Hall, 2004, p. 257). He notes that creating the necessary preconditions can be very time-consuming.

Although things will not change overnight, the logic of path dependence and societal changes is that cities adapt to changing circumstances. It is true that the chances of a city or region specialising in creative and innovative activities and attracting the talent needed are considerably larger where there is a long tradition of creativity and innovation, but it is not impossible, neither unwise for many cities to continue changing their profile accordingly. Even though changes are slow and cities will be differently constrained by their histories, they adapt to new circumstances and new opportunities. However, the adaptation process should be informed by more knowledge about why there is spatial selectivity in the settlement behaviour of creative and knowledge intensive industries. At least part of the production seems to be connected to specific urban contexts at various scales (Lash and Urry, 1994; Zukin, 1995; Kloosterman, 2004; Musterd, 2006).

3 EMPIRICAL EVIDENCE 1:

MULTI-LAYERED CITIES OR THE IMPORTANCE OF PATHWAYS

3.1 The rootedness of urban histories

Although there are examples of efforts made in that direction, it seems either very difficult to break with the past, or very difficult to create new and proper sustainable balances to make the city sufficiently attractive to work and live in. Path dependence, the rootedness in rich or poor urban histories, continues to play a major role in future opportunities for cities and for those who create and recreate them. The historically grown structures and urban cultures may help or may prevent the city from flourishing in a certain time-space framework. These frameworks are changing, as short and long economic cycles show us. Structural changes may have particularly serious effects on the development of the city, as we have experienced in the past. An era in which mainly manufacturing industries and port activities were driving urban economies – as was the case in many European cities from the 19th century onwards – can change into an era in which trade, consumer and producer services, and technology, are the combined new engines. As a result inflexible, standard ways of production were replaced by more flexible processes. This has had major consequences for urban structure and urban life.

Economic restructuring is not the only deeply rooted driver of change; large technological, political, cultural and institutional changes will have major implications for urban transformation in turn. A relatively recent example of significant change has been formulated by Manuel Castells (1989), who saw that the telecommunication revolution would transform information exchange and this would, in turn, have major impacts on cities. Spaces of flows in various networks would become dominant over the classic spaces of places. New urban realities would be better understood when looking at the city's embeddedness in a range of (global) networks (Krätke 2003, Scott, 2006). Even though people and firms did not become really footloose, and even though the spaces of flows did not make the spaces of places redundant (as many initially thought they would), the importance of networks has been acknowledged and still seems to be increasing. Similar changes may be connected with major shifts in the type of welfare state that cities are embedded within and with other major political changes (the rise and fall of the Iron Curtain and connected state systems, the consolidation of democracy in Spain, admission of new Member States to the European Union).

Those cities that are best able to change their profile from old to new will become the winners of their time. However, to be able to make the appropriate change, certain conditions have to be met. Cities have built on distinctive legacies and traditions but what appears to be an important asset is that a varied economic structure represents an important asset. This is illustrated by the cases of Sofia, Birmingham and Barcelona. Sofia was forced to become specialised in heavy manufacturing industries under communism and was late to develop a

post-communist economy; Birmingham was identified with manufacturing industry from the early years of the Industrial Revolution onwards; and the city and region of Barcelona, that experienced the last wave of industrialisation rather late. Superficially these cities seem to be representatives of cities with an urban history dominated by a manufacturing industry. But on closer examination they are much less monolithic and uniform having diverse roles such as capital city or regional cultural and educational centre or as a centre for innovation and proactive local government enriching the assets of each city.

Consequently, even these cities cannot be treated as similar or disadvantaged. In Birmingham, for example, many who were employed in manufacturing industries were high-skilled and the presence of small and medium sized enterprises, skilled craftsmen and artisans offered a good basis for the development of creative industries. In Barcelona, where labour was predominantly lower skilled, albeit diversified, there were strong traditions related to fashion and textiles as well as arts and architecture. While the low-skilled labour force offered good opportunities for the building industry, the diversity of industry also offered opportunities for the development of new creative and knowledge intensive industries. Sofia as a national capital had resources of both high- and low-skilled labour, and being a vanguard of change, absorbed talents from all over the country. And in all of these cities there were strengths that emerged in their size and the capacity to adopt active and effective policies to reinvent the city.

Capital cities, cities with a long history as a centre of culture, cities that were not built on a narrow manufacturing industry profile, and cities that had strong positions as control centres for wider, perhaps even global, networks, have assets that attract new creative and knowledge intensive industries. This seems to apply to Amsterdam, Munich, and Budapest, and perhaps also to Dublin. These cities are also known by political power that was established long ago, by a differentiated economy, not a reliance solely on manufacturing industry, an established position in major economic networks and they are known as historical cultural centres with a preserved urban core. But cities with some of these elements in their histories (e.g. Riga) should not assume that their histories will guarantee their futures – they may have to address barriers and develop new practices in the same way as others.

What emerges is a differentiated reality in which accumulated economic, social, political, cultural, physical and functional structures play an important role and are crucial for stable and continued development. This also implies that, in contrast, it will be very difficult to create a new sustainable city with no reference to its past. Urban histories and multiple urban layers simply add to the variety of the city. That does not mean that all layers will be good or helpful at any point in time, but the presence of multiple signs and remnants of urban structures, forms and functions may offer opportunities for a wide array of producers and consumers, and will provide opportunities for re-use when society is changing once again. This is about re-inventing the city, and re-using crucial elements of the old urban social, economic, institutional and functional fabric (Bontje and Musterd 2008).

We studied experiences in a range of urban regions that have been under communist rule until 1989. The breakdown of the communist planned economies resulted in instability and opportunities for changes - starting along new pathways. However, some of these urban regions have been able to maintain crucial characteristics of their older, pre-communist,

profiles. Budapest (with its once central position in the Austro-Hungarian empire), and Leipzig (as a rich economic and cultural centre before communism, with major fairs, and being an important publishing and printing centre), have been able to capitalise on elements of their rich histories, including their 'reclaimed' geographical position. What is important, though, is that each of these histories, (and those of Poznan, Riga and Sofia), have their own character that has to be recognised individually to be able to 'make the most out of it'; and all need significant support from public and private investors to overcome their turbulent recent histories. These kinds of support are not equally available in practice. Although there are some common threads between some of the cities the unique pathways, histories and assets of the cities and their urban regions means that they must also be considered one by one. This also means that any strategies and policy approaches must be tailored in an individual way to fit each city – and this perspective also holds for each of the other urban regions.

What most cities and urban regions do have in common, though, is that contemporary urban leaders often regard themselves as key-actors who are responsible for current urban affluence. However, the real foundations for successful economic development were often established long ago. Toulouse and Munich had created the basis for their scientific and technological development in the 19th century, and other local conditions contributed to the cross-fertilisation of research and industry. Current leaders and current policies may have enhanced their potential, but they did not (have to) invent them completely and could build upon them. Similarly, those who intend to get involved in the study of urban transformation in Amsterdam cannot do so without proper knowledge of what happened to the city in the 17th century, the so-called Golden Age. At that time the city became a global city *avant-la-lettre* and foundations were laid for trade and for the financial and insurance sectors. Milan's strong position in fashion and design also seems to be deeply rooted. Traces go back in textile and silk production and trade as far as the late Middle Ages; the city's wealth was based on these activities (and was spent on luxury goods). Alongside this, Milan's rise as a cultural city is rooted in the Renaissance. The two developments together are of key importance to the current fashion and design industry and therewith form an important element in the profile of the contemporary city.

Some cities have had economies that have experienced sharper discontinuities. This applies to cities and urban regions that belonged to the former communist bloc, and also to cities which developed a strong connection with manufacturing industries. Birmingham and Barcelona have pathways that were clearly different from those of Munich, Milan or Amsterdam. Whereas the latter were able to substantially capitalise on their historical legacies Birmingham and Barcelona have shorter histories to draw on. But even in these cases the roots of the contemporary creative knowledge city are in the past. For Barcelona the role as Catalan capital and distinctive traditions in trade and architecture have been assets and these have been enhanced by public policy activity and strong urban leadership that has self consciously built on these foundations. And although Birmingham has to dig deep to find a history much before the eighteenth century its size and energetic invention of what is needed by a major city meant that by the beginning of the twentieth century the best governed city in the world had established enviable public services, a university and an economy that became the assets for subsequent transformation. Both of these cities show elements of catching up – of building assets that do not eliminate the gap with longer established cities but narrow it in

some respects. And this process of catching up is also observable in other cities including those in East and Central Europe and in Dublin's repositioning itself as a major location for multinational firms in Europe.

Revolutionary changes in the urban region also occur; however, even in these cases emerging patterns often reflect, to some extent, pre-existing arrangements. Although such situations may seem attractive, because new initiatives may not be hindered by urban legacies and can start, more or less, from a blank sheet, this is often an illusion. It will also be extremely difficult to build a successful economy that makes no use of the legacy of skills and other resources that reflect past patterns and can be utilised in the future. And where such revolutionary invention of the competitive city does occur the risks are evident. To some extent Helsinki may serve as an example. That city and wider urban region, or perhaps even the country, are highly dependent on the ICT firms, with Nokia as the flagship. Vaattovaara (2009) noticed that in 2002 62 per cent of Finland's investments in R&D came from that one single firm. The single ICT layer that developed on the basis of locally constructed historical traditions and the requirements of new economic success has brought a very high skilled population, significant economic growth, world class positions and affluence and resulted in multiple spin-offs. Yet the lack of variety simultaneously implies that there is a fragile basis for further development. If Nokia fails, the city of Helsinki will be seriously affected. If the wider ICT sector gets into trouble, the city will be hit even harder. It remains to be seen whether the other layers, such as the fact that Helsinki is the political and educational centre of Finland, create sufficient counterbalancing forces.

The urban region of Toulouse is sometimes said to have a comparable single sector dominance in technology but here the economic roots in history seem to be deeper. Toulouse was already known as a major crossing for trades between the Mediterranean and the Atlantic, and the economic base reflecting this history is more diversified.

Because each city's history and the legacies from history are important influences (but not determinants) on its future development, policy approaches quite rightly tend to involve efforts to build upon the past. There is a reluctance to destroy urban cultural heritage. Cities with a more limited number of layers (for example, rapidly grown new towns, characterised by economic and urban structures that reflect the time when they were built) run a greater risk of becoming the problem areas of the future, since they do not have the 'fall back' options associated with richer, layered legacies. The multi-layered character and rich urban histories of many European cities would – in the longer run and in general – impart an advantage compared with the currently booming cities in China or compared with the formerly booming but single-layered cities in some parts of the US.

The importance of development pathways does not imply that local government and policies are completely unimportant. What it does say is that the impact of the pathways and path dependence cannot be neglected. The histories will enable certain developments or they will block or obstruct certain changes, and thus they result in a variety of successes and failures. Of course, actors and strong leaders often can make a difference as well, but based on the research shown in this report, they cannot tell the whole story and those who intend to change the city will have to have and make use of very good knowledge of the historical development of the city and its region. Moreover, that development will have to be taken into account,

because it may offer new and more opportunities when current initiatives can be connected to some of the achievements from the past, especially when they offer unique comparative advantages that are difficult to copy.

3.2 Quasi-hypothetical rankings of cities

At an early stage of research we made an attempt to assess the main elements of the deep structural position (or pathway) of the 13 case-study regions and hypothetically ranked them according to the strength of economic profile. Three components were considered to be of crucial importance: 1) the status of a city-region as an international decision-making centre (political or economic); 2) the status as a historical centre for education, government and commerce, and 3) the role as a high-tech centre or early service centre where manufacturing industry was never dominant (Table 3.1).

Table 3.1 - Quasi hypothetical urban economic profile based on deep structural conditions (grey bars: relatively good position)

Urban region	Known as established international political and economic decision making centre	Internationally known as strong historical centre for education, government and commerce	Known as strong high-tech centre or early service centre where manufacturing industry was never dominant
Amsterdam			
Barcelona			
Munich			
Dublin			
Helsinki			
Budapest			
Milan			
Riga			
Leipzig			
Toulouse			
Sofia			
Poznan			
Birmingham			

According to this ranking, we have suggested the following provisional classification of urban regions:

- Amsterdam, Barcelona and Munich would be expected to have the best chances for economic success and creative and knowledge industries, with strong positions in ‘deep structural’ terms.
- They are followed by Dublin and Helsinki; both differ internally but have a strong position in many respects as well.
- Milan has a strong ‘history’ as has Budapest; both may profit from their position in the past, but inherited a relatively large manufacturing history as well.
- Riga and Leipzig seems to have a similar position, one level lower in the European urban hierarchy albeit with a different profile.

- Toulouse clearly manifests itself as a high-tech centre that has been established long ago.
- Sofia and Poznan have strong points to depart from as well, the first as a capital city; the second as an early service centre that was not hit very hard by communist manufacturing policies.
- Although Birmingham does not classify as strong in any of the dimensions distinguished, it has a relatively special position in all of these spheres due to the unique combination of skills, traditions and recent policies.

On the basis of our reports on pathways the city regions went through, we are now able to refine this classification by adding a couple of extra dimensions that have deep-rooted characteristics as well. From the studies we were able to deduct the following additional dimensions:

1) A geopolitical location. There is still a considerable difference between West and East European cities as regards the general level of wealth, stability of economy and the state of the legal environment. Even the most recent developments in Eastern Europe still carry traces of the state-socialist period. Post-socialist cities can be analysed as a separate category (with Leipzig being an exception and having traits of both West and East European cities)

2) 'Status' of the city region. In addition to the dimensions already referred to in Table 3.1 (capital city function, image as important city, etc.) we were able to refine the knowledge about the 'status' of the city region by specifying the city region in terms of ranking in the world city 'league'. That position is corresponding with having a certain range of functions and activities. A second dimension within the 'status' distinction is slightly vaguer, yet regarded to be important as well. This is the *competitive spirit* of cities (cities with a 'drive'), mostly cities which are national leaders in countries with a strong national/political self-consciousness; they may have either a high level of bottom-up initiative (like restructuring post-socialist countries) or developed system of policy-making (top-down initiative, like e.g. in case of Barcelona).

3) The urban and economic profile in general. A multi-layered city, with many and varied elements of the past, both in general urban terms and in economic terms, may help to make the urban region stronger. This is about a *diversified economic profile* that provides a much more stable basis for economic development. Single sector urban economies make the city economy much more fragile during economic recessions and especially during economic restructuring. Historically strong cores have high flexibility and internal strength to survive any turmoil (with policies or without policies) and are therefore among the first with any radical (revolutionary) technological or social innovation;

4) Traditionalism in culture and society. The wider cultural legacy of the society is also shaping city regions differently. Many socio-economic processes taking place in Southern and Eastern Europe take different shape than in the North-West of Europe, where there still is a dominance of protestant rationalism; for instance the importance of individual networks is more pronounced in Southern and Eastern Europe than elsewhere, because of more traditional family structures and the role of families and friends' networks in the social organisation of society as a whole (more activity is based on networking, using friends and relatives; this also

creates more space for corruption as it decreases the level of transparency important for a healthy business climate)

In Table 3.2 we show the city region's position on these refined dimensions, but for the reader's convenience we also include the dimensions already presented in Table 3.1; an additional reason to do that is the fact we are now able – on the basis of the 13 city region studies we carried out – to refine the positions within these dimensions as well. A number of trends are revealed.

Table 3.2 - Variations between the cities according to 'deep cultural factors'

	Status of the city			Economic profile			Historical/ cultural background	
	National/regional capital + imp. decision making	Considered as a world city of any rank	Competitive spirit (cities with a 'drive')	Diversified economic profile	No negative industrial heritage or image	Powerful high-tech clusters	Pathways with periods of glory	Important international function in the past
W.Europe								
Amsterdam	3	3	2	3	3	2	3	3
Barcelona	3	2	3	3	2	2	3	3
Birmingham	1	2	1	2	1	1	2	1
Helsinki	3	2	2	2	3	3	1	1
Leipzig	1	2	1	2	2	1	3	2
Munich	3	2	3	3	3	3	3	2
Toulouse	1	1	1	2	3	3	1	1
Milan	2	3	2	3	3	1	3	3
Dublin	3	2	2	3	2	1	2	2
E.Europe								
Budapest	3	2	3	3	2	1	3	3
Poznan	1	1	3	3	1	1	1	1
Riga	3	2	3	3	1	1	2	2
Sofia	3	2	3	3	1	1	1	1

3 - strong

2 - medium

1 - relatively weak or no score

For some factors scores are given according to the existing function (capital city). In case of the world-city status ranks are given if a city is altogether mentioned in the global city lists (see GaWC bulletins 56 and 105 at <http://www.lboro.ac.uk/gawc/publicat.html>) and if it is mentioned as a 'power city'. Other factors are judged in an expert way, as they are described in the ACRE local reports.

- Amsterdam, Munich and Milan have a high status as decision-making centres. All the three cities have pathways with periods of glory in the past. Today they have a diversified economic profile with hardly any burden from old industries and no negative industrial image. Munich

has a powerful high-tech cluster as a basis of its economy and benefits of its strength. Amsterdam and Milan, on the other hand, benefit from their historical international function which is preserved until now (both have the highest rank as world cities among the 13 case-sites). Munich, as the capital of Bavaria, seems to have more challenges in the competition with other German cities and therefore a higher 'competitive spirit' than Amsterdam and Milan.

- Barcelona and Dublin follow the leaders according to the main parameters, both still experiencing some problems with existing old industries but successfully restructuring in the last decades. Barcelona seems to benefit from its historical pathway (has been since long ago known as an important European cultural and economic centre with a strong international orientation), while Dublin is rather taking advantage of the 'Celtic Tiger' phenomenon in the recent decades, which made it one of the richest among our 13 cities (figures were taken from before the recent economic crisis, which has changed the situation quite dramatically).
- Barcelona, as the capital of Catalonia, has a very special position among Spanish cities and this provokes a lot of local initiatives, making it more competitive.
- Helsinki and Toulouse are city regions with strong and relatively recent high-tech clusters, dominating their economic structure. The difference is that Helsinki is a capital city, while Toulouse is not, which may mean that if the currently successful high-tech activities would experience difficulties, Helsinki might recover more easily thanks to its capital city functions which will still be there; however, the economy in Helsinki seems to be less deeply rooted than in Toulouse, where the industrial base goes further back in time.
- Birmingham, like Toulouse, also does not have a pronounced administrative status, which would nourish its economy and stimulate its competition with other regional capitals (like in case of Munich and Barcelona). But unlike Toulouse, Birmingham had a more complicated and uneven pathway, with a period of economic success being followed by a stagnation and a new recovery. This complicated pathway makes the current restructuring more difficult because the city has to find a way to create a new image, using its strength of the glorious past and distancing itself from the negative consequences of a more recent industrial past. Whilst there has been much progress with the re-invention of the city since the early 2000s - there is still some way to go in terms of sustaining a (diversified) and globally competitive economic recovery
- All the post-socialist cities (including Leipzig) have to combat the problems resulting from the imposed industrial developments of the post-war years. Budapest and Leipzig, internationally known as old historical centres are in a more advantageous position, especially considering high investments into their restructuring than in Poznan, Sofia and Riga. In a sense they take an intermediate position between East and West European cities. Riga has a good potential as an old international centre but currently, in a difficult economic situation, is not able to realise it. At the same time, the four purely East European cities from our list seem to have generally a higher entrepreneurial spirit than western cities, created on the wave of radical reforms.
- The social structure of cities in Southern and Eastern Europe (European 'semi-periphery') is characterised by a stronger presence of cultural traditionalism, which is found both in personal and professional spheres. This makes impacts upon many general processes covered, and in our study, for example affects labour force mobility in general and is quite pronounced as regards the importance of 'individual networks' (see chapter 4).

3.3 The first proof of the quasi hypothetical ranking (empirical evidence 1)

This quasi hypothetical ranking according to deep structural positions was related with employment in creative and knowledge intensive industries and GDP levels per region (Table 3.3). We arrived at the following conclusions:

- GDP is associated with regions that are, according to our information on their historical positions and pathways, strong urban regions. Even though the relation is not one-to-one, all city regions that belong to the regions with the strongest development paths have GDP's in the medium or higher strata; of the eight other city regions, not belonging to the top, five show low levels of GDP (all in Eastern Europe) and three are in the medium level (Helsinki, Toulouse, Birmingham).
- Employment in creative industries seems to be more associated with historically strong city regions than with others. However, Budapest shows relatively much employment in creative industries according to its positions, while Amsterdam and Munich show less than expected. They have moderate employment in creative industries irrespective of their strong theoretical positions.
- Employment in knowledge intensive industries does not seem to relate to deep structural positions.

Table 3.3 - Tests of deep-structural positions with employment and GDP information, data collected between 200 and 2006*

City regions	Theoretical top (structural positions)	Employment in creative industries (%)	in knowledge intensive industries (%)	GDP per capita in the region (in Euros)
Amsterdam	+++	8	18	High (50,000+)
Barcelona	+++	12	10	Medium (25-50,000)
Dublin	+++	11	10	High
Munich	+++	8	21	High
Milan	+++	14	17	Medium
Helsinki	++	13	18	Medium
Toulouse	++	6	16	Medium
Leipzig	++	9	16	Low
Budapest	++	13	16	Low (< 25,000)
Riga	++	6	23	Low
Sofia	+	8	19	Low
Poznan	+	7	11	Low
Birmingham	+	6	19	Medium

* Due to the fact that the data refers to national statistics they are difficult to compare, in some cases (e.g. Munich) the data contains only employees who are subject to social security and freelancers are not included.

Source: Eurostat (2005)

It appears that most of the West European cities, which on the whole have a better initial position for attracting new economic activity, do not generally have a higher share of employment in creative and knowledge-based industries, even though Eastern European states still have to invest a lot of effort into general economic restructuring and creating and improving the institutional structure and urban governance.

Comparing the theoretically expected positions with the empirical findings on employment in some greater detail, we found that the expected leadership of Munich, Amsterdam, and Milan was partly supported by the empirical findings. Munich and Amsterdam can be found among the city regions with high figures in knowledge intensive industries, as expected. Milan shows high levels of employment in both sectors. Barcelona and Dublin, however, show firm employment in creative industries, but not so much in knowledge intensive industries (Murphy & Redmond 2009). Helsinki and Budapest, although ranking lower on deep structural conditions, seem to be stronger than Barcelona and Dublin in terms of employment in the creative knowledge sector. We also saw that the other urban regions, Riga, Leipzig, Sofia, Poznan, but also Toulouse and Birmingham have only moderate employment in creative industries; however, Riga, Sofia and Birmingham show more employment in the knowledge intensive sphere

Our observation is that there still is a divide between East and West in terms of the share of employment in creative industries, whereas such a divide cannot be found in knowledge intensive industries. The explanation seems to be fairly obvious, in the field of knowledge intensive industries state has much more influence (e.g. developing higher education or R+D activities) than in the sphere of creative industries. Nevertheless, there is an obvious difference between East and West in the 'level' of employment in knowledge-based industries. It is more common for Western cities (especially those with a pronounced global city function) to host the headquarters, R&D centres and leading units of international companies, while in the East high employment in knowledge intensive industries is achieved to a large extent due to the growth of small (and unstable) companies, or due to the state sector.

On top of what has been said about explanations for these differences, we may also suggest that the rise of creative industries first requires a well-developed regional economy in general as a basis for developing creative industries. This 'phase-theory', however, requires further analysis.

The divide between East and West, and the correlation with deep structural factors, is clearest in the sphere of value added. There is a strong relationship between regional GDP and the city regions pathways and strength in terms of the deep-structural conditions we referred to. The general association is that the stronger the city is in terms of the deep structural factors, the higher the GDP; but on top of that there is an evident East-West divide. Budapest, Riga, Leipzig have relatively strong histories, and Birmingham – according to our measurement – slightly weaker, yet the first three mentioned (all Central and Eastern European) show lower but catching up GDP values compared to Western cities (like Birmingham). Perhaps Birmingham created its own niche in terms of the presence of high-skilled craftsmen in specialised branches of the manufacturing industries.

The confrontation between expected positions of urban regions and actual positions in terms of employment and value added taught us that there is – to some extent – path dependency. Some regions show that what has been built up in the past still has its effects in current developments. However, in some of the cases the pathways point in other directions. This may to some extent be explained by the strength of past or current policy interventions. Active and sustained local policy may have been effective in increasing the level of

employment in the creative and knowledge intensive sectors and have helped rebalancing the lack of other conditions. This suggests an important agenda for further research on the role, necessity and efficiency of policy in accommodating creative knowledge and reinforcing the competitiveness of European urban regions. However, the deviations we found may also mean that in these cases contemporary conditions are likely to be more important. This is where we now turn to in the next chapter.

4 EMPIRICAL EVIDENCE 2: CONTEMPORARY CONDITIONS

Cities are made and transformed by a wide range of actors, not least the people who work, and live in them, and those who use the city for recreation or who simply pass through the city - whether they enjoy it or not. In current debates there is a controversy about their actual roles and 'positions'. Some scholars, notably Florida (2002), believe that these actors are the golden elements that create the urban economy: residents and employees and managers in particular shape the future of the city and the economy develops in response to (talented) actors. The implication of this view is that these actors are the primary targets for attention and, as they would typically be attracted by *soft conditions* or 'amenities', such as tolerance, diversity, openness, and 'nice environments' these attributes tend to become the key to the competitiveness of the city. If the city is successful in attracting talent, firms will follow the employees and (potential) managers.

Others, however, say that this is a naïve way of thinking about how urban economies function. As Storper and Manville (2006) state, "the notion that skills have driven growth, and that skilled workers locate according to some set of exogenously determined preferences and therefore determine the growth's geography, is less convincing than a theory that the preferences of firms – i.e. agglomeration economies – give rise to growth" (p. 1254).

In this view firms are the key issues and cities have to try to facilitate the firms; they have to build on past performance and enable the development of clusters with related economic activities and the accompanying institutions. Space, connections and tax climates or other *hard conditions* would be among the major instruments to use when trying to realise the initiatives. So, these would be the important factors to start with. Employees and (potential) managers would follow the firms!

To explore the factors lying behind the decisions of the main actors of the creative knowledge sector to settle in a certain city region the ACRE teams have conducted three field tests with a focus on the highly educated workers, managers and transnational migrants, whose activities are seen as critical to the development and sustainability of creative knowledge regions.

- 1) a survey among high-skilled employees of creative and knowledge-intensive firms (n ~ 2500)
- 2) in-depth interviews among managers of creative and knowledge-intensive firms (n ~ 300)
- 3) in-depth interviews among transnational migrants working in creative and knowledge based industry ((n ~ 300)

4.1 Methodology and the choice of actors

Employees with higher educational qualifications

Each of the theories we have referred to identify potential drivers behind the decisions of highly educated workers in creative and knowledge intensive industries to find and choose a location to work and live in. Perhaps this category, however, associates strongest with the concept of 'talent' and therefore associates strongest with 'soft' conditions theory in which urban atmospheres and urban amenities take centre stage. It remains to be seen whether these conditions nowadays really dominate the scene and whether such conditions can be used to attract 'talent'. In a recent study on the migration behaviour of 'talented people' in Sweden, Hansen and Niedomysl (2009) found that most migration activities of talented people relate to finishing university study, but that most of these moves are driven by job opportunities and not by places. We should also recognise the much lower mobility rates in Europe, compared with the USA. High-skilled employees in European urban regions may not be as mobile as the 'creative class' is expected to be.

We should, however, be aware of the risk of over generalisation. There may be important differences in behaviour because of special considerations associated with specific creative or knowledge intensive industries. Van Oort et al. (2003) investigated the role of amenities for residential behaviour of ICT employees. Their assumption was that increasing footlooseness of these employees would result in higher weights attached to amenities in the location decisions of both firms and employees. While they found that ICT employees were relatively footloose, they did not find evidence that residential preferences influenced the location decisions of ICT firms; managers and other decision makers did not take residential preferences into account. Moreover, they argued that in the Dutch Randstad both the firms and the employees seemed indifferent as to the level of amenities in the environment.

Managers of creative and knowledge intensive firms

Although managers and entrepreneurs are often associated with rational behaviour this still leaves scope for enormous variation. Rational behaviour in connection with the firm is particularly reflected in the theoretical literature about agglomeration economies and clustering where the debate is about taking advantage of related firms, services and institutions. However, others have found that the rationality of managers is 'bounded rationality'. After an analysis of foreign direct investment location choice, which was partly based on a literature review, Buckley et al. (2007) concluded that the creation of the set of alternative locations for investment appeared to follow fairly rational rules. However, the choice of actual investment locations appeared less driven by rationality.

We argue there should also be attention for the differentiation between managers' behaviour and the size of the firm: decisions with regard to the place of settlement of larger size firms will be based on different considerations than the decisions of smaller firms. The decisions made by self employed individuals and by managers of very small firms may more often be driven by a wider range of non-business related considerations, such as the attractiveness of

the place in terms of residential qualities and perhaps also the location relative to family and friends. It may also be the case that the balance of issues affecting decisions will vary according to the sector that is involved – for example there are likely to be different issues for those in the creative rather than knowledge intensive sectors.

Trans-national migrants

The third category we focus upon is high-skilled trans-national migrants. As with the other groups the attraction of this group is seen as crucial for successful development and sustainability of creative and/or knowledge-intensive activities. Therefore, the competition for highly skilled labour continues to be fierce. Mahroum (2001) sketches the changes in policies, legislations, and procedures across various EU countries and shows that EU member states not only compete with non-EU countries/regions but also among themselves in order to attract and maintain sufficient flows of highly skilled labour. The immigration policies of major industrialised economies which have experienced significant changes in recent years have moved towards more openness regarding highly skilled immigrants. There is widespread agreement in Europe that economic competitiveness is increasingly linked to the quality and quantity of skilled human resources available for any given economy, he argues.

There is, however, a wider range of theories about what drives transnational migrants, ranging from classic push-pull models, through ‘neo-classical’ models of restoring the balance between supply and demand of labour, to more modern theories which stress the importance of migrant networks and personal motives such as family reunification.

There are also theories more specifically dealing with high-skilled migrants. In ‘The New Argonauts’ Saxenian (2006) described the positive effects of international mobility of highly skilled migrants for regional development. She observed the impact of foreign talent and entrepreneurs in Silicon Valley in recent years and pointed out that the openness to foreign creative talent was one of the key factors for the success of Silicon Valley. Thus, ‘soft’ conditions seem to play an important role alongside ‘hard’. However, Saxenian also argued that the development of ICT in Israel, Taiwan, China and India was partly due to the networks created by mobile talent which stimulated innovation, investment and trade between countries. This reflected, once more, the importance of personal ties and trajectories.

Most of the skilled international migrants migrate between large international economic centres and only stay for relatively short times - between a few months and a few years. These ‘short-term’ staying people are often better known as ‘expatriates’. Another section of the transnational migrants settles more permanently in the new residential environment. The heterogeneity of expats increases. Apart from the seconded transferees who work in large companies, and were ‘sent’ by their employers to work in the firm that was already located there, an increasing share comes on their own. Due to the removal of immigration barriers for labour migration within the EU and the stronger support of student mobility, the socio-economic background and the motives of trans-national migrants as well as their origins has become more mixed (Conradson and Latham, 2005). This is expected to have implications for settlement behaviour in general.

For this category as well we may wonder whether the diversifications also imply that more migrants will be settling in a place because of personal and 'consumption' related factors and less driven by 'production'? In that regard it may again be useful to distinguish between those who are attached to creative industries and those who are related to knowledge intensive industries.

Information about high-skilled employees and graduates was collected through a survey. A total of 2751 responses were obtained based on structured interviews (on average slightly over 200 per urban area). The survey data were collected in 2007. Apart from the common sector, size, and location selection strategy that has already been referred to, we also agreed a common approach to the collection of information from respondents. This should not be taken as meaning that there was no variation between cities in the implementation of the approach. Of course, when working with many different urban and national contexts there are differences between the settings that should not be denied. These include sample frameworks, but also different local cultures that impact on some elements of the entire strategy. For example, in some contexts high-skilled employees in firms can be approached directly, whereas in other contexts the approach can only go via the management of the firm. Other issues included the variation arising from whether certain economic activities were present in each city. Although we chose sectors where some comparison could be achieved the selected sectors are not equally distributed across all urban regions and this resulted in minor distortions of the 'ideal' strategy. Other locally specific issues also had some impact on the information we collected. Detailed data collection reports and response overviews for each urban region have been reported in ACRE reports 5.1-5.13.³ The researchers involved in the data collection in each of the urban regions expressed their confidence over the quality of the data, but also considered that the number of responses for specifically defined subsectors may be too small to generalise the results to all of those who belong to such a sub-sector. We believe that in general it would be unwise to treat the data as entirely representative for the subsectors we deal with. Even the combined larger data set, where some 'noise' in the data may disappear, at least for some analyses, should be treated more as an instrument to help us to present a range of indications of what are important conditions for the development of urban economies, rather than treating this as a perfect representation of the wide variety of situations and conditions that may exist in reality.

The information we obtained from managers and (self-employed) entrepreneurs applied to the same sectors, but was collected through an average of 25 semi-structured face-to-face interviews per urban region (reports 6.1-6.13).

A similar strategy was applied to collect information from transnational migrants and a similar number of responses formed the basis for our comparative analyses (reports 7.1-7.13). We also used statistical material, as well as other written sources to get a better understanding of the various pathways affecting each region.

Results of surveys and interviews have been published in three sets of 13 local reports (one for each field study) and 13 local synthesis reports, summarising the results of surveys and interviews for each city region. Here we present the syntheses across the 13 urban regions.

³ <http://acre.socsci.uva.nl/results/reports.html>

4.2 Results and findings: the role of individual trajectories

The most important finding has been revealed already after the first field work, the survey among the high-skilled employees showed that *in the European context the so-called ‘individual trajectory factor’ (or ‘personal connection factor’) that is not taken into account by Florida and a range of other writers, is at least equally important as ‘hard’ and ‘soft’ factors*. Empirical evidence was obtained proving that generally it is individual connections or trajectories that are mentioned as the most important conditions for choosing one or another city as a place of work (Martin-Brelot et al, 2010).

Table 4.1 shows that almost in all of the cities studied (apart from the two German ones) individual connections or trajectories are mentioned as the most important conditions. For most high skilled employees in most of the cities so-called hard conditions are also important, although generally to a lesser extent and with more variation. Exceptions are Leipzig and Munich, where hard conditions are more often ranked first. What is striking is that the soft conditions, that formed the key building blocks for the Florida hype, are very rarely mentioned as ranking first. Here Amsterdam is an exception, although hard conditions and individual trajectories also score higher in this city.

Table 4.1 - Percentage of responses that ranked indicators as the most important (from a list of 26 indicators), classified as indicators for trajectories, hard, and soft factors, per urban region

	Trajectories	Hard conditions	Soft conditions	Total %	N
Amsterdam	39	35	26	100	221
Barcelona	62	27	11	100	200
Birmingham	57	38	5	100	165
Budapest	71	24	5	100	197
Helsinki	51	39	10	100	191
Leipzig	42	50	8	100	159
Munich	30	60	10	100	178
Poznan	74	23	3	100	155
Riga	80	16	4	100	132
Sofia	90	10	0	100	200
Toulouse	48	42	10	100	191
Milan	64	32	4	100	183
Dublin	57	42	1	100	201
Total	58	34	8	100	2373

Source: surveys ACRE 2007

Trajectories
 born in region
 family lives here
 studied in City
 proximity to friends

Hard conditions
 moved because of my job
 moved because of partner's job
 good employment
 opportunities

higher wages
 size of city
 good transport links
 presence of good universities

Soft conditions
 weather/climate
 proximity to natural
 environment
 housing affordability
 housing availability

housing quality
 safe for children
 open to different people
 open minded and tolerant
 gay/lesbian friendly
 language
 overall friendliness
 diversity of leisure &
 entertainment
 cultural diversity
 diversity of built environment

The results clearly show the importance of individual networks and of employment opportunities in particular. These findings are in support of those who argue that individual networks are key to understanding people's location behaviour. This also holds for highly skilled employees in creative and knowledge intensive firms. Furthermore, job opportunities are still of crucial importance. Diversity and tolerance, on their own perhaps 'values' to be nurtured, do not seem to be highly relevant for the attraction of 'talented people'.

We decided to perform some analyses to see to what extent these assumptions can be supported when controlled for some demographic and economic variables at individual level. Table 4.2 provides some results of these analyses.

The results are not shocking. Soft conditions are not more important for the young; a low income also does not relate to soft conditions in particular, but networks are more important to them, as they are for those who are born in the local area; self employed (and those who are employed in smaller firms) more often mention soft conditions, but not extremely more often than others do; soft conditions are hardly mentioned by those who just arrived in the city, but more frequently (yet not in large numbers) by those who lived there for a longer time period. The stage of life course also affects the evaluation of factors, especially different kinds of soft factors (for instance in Helsinki those valuing tolerance, diversity and entertainment are mostly single or couples without children, whereas families with children value other soft factors, e.g. safety and proximity to nature)

Table 4.2 - Per cent of responses that ranked a condition as 'most important', by various factors

Special categories	Networks/ trajectories	Hard conditions	Soft conditions	%	Total
age <35	59	36	6	100	1239
income <1000	70	24	6	100	339
self employed	58	31	11	100	542
less than 1 yr in the city	21	76	3	100	90
more than 1 yr in the city	60	32	8	100	2283
firm size < 10	60	30	10	100	659
born in local area	73	19	8	100	818
All survey	58	34	8	100	2373

This suggests that perhaps a distinction should be made between the conditions that are relevant for the decision to settle somewhere – in which soft conditions do not feature strongly – and the decisions to stay after settlement. That retention side of the process seems to be more interlinked with amenities available in the urban area. But even then other considerations play a very significant role as well.

A closer inspection of the scores provides even more insight.

In the current debates between soft conditions believers and their opponents, generally four key concepts appear to be crucial:

- The first is the importance of the presence of employment opportunities;
- The second is the level of openness and tolerance;
- The third is the level of diversity and a positive attitude to it;
- The fourth is the role of personal networks, relations, and connections.

In order to consider these four dimensions, again, on the basis of the rankings provided in the interviews, we have adopted the following procedure.

We first selected relevant conditions that fit the key concepts.

The measurement of employment opportunities was based on three indicators:

- moved to the city because of a job;
- moved to the city because of a job of the partner; and
- lives in the city because of good employment opportunities.

If a respondent ranked at least one of these three indicators as very important (in position 1 to 4 out of 26), we registered that the respondent scored on 'employment opportunities'.

We followed the same procedure for the three other dimensions.

The level of openness and tolerance was based on whether the respondent included any of the following among the four most important conditions for living in the urban region:

- the openness to different people in terms of race, colour or ethnicity;
- the open minded and tolerant urban atmosphere;
- and the gay and lesbian friendliness.

The level of diversity and positive attitude towards it was measured by whether the respondent included any of the following among the four most important conditions for living in the urban region:

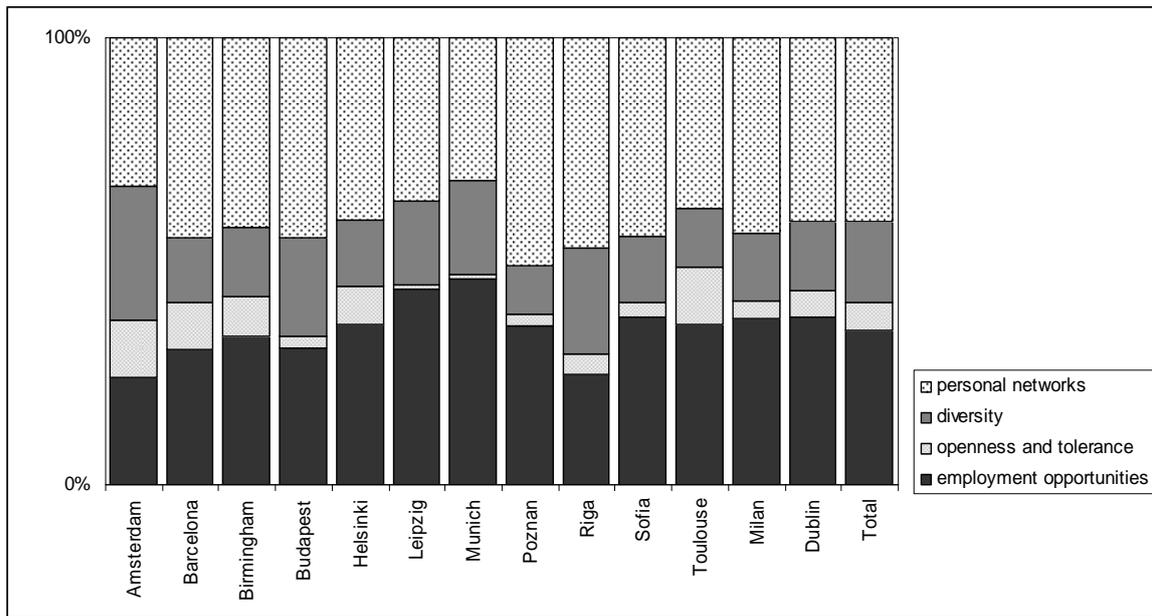
- diversity of leisure and entertainment, and
- 'cultural diversity'.

The importance of personal relations was measured by whether the respondent included any of the following among the four most important conditions for living in the urban region:

- they were born there;
- that their family lived there;
- that their friends were nearby; and
- that they studied there.

For each city we then calculated the proportion of respondents that regarded these four dimensions important and presented this relative to each other. In Barcelona, for example, 82 per cent of all respondents said that personal relations were of key importance to them to be in that city; 56 per cent of the respondents said to be there because of employment opportunities; only 19 per cent mentioned the openness and tolerance; and 27 per cent mentioned diversity as important. These scores were made relative (total 100 per cent) to allow for an easier comparison between urban areas (figure 4.3).

Figure 4.3 - Relative share of respondents that ranked indicators as among the four most important from a list of 26 indicators, assembled in specific dimensions, per urban region



Source: Surveys ACRE 2007

The results clearly show the importance of individual networks and of employment opportunities in particular. These findings are in support of those who argue that individual networks are crucial to understanding people’s location behaviour. This also holds for highly skilled employees in creative and knowledge intensive firms. Furthermore, job opportunities are still very important. Diversity and tolerance, on their own perhaps ‘values’ to be nurtured, do not seem to be highly relevant for the attraction of ‘talented people’.

These general statements also seem to hold for the potentially even more ‘urban’ oriented people, the younger ones. Employment related factors are even more important for those who are young than for older people; the young score slightly higher on openness and tolerance, and slightly lower on diversity related factors; there is no significant age effect on personal network relevance.

It is valuable to look more closely at three cities known for their creative position and regarded as attractive to young people in particular and to consider the importance of soft and hard conditions and personal relations among the young and highly-skilled. These cities are Amsterdam, Barcelona and Milan. At first sight the findings for these three cities do not differ that much from the general findings: job opportunities and personal networks also turn out to be key factors for the young. If the 13 metropolitan areas are considered together, 72 per cent of young respondents say they are in the city because of job opportunities; 81 per cent because there are personal ties; only 10 per cent mention diversity and 38 per cent refer to openness and tolerance. In Amsterdam, however, young respondents (compared with all areas) are almost twice as likely to mention openness and tolerance and this is the only metropolitan region where less than 50 per cent say that job opportunities were of key importance.

A remarkable finding was that even the young and highly-skilled employees in creative and knowledge intensive industries did not show a very high residential mobility rate. In that respect European cities clearly differ from those in the US. The ‘mobile creative class’ did not appear to be very mobile at all. However, the difference between the two continents may actually have nothing to do with the young and highly mobile creative class. Mobility differences between young and high-skilled employees in European and American cities may just be a reflection of the general differences in residential mobility between the two continents. These differences may, in turn, be ascribed to deeper cultural differences between the two continents.

All this proves that the frequent talk about ‘talent’ and the ‘creative class’, about the ‘young and mobile’ or about the ‘competitive city’, is not all about glitter and glamour. The evidence presented for Birmingham, Leipzig and Poznan, showed that in all of these contexts, with clearly different labour market situations, there is a downside to the economic development of jobs in creative industries and this pattern also applies elsewhere. Much creative employment was temporary, insecure, short-term, contract work, characterised by long working hours; there was often a need to have multiple jobs, and many employees frequently changed job; unequal and insecure payments were also no exception. It remains to be seen whether the freedom, self-actualisation and self-governance connected to the type of jobs and frequently mentioned as contributing to the overall job satisfaction will in the longer term outweigh the negative characteristics of these precarious jobs.

When the attention is shifted from the employees to the *managers and entrepreneurs*, a similar pattern emerges in relation to the type of conditions that shaped their decision making process. Based on a range of face-to-face, semi-structured interviews with these actors, the conclusion was again that individual trajectories or networks were the main drivers for settlement in a specific urban region. In Toulouse, for example 75 per cent of the managers had an existing link with the city (family, study, being born there); similar results were found in the other cities as well. This is very much in line with findings by Krugman (1991) and Markusen (1996); they refer to place-attachment and dependence on networks once they have been established. Moreover, just as with the employees, for managers it was hard conditions that came second and so-called soft conditions were hardly referred to. The approximately 300 managers of creative and knowledge intensive industries who were interviewed in the project underpinning the findings in this report, strongly confirm that Florida’s theoretical model must be brushed aside.

However, there is again one ‘but’. For managers too, a distinction must be made between the conditions that are relevant for the decision to settle somewhere – in which soft conditions do not feature strongly – and the decisions to stay after settlement. That retention side of the process seems to be more interlinked with amenities available in the urban area. But even then other considerations play a very significant role as well.

Transnational migrants formed the third category of actors we specifically focused upon. In the summer and autumn of 2008 at least 25 interviews were completed with transnational migrants in each of the urban regions we have referred to. The interviews were designed to identify which conditions were most important in their location decisions. Here we illustrate some findings by focusing on four cities: Amsterdam, Barcelona, Dublin and Munich. In

Amsterdam the responses indicated a similar pattern to those of employees and managers: soft factors were not driving the decisions; instead, labour market opportunities are more important, together with hard conditions such as immigration policies. In Dublin and in Munich employment opportunities were mentioned as among the most important factors, but together with family relations or other personal trajectories. In Barcelona, however, soft conditions were clearly mentioned as primary, although there too personal linkages with relatives and others from elsewhere (overseas) were mentioned as of key importance.

As for the managers and high-skilled employees, also for migrants soft factors seem to gain importance for the decision to stay after settlement. However, the decision to settle somewhere is much more driven by employment opportunities and personal relations of those who migrate to a new place to live in. These results suggest that the distinction between factors influencing key actors to come to a city and those influencing them to stay should receive more attention – as well as looking at ‘those who go’. The latter category, migrating out of the urban region often also appear to be high-skilled persons, and the relative quality of life elsewhere may be a factor affecting decisions – although in line with the evidence reported here it would rarely be the key factor.

4.3 The mobility of the creative class in Europe

Our evidence also established that *key actors are much less mobile than some of the literature, notably Florida (2006), would like us to believe*. Mobility rates among key actors in Europe do not seriously differ from more general mobility rates and this may also be the case in the US (where the general mobility rate is much higher than in Europe). The ‘competition for talent’, therefore, seems to be much more difficult and we have serious doubts that promoting diversity, tolerance and openness will create bigger flows of talented people to the cities that aim for that. This is not to say that structural problems in cities will have no negative effects in the long run. If there is a structural problem of lack of access to affordable housing in the regional housing market of a city, or lack of proper amenities, this may in the end result in driving away those who were already settled in the city. With regard to the housing market, a lack of affordable housing supply may initially – perhaps – be seen as a sign of success of the city (there is much demand!), however, in the longer run, this may turn into a disadvantage and thus an adequate response is of crucial importance to sustain the competitiveness of the city and region. The high costs of housing and other premises may also have a particular impact on the creative sector where incomes generated are not high – and there is some sense that this is the case in Milan and Munich for example.

European creative workers do not seem to be much more mobile than the continental average. What are the reasons for the relatively low mobility compared especially with the creative class of the US? Partly it can be explained by *cultural constraints* (differences in languages, cultural barriers, less openness towards foreigners, necessity to obtain local know-how to settle down etc.). Another important reason is the presence of strong *institutional constraints*: differences within the continent between the countries in educational and health care systems, limits set by national pension schemes, limits set by legislation about employing migrants, bureaucratic barriers for settling down and starting businesses. Unlike Americans, European

creatives remain 'regionally connected'. Favell (2008) points out that even in selecting a foreign city as a place of residence, European professionals tend to settle in places that are well connected with their social and family 'anchors'. Regarding mobility, 'creative' people are not much different from other occupation categories in Europe (Gáková & Lewis, 2008; Favell, 2008). Although the low level of labour mobility in Europe is often considered as a factor threatening the economic growth and competitiveness of the continent, it can also be interpreted as a factor providing social stability and preserving cultural diversity within the EU.

These results show that Florida's theory does not seem to apply to the European context. This issue has been more profoundly elaborated in an article, prepared by the ACRE researchers from several teams and based on the results of our survey (Martin-Brelot et al, 2010). According to the authors, the theory relies heavily on a model of mobility where workers are not only mobile, but also make location choices in the same way that they choose a trip for a vacation week, comparing cities and their quality. This model does not take into account that workers are linked to persons or particular places where they lived before. It also overestimates the importance of choosing a city when workers move to another job, and it underestimates the importance of choosing the neighbourhood within an urban area. It may be less important to choose between Milan and Munich than between one district or another in Milan or Munich. For creative people searching for a location, hard factors (mainly quality of jobs) are the reasons why they choose a particular city and soft factors determine why they choose a certain district. Florida's model may work for single young professionals or bohemians looking for inspiration or a quick career and ready to take off at any moment if they see a better chance. But it does not seem to apply to families with children in a school age, when a perspective of another language and a novel cultural environment may become a serious obstacle. It may also not work for middle-aged couples, where one of the partners is professionally connected with a certain European area or where the adjustment to other pension rules would also be seriously considered.

Our empirical results also showed that although soft factors are rarely considered by creative people among the most important reasons why they settle in a particular city, they may appear to be important for professionals considering to stay in the city after making their initial choice. Taking this into account we suggest that policies should be more focused on retaining people rather than attracting them. *The reasons to come to a certain city and to stay in it* may be quite different, and given the relatively low mobility of creative workers in European metropolitan regions both of them should be given an equal attention.

5 VARIATIONS BETWEEN EUROPEAN CITIES

5.1 Main questions

In the preceding chapters we paid attention to the impact of deep-structural conditions and to the relative importance of more contemporary conditions, labelled as hard, soft and personal network conditions. The analyses of the latter conditions, the more contemporary factors, can also be put in another way. For each of the city regions we not only asked which factor was most important for the individual employee, employer, or transnational migrant, to settle there, but we also asked whether the city region in discussion showed a strong or weak profile in terms of these contemporary conditions, and we asked whether these conditions were regarded to be important for the city region. In this chapter we will make an effort to present the summarised results of these analyses that were again carried out in the 13 city regions. We will integrate the findings across cases. The summary is based on reports on the considerations and opinions of members of each of the three target groups and results in a series of classifications of city regions. Because the focus is on the city regions' strength and the importance of the factors for the city region we limit our analyses to the hard and soft conditions. The personal network conditions are too much connected to the individual to allow for a comparison of qualities of the city regions on this dimension as well.

5.2 A comparative analysis of European city regions¹

While focusing on three categories of actors who are connected to creative and knowledge intensive industries, we were able to create summary scores for each city and for each of two dimensions (hard and soft conditions) for either actors active in creative industries or in knowledge intensive industries. The summary scores for the question "how well is the city region doing" are measured on a scale from 1 (very bad) to 5 (very good). The summary scores for the question "how important are these conditions for the city" run from 1 (not important) to 3 (very important). The summary scores were constructed on the basis of the

¹ Methodology: The scores were derived from summary tables produced by each of the teams. An average score was calculated for each category of actors (employees, employers and transnational migrants) by the industry they belong to (creative or knowledge intensive industry) for two categories of factors (hard or soft factors). In total 12 scores for each city (3x2x2). Scores on strengths were calculated on a scale of 1 (very bad) to 5 (very good). In case teams reported strengths on a scale of weak, medium strong, these were converted to 1, 3 and 5 (respectively). Seven teams explicitly reported also the importance of each separate factor. For these cities the factors were weighted by importance on a scale of 1 (not important) to 3 (very important). In cases where no relative importance was reported, factors were given equal weights. Cases were omitted in which the actors did not match the scheme of creative/knowledge workers. For example, Munich is not represented in the diagram on transnational migrants as the sample was divided into different groups. The axes were adjusted for presentation reasons.

answers given on questions that covered indicators for each of the dimensions: hard and soft conditions. For the employees these scores were constructed on the basis of a range of indicators derived from the survey; for the employers and transnational migrants scores were given on the basis of interviews in which similar dimensions were discussed. All of these scores suffer from subjectivity in the interpretation of the answers given by the respondents and therefore also some individual bias will be in the data.

We applied simple classifications and plotted the city-regions in a two-dimensional space, showing the city-regions average scores on the dimensions and allowing for detecting some clusters of city-regions. We will first go into the classifications regarding the question: “how well the city region is doing”. First for the creative industries (Figures 5.1-5.3), then for knowledge intensive industries (Figures 5.4-5.6).

5.2.1 How well is the city region doing, according to various actors?

Creative industries

Creative Employees (Figure 5.1)

A wide variety of positions can be detected when we present the city-regions in the two-dimensional space on the basis of strength in terms of hard and soft conditions. Sofia, Helsinki, Birmingham and Poznan are, according to creative employees, strong in terms of hard conditions, and also fairly strong in terms of soft conditions. Barcelona, Amsterdam, Leipzig and Munich show the reverse; they are strong in soft conditions terms, and fairly strong in hard conditions. Five other city-regions have weaker positions in these spheres, although Dublin and Toulouse have an average position in soft conditions terms and Milan in hard conditions terms. However, Dublin is very weak in hard conditions; Milan is very weak in soft conditions, all according to the creative employees. Budapest and especially Riga would be weakest on both dimensions.

Figure 5.1 - “How well is the city region doing” in terms of hard and soft conditions

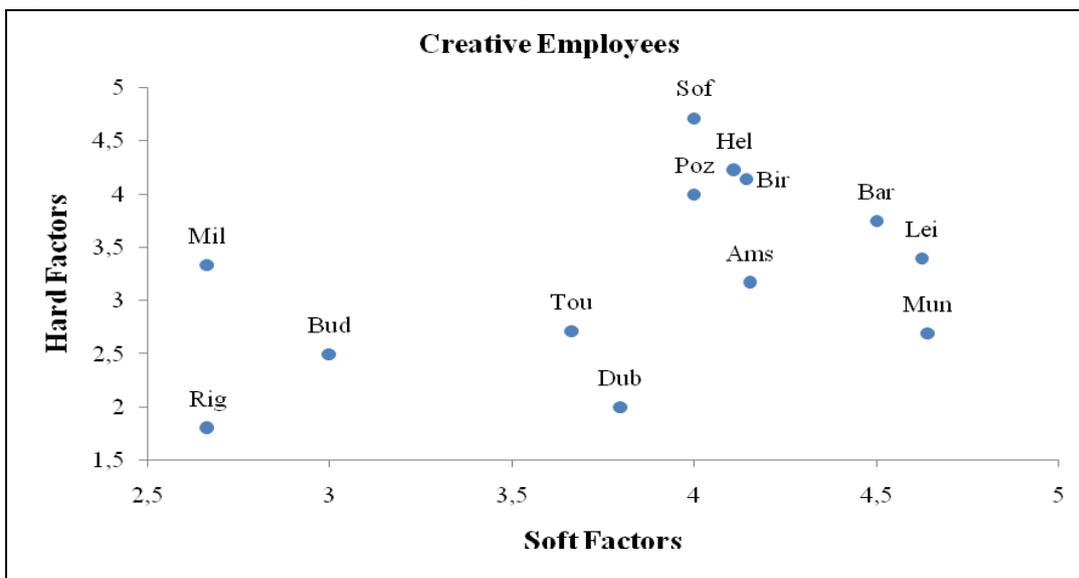


Figure 5.2 - “How well is the city region doing” in terms of hard and soft conditions

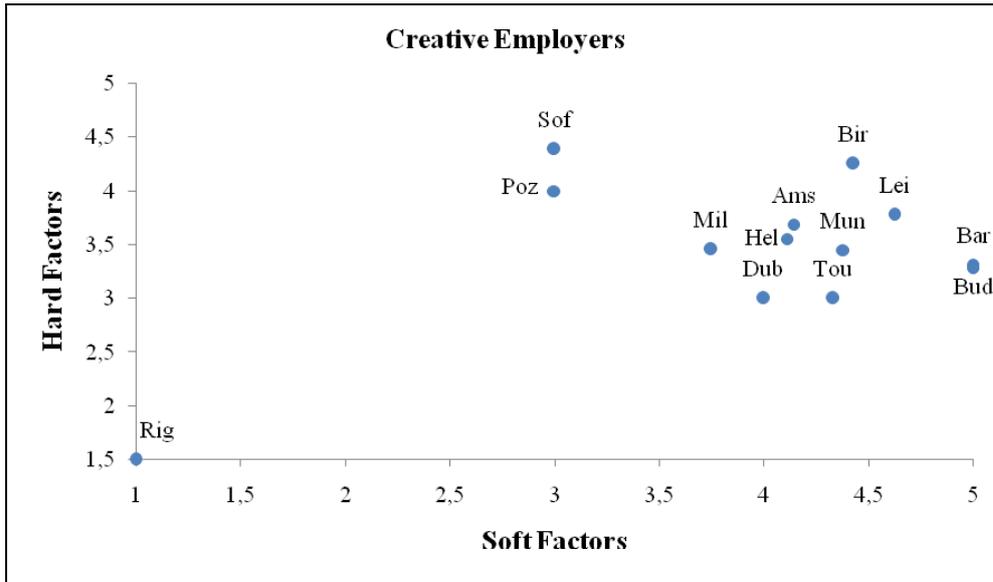
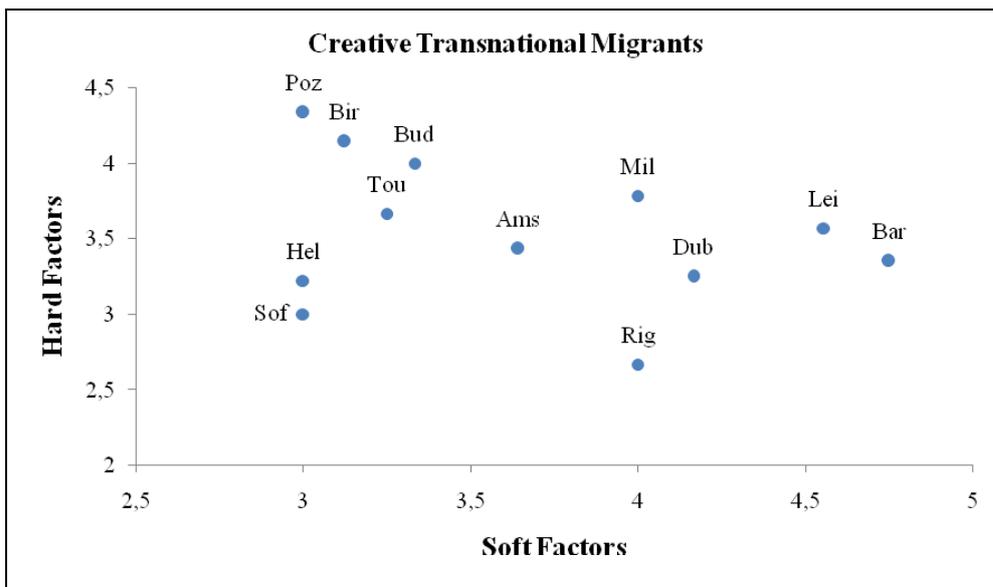


Figure 5.3 - “How well is the city region doing” in terms of hard and soft conditions



Creative Employers (Figure 5.2)

Except for Riga, which also through the eyes of creative employers should be seen as a city region with a very weak position in terms of hard and soft conditions, the employers and managers have a more optimistic view on what the strong factors are of the city regions under consideration. Employers in Birmingham are especially optimistic: they consider their region to be strong both in hard and in soft conditions terms. Amsterdam and Leipzig follow shortly after. Poznan is seen as a city region with a strong profile in terms of hard conditions (such as connections, tax climate), and average in the sphere of soft conditions (such as urban amenities). All other city regions (Milan, Helsinki, Munich, Dublin, Toulouse, Budapest, and Barcelona) are strong in soft conditions and average in hard conditions.

Creative Transnational Migrants (Figure 5.3)

A different graph is shown for transnational migrants who are working in the creative industries. On average they seem to be more optimistic about the strengths of the city regions they settled in. Even Riga is assumed to be relatively strong in terms of soft conditions, yet transnational migrants in Riga share the employees' and employers' views that the hard conditions are a weakness of the city. Barcelona and Leipzig are seen as strong in terms of the soft conditions and average in terms of hard conditions; they are closely followed by Dublin and Milan. Sofia has a position at the bottom end, with relatively low scores on hard and soft conditions for the city region. Poznan, Birmingham, Budapest and Toulouse are clearly seen as strong in terms of hard conditions, while not very strong in amenities, whereas Helsinki and Amsterdam have an average to relatively low position in both dimensions according to these migrants.

In short

The cluster and scaling results we have shown reveal that there is a wide variety of opinions between different actors; city-regions cannot be classified in similar clusters if we consider the views of employees, employers and transnational migrants who are connected to the selected creative industries we focused upon in this research. These findings imply that a context and actor related perspective on urban economic development is required. Cities differ a lot from each other, but they are also differently classified by different actors. Some regularity could be found, though.

In the creative industries sphere we were able to show that different types of actors share the same opinion in cities like Riga – they all agree that the city-region has a weak profile in terms of the hard conditions and employees and employers also saw a weak position in soft condition terms; in Poznan and Birmingham – they all agreed that these city regions are strong in hard conditions terms; and in Barcelona, Dublin, Munich and Leipzig – they all regard the city-region to be very strong in terms of soft conditions. In other cities, such as Amsterdam, Budapest, Helsinki, Toulouse and Sofia the opinions tended to differ. Milan seems to be the most average city region.

It is important to see these opinions in the context of the importance of personal networks and related (lack of) individual mobility, especially regarding the employees. The first impression in cases where the importance of the individual trajectory is strong (see Table 4.1), is that people often tend to be quite critical about other conditions, such as the quality of their urban amenities, although it apparently does not have a decisive influence on their decision to come or to stay here. This may be one of the reasons why in some South and East-European cities (Milan, Budapest and Riga) the opinions of employees are on the lower side. This is not always the case, because creative employees in Sofia and Poznan seem to be much more enthusiastic about their cities, - apparently due to some more pronounced local patriotism and enthusiasm for change (see below). It can also be the case that in these cities the creative employees have less international experience and are comparing their cities only with other Bulgarian or Polish cities, and that comparison is always favourable.

But it is quite clear that giving their judgements, local employees and managers, especially in countries with a lower personal residential mobility, have difficulties to distance themselves from their own cities and to develop a more balanced view on them (not too positive or negative). Transnational migrants, who see all the cities through the eyes of outsiders and who are often able to compare them with other countries, make these differences softer: their judgements look closer to the existing historical images of the cities and corresponding expectations based on deep-structural conditions. East European cities have lower scores in terms of soft factors, - apart from Riga, which while being a disappointment to the locals, seems to be a pleasant discovery for the transnational migrants. At the same time Poznan and Budapest appear to be attractive rather for their hard factors, while Sofia and Riga are still not.

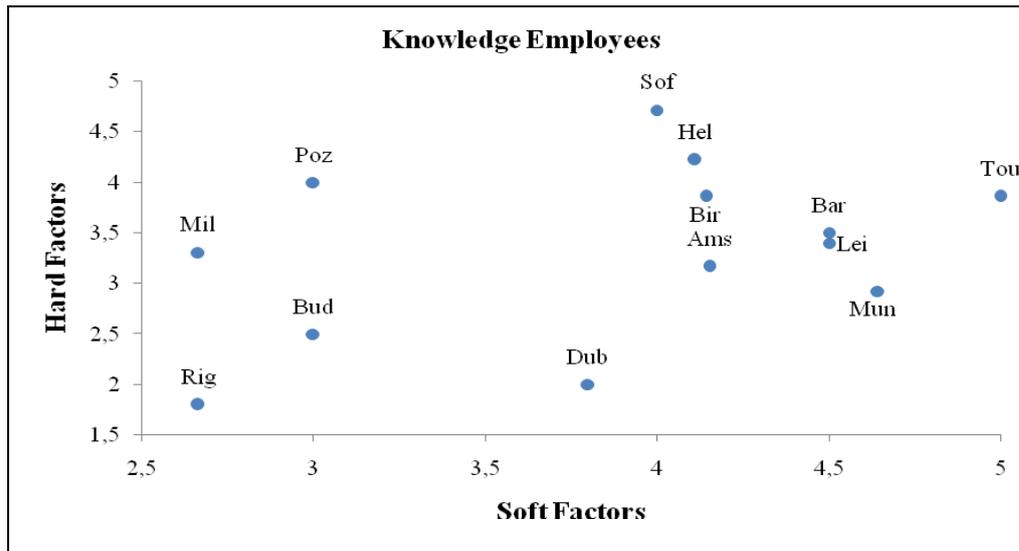
Amsterdam and Milan happen to be a surprise: being world cities, they have different scores for local employees (rather positive for Amsterdam and rather negative for Milan), but are seen by the transnational migrants much less positive than one would expect, given their international status and historical image. This observation, and perhaps the previous one above as well, may be explained by a different origin of transnational migrants, compared to many other cities: as world cities, Amsterdam and Milan host more western migrants who rather compare the city and its region to other world cities and not always positively. In contrast, Riga, for example, gets a lot of high qualified migrants from Eastern Europe and post-Soviet states, who tend to be more optimistic about the city. Another explanation is generally high expectations from Amsterdam and Milan, which are not always met, while less popular cities are often in an advantageous position to be seen as an unexpected positive surprise.

Knowledge intensive industries

Knowledge Employees (Figure 5.4)

Employees in knowledge intensive industries also expressed their views on what makes their city-regions strong. In the knowledge intensive sphere a similar variation can be found. We see again the same clusters like Amsterdam, Barcelona, Munich, Leipzig and Sofia, Helsinki and Birmingham, where employees in this sphere think that their city regions are strong in both hard conditions and soft conditions. Only Poznan and Toulouse are judged differently by employees of knowledge-intensive industries compared to what creative employees argued: Toulouse scores much higher, especially regarding soft factors (very high), while Poznan scores much lower. Some city regions are strong in one sphere: Poznan in hard conditions, Dublin in soft conditions. Milan, Budapest and Riga are again seen as city regions with limited strength in the dimensions considered.

Figure 5.4 - "How well is the city region doing" in terms of hard and soft conditions



Knowledge Employers (Figure 5.5)

Employers in the knowledge sphere also tend to be, in general, more optimistic than employees. Except for Riga, which is again classified as very weak in terms of both hard and soft conditions, all other cities are classified in the higher sections of the scales. Top city region, according to the employers, would be Birmingham. Sofia is regarded to be much stronger in hard conditions (apparently as a capital city), than in soft conditions; all other city regions would be especially strong in terms of their urban amenities and have more moderate positions regarding hard conditions.

Knowledge Transnational Migrants (Figure 5.6)

Transnational migrants in the knowledge intensive industries show a very fragmented picture. The variation in opinions is larger between city regions. Birmingham is regarded as a top location in terms of hard factors, while Sofia is seen as a region with limited strength. Helsinki is regarded strong in terms of hard conditions and weak in soft conditions. Toulouse, Milan, Dublin, Barcelona and Leipzig are regarded strong city regions in terms of soft conditions (and around average with respect to hard conditions); the cluster formed by Budapest, Poznan, and Amsterdam strength is seen as related more to hard than to soft conditions.

Figure 5.5 - “How well is the city region doing” in terms of hard and soft conditions

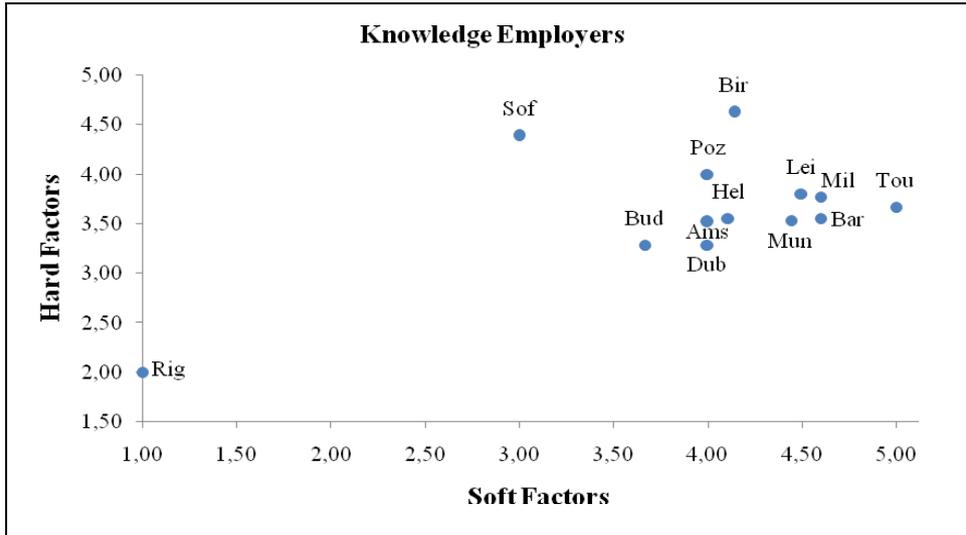
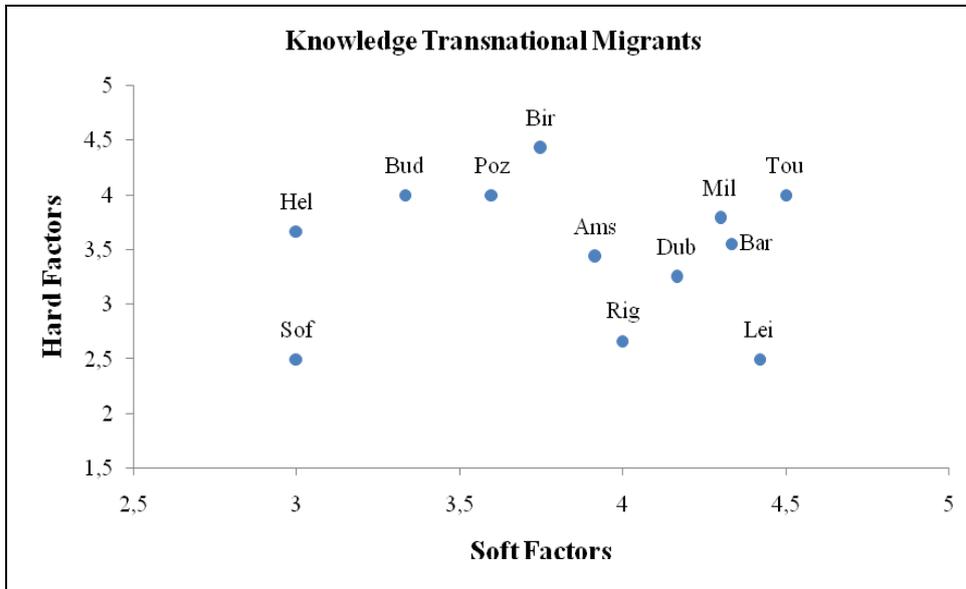


Figure 5.6 - “How well is the city region doing” in terms of hard and soft conditions



In short

In the knowledge intensive sphere there is a wide variety of positions too, just as we found for city regions in the creative industry sphere. Some city regions are seen as very strong locations because they get high valuations by all actors we interviewed. City regions like those of Birmingham, Toulouse, Barcelona, and Amsterdam are regarded strong ‘knowledge’ cities in the sphere of hard and soft conditions. At the opposite side of the classification we again find Riga as an example of a city region with limited strength in soft and hard conditions for knowledge intensive activities; transnational migrants are a bit more optimistic about Riga, but employees and employers have no confidence in the strength of the city region. A range of cities is classified as average, and some of these have rather moderate scores on one of the two dimensions as well. Employees in Budapest and Dublin see few hard

condition strengths in their environment; employers in Sofia tend to be not too optimistic about the strength of their city region.

The opinions of local employees and managers working in the knowledge intensive industries seem to be, in general terms, quite similar to the opinions of creative workers. A substantial difference only exists in the cases of Toulouse, Poznan and Sofia with Toulouse altogether scoring much higher, Poznan lower mostly at the expense of soft factors, and Sofia lower in terms of both hard and soft factors. In the case of Toulouse the explanation is quite obvious: the high-tech profile of the city and its region creates a favourable environment for all the knowledge-intensive industries. It is more difficult to formulate the explanation for Sofia and Poznan: one of the possible reasons for a lower score can be the fact that the sample of people working in knowledge-based industries (especially in business services, education and research) is internationally more involved than the sample of creative workers, and therefore tends to be more critical.

Another interesting finding is the difference in the judgements of the same cities, made by transnational migrants. It looks as if transnational migrants who are working in knowledge-intensive industries are generally more critical about the hard conditions of the cities they are working in. As a result, cities with a larger knowledge-based sector (which in turn attract many transnationals) are judged by knowledge industry migrants to be in poorer condition than by transnational migrants working in the creative sector. Poznan and Helsinki score somewhat lower than with migrants from the creative sector. Riga again scored higher than judged by the local employees and employers. Amsterdam and Milan are seen in a more favourable light by the transnational migrants in knowledge intensive industries. Surprisingly, Birmingham has high scores for both hard and soft factors and is praised by this group of transnational migrants as a fantastic place to live and work in.

5.2.2 How important are these conditions for the city²

Next to the question about the strength of the city region, we also investigated how important the dimensions considered were according to the three actor categories we distinguished. Here the focus was on the answers to the question: "how important is a dimension for the city region". So, this may not be similar to the actual strength of the city with respect to a specific indicator, but this is about the perceived importance of the indicators. In Figures 5.7-5.12 the classifications and clusters of the city regions have been presented, again first for creative industries, followed by knowledge intensive industries.

² This analysis includes only cities which the importance of hard and soft factors was explicitly reported in the relevant summary tables. Importance is ranked on a scale of 1 (not important) to 3 (very important). Cases were omitted in which the actors did not match the scheme of creative/knowledge workers. For example, Munich is not represented in the diagram on transnational migrants as the sample was divided into different groups. The axes were adjusted for presentation reasons.

Creative industries

Creative Employees (Figure 5.7)

Information about the importance of specific conditions for the development of the city region is not available for all city regions. We present the information for those regions for which the information is available. It is interesting to see that employees in creative industries are thinking differently about the question how important certain conditions are. Extremes are Barcelona and Milan. In the first city employees believe that hard and soft conditions are extremely important; while in the latter employees believe soft factors are not important at all, while hard factors are somewhat important. In Sofia soft conditions are regarded to be very important. In Poznan, Amsterdam, Leipzig and Munich both conditions are seen as somewhat important.

Figure 5.7 - “How important are each of the two dimensions”

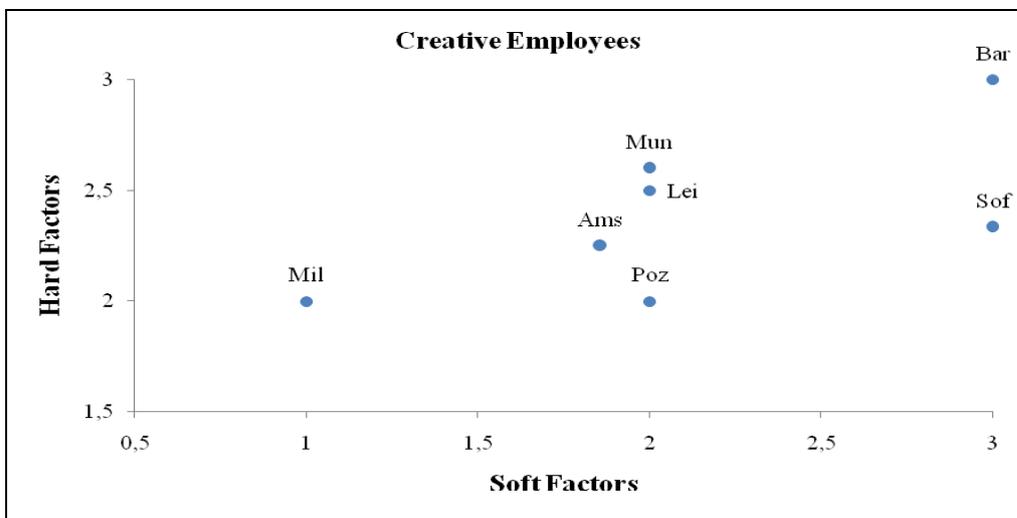


Figure 5.8 - “How important are each of the two dimensions”

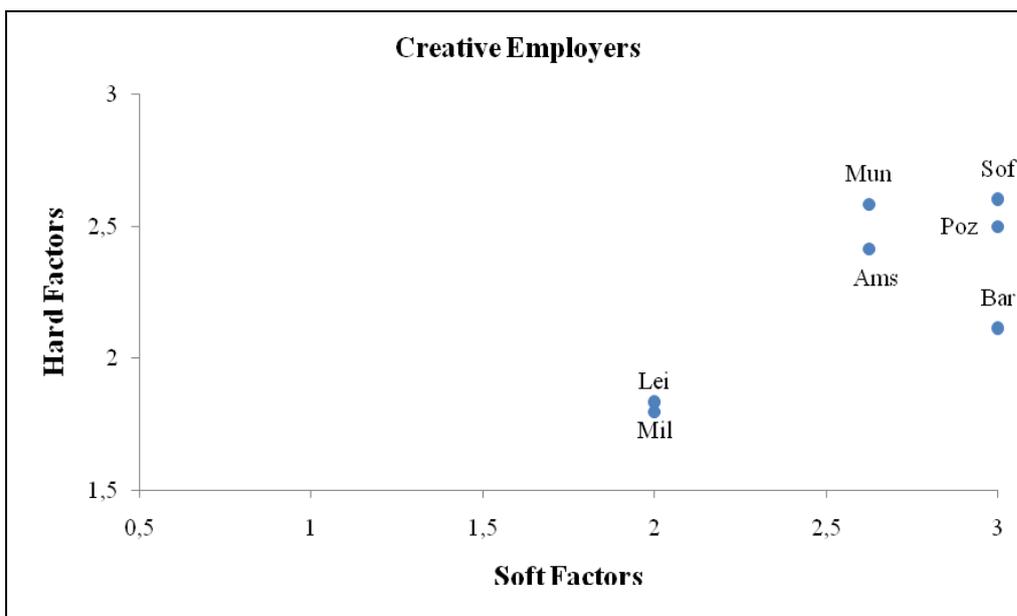
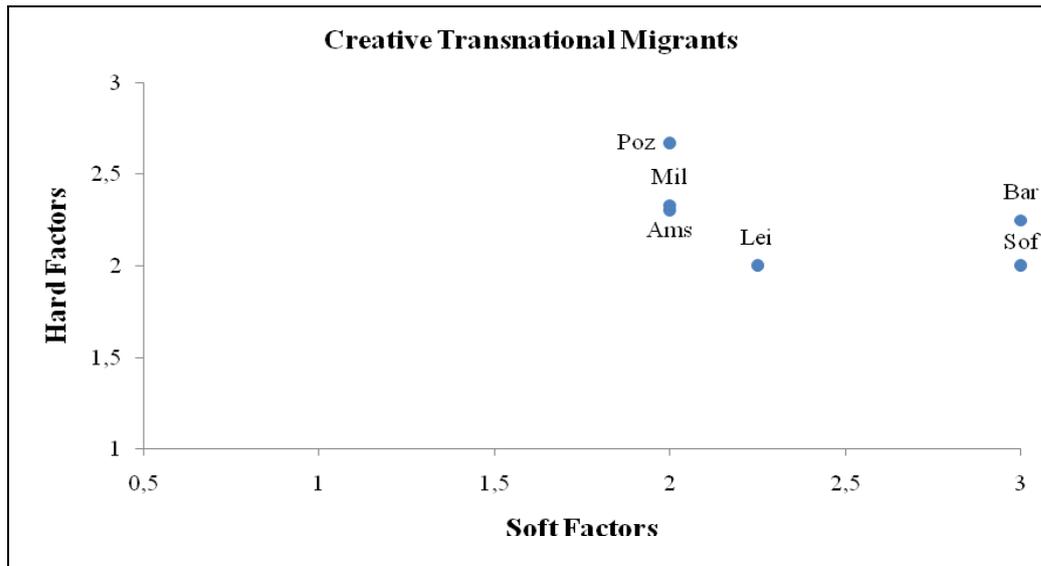


Figure 5.9 - "How important are each of the two dimensions"



Creative Employers (Figure 5.8)

The employer’s opinions are clearly different. Hard conditions have average importance for Barcelona’s employers in creative industries; they tend to pay more attention to the soft conditions. In Poznan and Sofia, however, both hard and soft conditions are seen as essential conditions, and in Amsterdam and Munich fairly similar opinions are predominant. Milan employers do not attach a heavy weight on either of the dimensions, but Leipzig and Milan employers are most extreme. Soft and/or hard conditions do not receive high importance.

Creative Transnational Migrants (Figure 5.9)

As in the analyses regarding the strong factors for the city regions, here too the transnational migrants show very different opinions. In Barcelona, both hard and soft conditions are regarded crucial, but for the other cities soft conditions are not seen as very relevant. These other cities differentiate, however, on the basis of the importance of hard conditions; in Poznan transnational migrants see hard conditions as more important compared to respondents in Amsterdam, Milan and Leipzig In any of these soft factors play a major role for the migrants.

In short

It is interesting to see that Barcelona is the only city where all (employees, employers and transnational migrants) believe that soft conditions are crucial for the city region’s development, with employees considering hard factors as very important, migrants as a bit important, and employers paying least attention to that. Surprisingly, Milan comes up with a quite low level of importance attached to both hard and soft conditions, which may have one of the two possible explanations: either the dominating role of individual networks and trajectories, or the historically strong image of the city as a centre of arts with a number of

unique specialisations (music, fashion etc), attracting creative people without thinking about hard or soft factors.

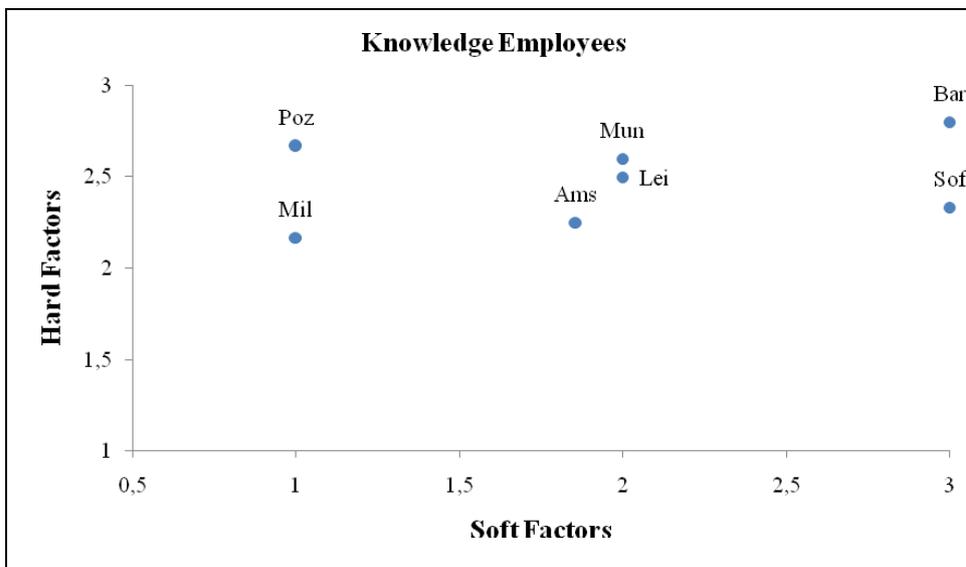
For other cities it is difficult to find any convincing explanation about the judgements regarding certain groups of factors. This may be influenced by a range of factors and we should stay aware of the fact that the answers provided may partly be a reflection of differences in style of interviewing, current political and economic situation, public events and debates, or even the weather when interviews were taken or questionnaires were answered. These remarks hold for all the results shown in this chapter.

Knowledge intensive industries

Knowledge Employees (Figure 5.10)

The attitudes of knowledge sector employees are not revolutionary different from those of creative sector employees. In Barcelona and Sofia they share opinions about the importance of hard and soft conditions for their cities and regions. In the middle category of Munich, Leipzig and Amsterdam, similar attitudes can be noticed. Except for Barcelona, employees do not regard the hard and soft conditions as absolutely vital. In Milan there even seems to be a lack of importance attached to soft conditions, and a moderate importance to hard conditions.

Figure 5.10 - “How important are each of the two dimensions”



Knowledge employers (Figure 5.11)

Employers or managers seem to be more aware of the importance of these factors. In Sofia and Poznan both dimensions are regarded to be of key importance, and in Milan and Munich especially hard conditions are seen as very important. Amsterdam and Barcelona are somewhere in the middle; hard conditions as well as soft conditions are seen as important. In Leipzig employers and managers are less explicit in stating that any of the two dimensions are important.

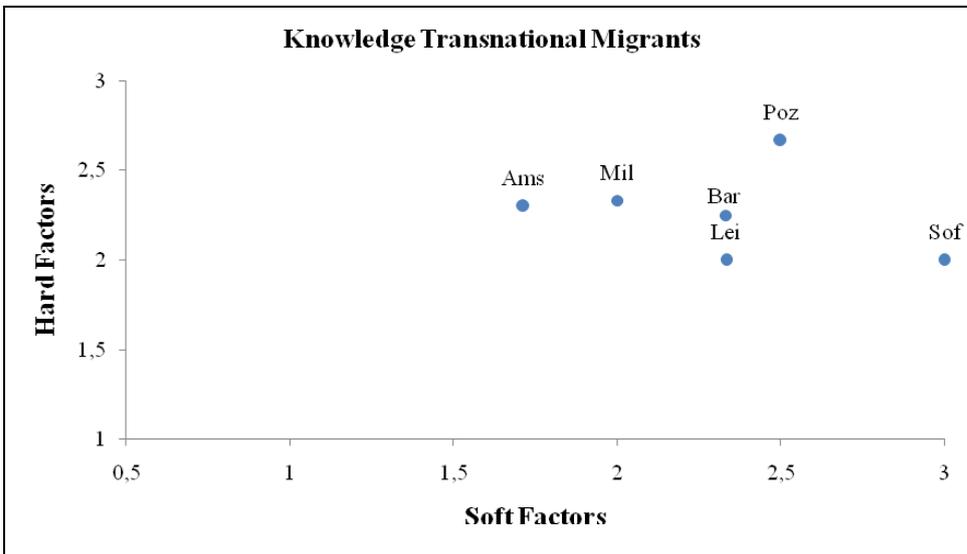
Knowledge Transnational Migrants (Figure 5.12)

For the transnational migrants in knowledge intensive industries the two dimensions (hard and soft conditions) are important, but seldom very important. Sofia is an example of a completely different situation: transnational migrants appreciate the warm southern character of the city with a lot of possibilities of going out, social energy, ambiance etc. - but not for its infrastructure or tax regimes. Milan and Poznan take an intermediate position, while Amsterdam migrants do not believe that soft conditions play any substantial role, and migrants in Barcelona and Leipzig tend to pay less attention to hard conditions.

Figure 5.11 - “How important are each of the two dimensions”



Figure 5.12 - “How important are each of the two dimensions”



In short

There is a wide variety of opinions among those who are active in knowledge intensive firms as to the importance attached to the hard and soft conditions the city region has to offer to attract and retain firms. In Sofia all actors believe that the city region's soft conditions are very important; in Munich the hard conditions are considered more important. In other cities either an intermediate position is taken (Amsterdam), or different actors think differently in this respect. Employees in Barcelona think that both hard and soft conditions are highly important, but employers only think they are somewhat important, and migrants even think more moderately. A similar variation can be found in Milan, but there employees are attaching less importance to soft conditions in particular, whereas employers believe these are very important, just as hard conditions. In short, there is a wide variety of opinions about the importance of the conditions considered among city regions across Europe.

6 DISCUSSION: 'CONDITIONS FOR CREATIVE KNOWLEDGE CITIES' AND SECRETS OF SUCCESS

6.1 Contemporary and deep structural factors as explanations for economic development

In this report we tried to synthesise a range of findings with regard to the essential deep-structural and contemporary conditions that attract (and retain) actors who are active in creative and knowledge intensive industries. We also summarised findings about how strong or weak city regions are, through the eyes of three categories of actors – employees, employers, and transnational migrants – in terms of so-called hard and soft conditions. Finally we tried to understand how important the hard and soft factors were considered to be for the city region the actors referred to.

The first of these three analyses showed that contemporary personal relations and networks appeared to be highly important for all actors in their decision to settle in a specific city region; this appeared to be a strong and consistent outcome of the interviews with employees, employers and managers, and with trans-national migrants. It was also made clear that so-called hard conditions, especially job availability, were the second most important factor. Incidentally, soft conditions were relevant, but never of prime importance. Amsterdam showed the highest scores on soft conditions as being relevant for attracting creative and knowledge intensive activity.

The opinions on how strong city regions are in terms of hard and soft conditions, reveal a more complicated pattern. Several results initially were not in line with expectations. This may partly be due to the fact that city regions may be strong in some of the 'classic' hard conditions, such as the tax climate, roads, or other connections; and this may be optimal for certain economic sectors, such as business services, but these may not be optimal for other activities, for example in creative industries. It may also be true, as was suggested, that when actors think that personal relations were decisive for settling somewhere, they do not pay that much attention to other factors anymore. This may also explain the complicated patterns of answers to the question how important certain assets of the city region actually are.

The wide variety of findings and opinions between different city regions, but also between actors, imply that a context and actor related perspective on urban economic development is required.

According to our survey individual network factors especially prevailed in the post-socialist cities of Riga, Poznan and Budapest. These cities were reintegrated into the circulation of global capital only recently, and they have been less affected by international migration of employees and employers than in West European cities. Personal trajectories played an above average role also in the Mediterranean cities of Milan and Barcelona. Evidently the societies

of Southern and Eastern Europe are more family-oriented and social network oriented than in North-Western Europe, although these personal relations were quite dominant in the latter spheres as well. These basic differences in societal and cultural life are clearly reflected in the mobility patterns of the respondents in our sample. In this context the role attached to hard and soft factors in East- and South-European cities seems to vary strongly and there is no overall regularity found to explain these variations.

Hard factors played the most prominent role according to respondents of the German cities (Munich and Leipzig) and also in Toulouse and Dublin they were seen as very important still. This is apparently connected with the positive economic dynamics of these cities in the last years, and the availability of affordable housing in case of Leipzig due to large scale vacancy on the housing market. The dominance of hard factors driven by economic success may change because of the current economic crisis, especially in the case of Dublin.

Soft factors were most often mentioned in Amsterdam, Barcelona, Helsinki, Toulouse and Munich. Amsterdam is the city where respondents mentioned soft factors a lot more often than elsewhere. It is also important to note that in Amsterdam the share of respondents grading soft factors in the first rank does not vary too much among persons who were born in the city (27%), persons who studied there (24%) or people coming from another city (30%). The importance of soft factors in these cities can be explained either by a strong historical image (Amsterdam, Barcelona, Munich), or successful 'branding' of the city in recent years due to its economic success (Helsinki, Toulouse). These cities are commonly known as attractive places to live in Europe. This general perception was translated into the high score of soft factors given by the respondents.

What also has become clear is that factors such as diversity and tolerance were hardly mentioned as relevant distinguishing factors. In various analyses we could show that these conditions are much less important for the attraction of talent or firms than some in the international debate want us to believe.

However, it also became clear that contemporary conditions, which make some European cities more attractive for the creative and knowledge industries than others, offer only a partial explanation. We cannot do without the deep structural factors referred to. These still appear extremely important, especially in Europe, where pathways can have long histories. Our findings show that although the deep structural conditions may be more difficult to define or to measure they are of essential meaning to the understanding of attracting economic activity in creative and knowledge intensive spheres. This is exactly what makes the European situation different from the American one, and what is often being underestimated by European policy-makers themselves.

6.2 Secrets of success (possible dimensions for different policy approaches)

Overall, the analyses provoked some ideas about common regularities, typical for certain groups of cities and – what is more important – about their chances for success. What cities have more chance to for improving their competitiveness through the attraction of creative and knowledge intensive industries? Are there any pronounced groups of cities united by certain common elements and are they in need of specific policies?

We suggest several explanations which may be considered as possible secrets of success:

- Understanding differences within creative and knowledge sectors and the choice of correct emphasis in various types of cities
- Status of the city (national or regional capital) and its size?
- A particular political role of certain cities as vanguards of innovation and change
- Presence of innovative clusters?
- Strong path or discontinued (ex socialist) path?
- Strong universities well integrated in city life and providing sufficient 'anchors' for personal social networks?
- Strong status or image as centre of creativity or centre of technology
- Policy intervention and re-branding efforts rebalancing the lack of other conditions?

These general explanations can be refined and be considered when an attempt has to be made to come to more general classifications of cities. In the following subsections some observations will be presented in which the explanations are coupled to the city regions, the sectors and the actors we incorporated in this project. Perhaps the joint observations help to discover what the secrets of success for city regions are if they intend to attract new creative and knowledge intensive activities. The observations may also be read as comments to take into account when one is trying to understand which factors are relevant and which are not.

Differences within creative and knowledge intensive sector and their consequences for various categories of cities.

Both the creative and the knowledge-intensive sectors include subsectors with different sensitivity to various factors. This must be taken into account when conclusions are drawn about conditions that would or would not be attractive to cities and their regions.

For instance, the creative sector is on the one hand quite international (especially computer-based sector like creative parts of computer gaming, software development, electronic publishing; software consultancy and supply). But in many respects the sector is dependent upon certain local cultures, languages, audiences etc (like in motion pictures, video activities, and radio and TV activities, advertising). The second group of activities seems to be more sensitive to the status of the city (national/regional capital city function), the first may, at first glance, be more 'loosely related to local circumstances'.

In the knowledge-based sector the high-tech management activities are mostly related to the established high-tech clusters, many of which exist outside the largest administrative centres. But within business services there is a clear stratification. Some activities (lawyers, management consultancies) are of an advisory and project-based character and are practically independent of the proximity to clients. They tend to be strongly concentrated in a small number of central (and most successful) cities – this applies especially to international companies. Other activities (banks, advertising) operate mostly on a national basis. For example, advertising relies on the national mass media, especially television, and has to be informed about local social and cultural mores. Here national or regional capitals are most important. Activities of the third type (like accountants or insurance companies) are locally and regionally biased, as they provide standard 'packaged' services, applied specifically to the local situation. They have hierarchically organised national systems of offices and branches all over certain countries.

Even more pronounced in space is the stratification of *international business service* companies, with international lawyers and consultancies being concentrated in a small group of the world cities, banks and advertising mostly in national or important regional capitals, and global accountants more diffused among the economically important cities.

One more point should be emphasised here: state (local and central) has different possibilities for enhancing future development in the creative industries (being mostly private sector driven) and knowledge intensive industries (with a larger share of public institutions e.g. universities or academies).

The importance of a city status and size

This emphasises the importance of a city status (including the position in global cities networks), but also the presence of adequate infrastructure and an attractive atmosphere or image. Cities of a higher status a priori concentrate certain parts of creative and knowledge intensive industries. Policies can only have a limited influence on these developments, can encourage them but hardly be a trigger for radical changes. One of the possible channels to upgrade the position of national and regional capitals is to become more internationally involved, especially considering the efforts of becoming a global city of any range and attract international business service companies, which in turn will bring along more international migrants and encourage creative activities, serving the needs not only of the national but also international labour market.

Of course cities with a lower administrative status may also benefit from creative and knowledge-based industries, but rather likely from other groups of activities within these sectors, which are not that much dependent of the city status (culture, entertainment, education). Policy-makers should be aware of making a clear distinction between certain activities while making plans for promoting creative and knowledge sector development in certain types of cities.

One of the policy implications is that cities with a low position in the urban hierarchy are more dependent upon the productive sector in their economic profile (including the

knowledge-intensive high-tech activities), with creative activities and business services mostly serving local needs.

In this context the size of a city can be considered an issue because in combination with its administrative, political or economic status it offers (or does not) more potential for personal interaction and networking. All global cities, including the European ones, are relatively large cities (although not each large city has enough potential to be a global one).

A particular political role of certain cities as vanguards of innovation and change

Some cities benefit from their political role as vanguards of innovation and change. In strongly centralised countries these are mostly the national capitals, with their unique and diverse urban environment remain particularly attractive for highly ambitious/aspirational individuals, including those working in creative and knowledge-intensive industries. They normally make quite a contrast to other cities, standing lower in the urban hierarchy, which need to struggle to find their niche in order to attract social capital. This is particularly the case in countries with relatively small populations such as Bulgaria, Latvia, Finland, Hungary or Ireland in our sample, as well as other European countries like Greece and Slovenia etc. The contrast becomes especially pronounced in large countries with a strongly centralised political *ethos* (for instance, France), which leaves most of the other big cities in the shadow of the capital.

In more decentralised countries like Germany and Spain, the situation is quite different. Here regional capitals, like capitals of federal states or autonomies, have important political functions and therefore often produce stronger impulses for dynamic development than national capitals. Also in Poland, where the regional level in governance is quite important and creates a competitive environment, regional capitals like Wroclaw or Poznan sometimes show a higher entrepreneurial dynamics than Warsaw.

This does not imply that the non-capital cities have nothing to be studied. On the contrary: given that capital cities *per se* attract a creative knowledge sector because of their special position, it would be very interesting to see the strategies which other cities use to attract them. There are quite a few examples when European cities with almost no potential or starting point for developing a creative sector (like Plovdiv in Bulgaria) manage to find cultural and professional niches to attract or retain creative workers.

Presence of innovative clusters

Because of a higher status orientation of a large part of creative and knowledge sector (and this is another important policy issue) cities with a lower status in the administrative hierarchy seem to be much more sensitive to the presence of innovative clusters, to the remnants of old industry or to the presence of other disadvantageous activities, to how diversified their economy is and how successfully the general restructuring is going.

A good illustration is the example of Birmingham and Toulouse. Both cities are quite successful large cities, overshadowed by strong national capitals. The economic profile of Toulouse is since many years defined by a successful high-tech cluster and connected to its extensive education/research sector; the city region has no negative experience with old industries and remains attractive for the labour market. Birmingham, after a historically important period of glory, had for many years a considerable presence of heavy industry and its social structure still carries the imprints of that late industrial period. Although the economic profile of the city has already considerably changed and successful efforts have been made to turn it into an international cultural and congress centre, the social structure and formerly deteriorated image of the city to a certain extent create barriers to its economic success.

A presence of innovative clusters is an extra bonus for any diversified large city. The example of Munich shows how a city region with sufficient administrative/political status and strong pathway has considerably benefited from its post-war development and high-tech orientation. These developments, together with cultural traditions and a long history of Munich as a prosperous city, create a solid basis for the current economic success, supported by policies. The famous Münchener Mischung (Munich Mix) is known for putting the emphasis of economic development on a healthy mix of cultural and high-tech activities. The dynamism of the city to a large extent relies upon both a creative and a knowledge sector, with an evident dominance of the latter.

Strong path or discontinued (ex-socialist) path?

The post-socialist cities are still quite different from Western cities. They have been considerably re-shaped after two major restructuring periods (post-1945 and then post-1989). This discontinuity of the development path has a major impact on their socio-economic structures and their current attempts to accelerate their modernisation, to improve their attractiveness and to combat the negative consequences of the state-socialist period. Creating an appropriate legal environment and stable political and socio-economic regimes are still first priorities.

It is essential that post-socialist cities are still unable to produce reliable statistics and this relates directly to policy-making capacity, because policies are often based on defective statistics.

Regarding policy, there is one more significant feature of post-socialist countries. It seems that cities in the ex-socialist part of Europe are impacted mostly by policies formulated by the central government. In some cases cities still do not have real autonomy that enable them to effectively make and implement policy. But quite often it happens that even receiving more autonomy from the central government, cities don't have enough capacity and experience to conduct local policy in an efficient way. Nevertheless, this is not always the case and can again be explained by the level of governance centralisation. In Poland attempts of decision-making decentralisation often come 'from the bottom' – in other words, it is cities that struggle for more independence in their policies. And sometimes local policies appear to be more successful, due to a higher stability of city governments than of central governments and

their lower dependence upon political tensions. And still it is true that their capacities are quite limited.

The capital cities of the post-socialist countries have a particularly pronounced political function: many of them led the way against communism, and after that again they led the way through the reforms and to the end of the “transition”. This is nothing new, East European countries were traditionally under-urbanised compared to the West. Capital cities were often the ‘lonely stars’ of modernisation within the national urban systems (with the exception of Poland) (Enyedi, 1992). Being at the vanguard of the nation – they have been the locomotives of all changes and economic modernisation – such cities generate visibility, energy and the feeling of being modern. They attract the most mobile and challenging categories of people, especially those who are easier in taking risks. Being the vanguard, such cities are quicker to introduce anything modern or progressive. Moreover, the experience of changing history gives the citizens of such cities a higher self-confidence, which inevitably generates extra energy in all spheres of life including economic development. High level of initiative taking gives them a better chance to succeed in becoming a creative city due to high level of initiative and stimulates the bottom-up initiatives, complementing the top-down decision making structure. This also explains why some post-socialist capital cities, mostly those with cities with a stronger ‘political energy’, manage to achieve more positive results, even being left even without proper urban policies for decades (for example, Sofia), while others, without much confidence of being a nation’s leader (like Chisinau in Moldova), fail to benefit from a much more elaborated system of existing policies.

Post-socialist cities often carry the burden of inherited institutional structures and laws which do not seem to change quickly enough. Traces of them can be seen even after 20 years of restructuring. Membership of the EU has some positive impact on this: new member states are forced to change their administrative systems and introduce certain types of policies in the various domains (infrastructure, social sphere, environment, ethnic issues etc) to keep up with the EU standards. As a result the top-bottom policies get a peculiar shape, when the ‘top’ is not the city or even the national government, but the European Commission.

A general conclusion is that compared to the West European cities East European cities are characterised by less stability and a smaller arena for policies, which are to a large extent compensated by a high entrepreneurial spirit (bottom-up initiatives). Among them capital cities as national leaders have more chances for new developments (including not only the spirit but also the financial situation).

All this has important consequences for urban policies, including any sort of targeted policies related to the creative knowledge sector.

First, any successful urban policy is possible only in a generally stable and well-functioning state. Political stability, state formation and development of democratic institutions are the crucial factors, which provide the stabilisation of socio-economic situation in general. This is the first stage of preparing any policy at any level, and it is especially important for the less advanced new member states and candidate countries. Only when political reforms are successful, one can expect general improvement in the socio-economic sphere, rise of incomes and positive development on the labour market (the second stage). Against this

background any measures or policies, introduced by the state or city councils, happen to be more efficient. In this respect integration into the EU may be by itself a factor, promoting successful urban restructuring. The new member states seem to be one of the most important arenas for the supra-national policies, when the EU intervention may happen to be quite efficient.

Second, a high bottom-up entrepreneurial activity in post-socialist cities can by itself bring rather quick results, which may be compared with the results of policy intervention in some of the West European cities. This factor can also be considered by policy makers.

Strong university, well-integrated into city life

The importance of universities, professional schools and other research or education clusters is not accidentally mentioned by each of the 13 cities as a necessary condition for raising, attracting and retaining talents in all sectors of urban economy, including both creative and knowledge intensive industries. Universities function as hard, soft and network enabling factors.

Universities not only provide highly qualified labour for their cities, but serve themselves also as important innovation clusters, incubators of new ideas and new activities. These impacts of universities on cities are widely studied (Hall, 1997, Lambooy, 1997). Very often there exists a remarkable local synergy between a local university and spin-off firms, resulting in a development of strong high-tech clusters, technopoles, science parks and other modern forms of entrepreneurship in advanced industries. Universities work for the cities, providing new jobs and maximizing the local economic, environmental and social benefits. The economic links between many universities and their cities seems to be an accepted fact.

Much less noticed is the role of universities as centres of professional and personal networks. The importance of these networks for the career path of the university graduates is clearly underestimated. The social networks of university graduates and alumni organisations may have a big impact on the professional mobility of high professionals, and this factor is very seldom taken into consideration by policy-makers.

Apart from the role of the universities' networks, the urban environment plays an important role in retaining university graduates. A study on British and Dutch universities (van der Meer, 1997) showed that in both countries a relatively large percentage of graduates from secondary cities tend to move away to other regions, while graduates from capital cities are likely to find ways to stay in attractive metropolitan environments. This illustrates the idea of an attractive urban environment being one of the crucial factors for retaining professionals. Therefore policy efforts aimed at general improvement of urban environment, including efforts to enrich its cultural amenities, may not be decisive for changing the economic profile as a whole, but indirectly help to increase the attractiveness of a city for the graduates considering to stay in the city or to move to another region.

Image of the city

The image of a city is not the decisive factor of its attractiveness but it can facilitate or weaken the impact of other factors.

A *strong historical image* of a city appears to be quite a stable category. It is not necessary to explain that Amsterdam is internationally known for its period of prosperity in the Golden Age and since then has retained a reputation as an open and tolerant city, centre of commerce with a multi-cultural and multi-ethnic environment. Even less glorious years in the 19th century did not change this image, which remains very beneficial for the city until now.

But even if the former glory was followed by periods of economic decline, the historical image is a good starting point for reforms and restructuring. The examples of Budapest and Leipzig, both known since the 18th and 19th centuries as prominent cultural centres, are good examples. The negative consequences of decades under socialism have deteriorated the economic profile of the city and its built environment and made the restructuring process in the last 20 years not easy. Of course, both Leipzig and Budapest happened to be in a more advantageous economic position than cities further to the East or South and received considerable investments. Nevertheless, the preserved historical layers of culture made it much easier to re-create the spirit of the cities, as it was known in its best years. Both cities remained attractive not only for tourists but also for transnational migrants, to a large extent due to their historical aura. Budapest stands apart among the post-socialist cities known as a former 'partial' capital of the Austro-Hungarian Empire and a capital city of Hungary. The city which preserved elements of its former markets even still in state-socialist period and therefore had a relatively easier way of transition, with a relative higher GDP per capita level than other post-socialist countries.

Riga is also historically known as a hanseatic city, an important economic and cultural centre with deep multicultural traditions and a well-preserved urban core. But apart from the legacy of a strongly centralised regime within the Soviet Union, it was recently extremely strongly hit by the financial and economic crisis. Because of that it may well now become a 'sleeping beauty' with a not fully realised potential for another while. Nevertheless, it appears to be attractive for high-skilled international migrants, which can be read as one positive sign.

In some cases a historical image can play a negative role – like in Birmingham, where a relatively recent industrial history has over-written the former glory of the city as a centre of commerce, crafts and fine manufacturing. Here *policy intervention and some progress in re-branding of the city* are able to rebalance the lack of other conditions and have a positive impact upon the improvement of the city's economic profile. Birmingham has in the last years become increasingly known as an international research and congress centre, and a lot of effort has been made to create a new type of attractive urban environment and reinforce this new function. Similar strong 'branding' efforts have been made since 1990s in Barcelona where a new orientation of the city towards the knowledge-based society is reflected in different policies and strategies, with a strong emphasis on the cultural sphere.

Creative class and creative city limits

Our research has revealed a strong heterogeneity within the group of employees, managers and entrepreneurs working in the creative and knowledge based sector. This heterogeneity is clearly pronounced in a wide variety of their preferences and choices regarding places of residence and work. It means that general pronouncements about cities attractive for creative and/or knowledge intensive sector do not make much sense until it is specified what parts of these sectors we have in mind.

This conclusion undermines the whole idea of Richard Florida that making cities attractive for the creative class should be considered as a quick way to economic success. Speaking about the creative class as one single category is hardly correct; therefore efforts to use Florida's theory as a universal key to success are very often doomed from the very beginning. Making cities attractive to the creative class does not make sense because different segments of the so-called creative class would clearly prefer quite different types of cities and very often not even the most attractive ones. A seductive creativity fix is very likely to be a phantom, and policy-makers should be aware that a mass product does not fit any particular city and using the popular 'creative city' concept without profound elaboration of local needs and possibilities may well result in a big fiasco.

7 CONCLUSIONS AND POLICY IMPLICATIONS

Conclusions

This report has addressed pathways, actors and policies related to making competitive cities. We have presented insights derived from five theoretical fields that partly overlap: theories that stress deep-structural factors and historical pathways, theories that stress the importance of agglomeration advantages and clustering, theories that illuminate the relevance of soft conditions, ‘classic’ location theories that elaborate on hard conditions, and theories in which relations and networks take centre stage. The empirical evidence we were able to base our findings on, pointed out that whatever the theoretical position one takes to understand current urban economic transformations, cities’ deeply rooted development pathways are of crucial importance. Beyond that we have been able to show that in each of the European urban regions we investigated, a mixture of factors is relevant to understand the various behaviours and attitudes of key-actor groups.

Policy implications of empirical findings

Having said that, the soft conditions most of the recent debate on creative cities was focused on, turned out to have some significance but actually must be considered the least important! Classic conditions seem to function as a necessary condition and in some urban regions, such as Leipzig and Munich, their importance may even be stronger. But most important seem to be the existing relationships and networks that have been built up in the past. Individual trajectories and networks of key actors almost always have reference to these relations and networks. We should be aware, however, that several indicators that underline the importance of relationships and networks, also refer to some of the other theoretical fields. This touches upon agglomeration theory and cluster theory, since the advantages derived from agglomerations and clusters are also strongly linked to various kinds of relationships. But also in ‘classic’ theory there are elements that relate to networks and individual trajectories and relationships. When key actors, for example, state that they went back to the place where they studied, this may be regarded as an individual study turf relationship; but this is also enabled by the presence of institutions for education, which feature in ‘classic’ theory. Therefore, the dividing lines between the different theoretical orientations should not be drawn too rigidly.

Yet, it was striking to find that issues like tolerance, openness and diversity were not regarded to be the key factors in the decision making process to settle for a time or to stay longer in a specific city. The fact that some cities have an image that meets these criteria may not harm them, but it does not imply that these are necessary conditions for future economic development and they are certainly not a sufficient one. A more powerful policy strategy would rather seem to be to stimulate the awareness about the characteristics of one’s own urban history and, the pathways these urban regions have gone through and to see what they

offer in terms of opportunities when future developments are considered. In addition, it may be challenging to think about the multiple ways to facilitate a range of networks that appear to be crucial for the individual decision making process of employees, managers and labour force from abroad. This requires creativity and knowledge as well as a flexible mind. The result may be a more diversified approach to urban economic development, away from 'models' and 'best practices'.

One dimension that requires policy attention, tends to be underexposed when debates on competitive cities are at play; that is the question about the 'effects' of urban economic development. This report has only briefly referred to these effects although it has referred to the precariousness and the quality of the jobs in creative and knowledge intensive sectors. The growth of the creative knowledge city is associated with increasing inequality and this in turn contributes to housing affordability and other issues. Even where the welfare state has remained vigorous and the tradition of limiting inequality is strong (Finland is a good example) inequality has increased and presents a challenge. It is not apparent that the best response to this is to resist the growth of the creative knowledge city and actions to address inequalities may be more appropriate. Nevertheless it is essential that there is a policy response of some kind. This is an important field for further exploration, for two major reasons. First of all, societies have to be aware of the impacts of urban economic development. Secondly, the effects, especially the social and social inequality effects may also, in the end, become relevant dimensions in the entire set of path dependent conditions for economic development. Studying the interrelations between the social and the economic, may thus become a crucial new challenge in the research arena that focuses on competitive cities.

Making cities competitive is not an activity that can be carried out by applying recipes that have been written down by a single professional. It is not something you can make or re-make like a standard product with the help of a common set of tools and instruments. Cities and urban economies are not T-shirts that can be produced in much the same way across the world. But why not? The main element in answering this is that a city is mainly 'context'; it is about the individual and collective histories and about networks that have developed in a differentiated way over a longer time path. In the words of evolutionary economic geography we could say that contexts, as soon as they have been developed, tend to have a continuous impact on future developments (Frenken and Boschma 2007). These contexts tell us what kinds of transformations are feasible. Cities are multidimensional, multi-temporal and multi-scalar entities, often existing for thousands of years and they have been built upon and for a wide variety of societies. The resulting variations and diversities cannot be neglected when urban change is on the agenda. There is not one formula with which to change the city to the good and there is not one set of policies that would produce the 'competitive city'.

This report, as well as the whole ACRE project, is not aimed at formulating a prescription for how to make cities competitive. It does however clarify what dimensions are important if we intend to understand some of the current urban economic transformations and opportunities. These dimensions include the various contexts that have changed over time and continue to change. The dimensions also refer to the social and professional networks that exist, including those that are connected with the presence of centres of education. These networks of friends, family, colleagues, and 'youth and study turf' emerge as major conditions for continued economic initiatives and orientations. Of course these conditions are also affected by current

and previous policy interventions. Policy has contributed in various ways to shaping the forms and functions of cities, but they have not determined them.

Debates about the cultural factor in policies: a European and American dimensions

Our findings proved that Florida's conceptual framework can only be seen as a useful preliminary hypothesis, but not as a solidly structured theoretical construct. This is especially pronounced in Europe, which turns out to be culturally and historically very different from the USA. The USA was deliberately established as a country structured around *individual mobility* and the autonomous individual of liberal philosophy (Johnson, 1997; Obama, 2006). Europe, on the other hand, has remained *structured around families, localities, and distinct cultures*. Or, to put it in another way: all people live in groups, but Americans choose which group to be part of (and are therefore very likely to leave their place of origin in order to be part of that group), whereas Europeans tend to stay with the group (culture) into which they have been born or raised.

This cultural explanation seems to be very significant because it reveals the driving forces, making European countries survive the era of Americanisation. This cultural 'rootedness' is especially strongly pronounced in Southern and Eastern Europe, where people remain more close to their family clans, feel obliged to attend family gatherings, take care of the graves of their ancestors and so on. It is not accidental that the importance of the individual trajectory, revealed by our research, is most strongly pronounced in the city regions of Southern and Eastern Europe where elements of traditionalism remain most important. For Americans, on the contrary, this consideration is hardly of importance.

This difference in culture in fact undermines to a large extent the suggestion of Florida about culture becoming more important than economics (the contemporary person is no longer driven by economic forces but is becoming more conscious of its cultural environment). This may be true for America, where the economic factor has been until recently clearly dominating, but it is not true for Europe, where the cultural factor has always remained almost equally important. There is also an essential difference in understanding the meaning of the cultural environment by Florida, who interprets it as 'soft factors' (attractive urban setting, cultural amenities, tolerant atmosphere) and by Europeans (national or regional cultural traditions, language, religion, family structures).

It would be unfair to reject altogether the viability of Florida's ideas while applied to Europe. With more certainty they can be applied to a certain group of *super-creative core*: the truly cosmopolitan artists, film-makers, people employed in advertising and fashion, journalists, especially those working for internet etc. This, however, is a very small sample, providing no basis for generalisations, and it would be not realistic to use it as a starting point for policy-makers.

An unavoidable question is if the importance of the cultural factor in Europe is an advantage or rather a disadvantage for the economic competitiveness of its cities. It is true that the low level of labour mobility in Europe, caused by cultural and institutional barriers, is often considered as a factor threatening the economic growth and competitiveness of the continent.

But it can also be interpreted as a factor providing social stability and preserving cultural diversity within the EU, which by itself is a factor, stimulating the competitive spirit and therefore having a positive impact on economic growth.

A future research agenda

Our research is based on the example of 13 European city regions, widely distributed all over Europe, characterised by different economic profiles and having different historical and economic pathways. Analysing processes, taking place in these city regions, we were able to achieve some generalisations and come forward with hypotheses and explanations which may serve as a basis for policy recommendations.

Nevertheless, we would like to emphasise that our results are only indicative and therefore a future, more representative research effort would be needed to further investigate the trends we have discovered. The data base we have created should be further extended and elaborated to serve the needs of European policy-makers and related research.

A possible agenda for the future could include the following topics:

- The changing role of the cultural factor in Europe under the impact of internationalisation and its impact on the mobility of the creative and knowledge workers
- The impact of the EU enlargement on both West- and East-European city regions
- The interdependence between the notions of creativity and innovation and its imprint on European cities
- The stability of the creative and knowledge sector in different types of cities (consequences of the recent financial crisis)
- The interdependence of economic and social development and the current neglect of social challenges in creative knowledge city policies.
- The differentiation between conditions that are relevant for the attraction of economic activity and those that are relevant for the retention of activities.
- The relationship between the level of competitiveness of the regional economy and the development of creative industries.

REFERENCES

- Amadasi, G. and S. Salvemini (eds) (2005) *La città creativa. Una nuova geografia di Milano*. Milano: EGEA.
- Bathelt, H. (1998) Regional growth through networking: A critical reassessment of the 'Third Italy' phenomenon. *Die Erde*, 129 (3): 247-271.
- Beccatini, G. (1979) Dal settore industriale al distretto industriale: Alcune considerazioni sull'unità di indagine dell'economia industriale. *Rivista di Economia e Politica Industriale*, 1: 35-48.
- Boschma, R.A. and R.C. Kloosterman (2005) Further learning from clusters. In: R.A. Boschma and R.C. Kloosterman (eds) *Learning from clusters: A critical assessment from an economic-geographical perspective*, pp. 391-405. Berlin: Springer Verlag (GeoJournal Library, Vol. 80).
- Bontje, M. and S. Musterd (2005) What kind of place do the creative knowledge workers live in? In: S. Franke and E. Verhagen (eds), *Creativity and the city; How the creative economy is changing the city*, pp. 167-175. Rotterdam: Nai Publishers.
- Bontje, M. and S. Musterd (2008) The multi-layered city; The value of old urban profiles. *Tijdschrift voor Economische en Sociale Geografie*, 99 (2): 248-255.
- Boschma, R.A. and R. Martin (2007) Editorial: Constructing an evolutionary economic geography. *Journal of Economic Geography*, 7 (5): 537-548.
- Buck, N., I. Gordon, A. Harding and I. Turok (eds) (2005) *Changing cities; Rethinking competitiveness, cohesion and governance*. New York: Palgrave Macmillan.
- Buckley, P.J., T.M. Devinney and J.J. Louviere (2007) Do managers behave the way theory suggests? A choice-theoretic examination of foreign direct investment location decision-making. *Journal of International Business Studies*, 38: 1069-1094.
- Camagni, R. and R. Capello (2005) Urban mileux: From theory to empirical findings. In: R.A. Boschma and R.C. Kloosterman (eds), *Learning from clusters. A critical assessment from an economic-geographical perspective*. The GeoJournal Library. Heidelberg: Springer.
- Castells, M. (1989) *The informational city: Information technology, economic restructuring, and the urban-regional process*. Oxford/Cambridge Mass.: Basil Blackwell.
- Conradson, D. and A. Latham (2005) Friendship, networks and transnationality in a world city: Antipodean transmigrants in London. *Journal of Ethnic and Migration Studies*, 31: 287-305.
- Cumbers, A. and D. MacKinnon (2004) Introduction: Clusters in urban and regional development. *Urban Studies*, 41 (5/6): 959-969.
- De Vries, J. (1984) *European urbanization, 1500-1800*. London: Methuen and Co.
- Derudder, B., P.J. Taylor, F. Witlox and G. Catalano (2003) Hierarchical tendencies and regional patterns in the world city network: A global analysis of 234 cities. *Regional Studies*, 37 (9): 875-886.
- Dövényi, Z. and Z. Kovács (2006) Budapest: Post-socialist metropolitan periphery between 'catching up' and individual development path. *European Spatial Research and Policy*, 13 (2): 23-41.
- Enyedi, G. (1992) Urbanisation in East Central Europe: Social processes and societal responses in the state socialist system. *Urban Studies*, 29 (6): 869-880.
- Epstein, G.S. and I.N. Gang (2006) The influence of others on migration plans. *Review of Development Economics*, 10: 652-665.
- Favell, A. (2008) *Eurostars and Eurocities: Free movement and mobility in an integrating Europe*. Oxford: Blackwell Publishing.

- Florida, R. (2002) *The rise of the creative class and how it's transforming work, leisure, community and everyday life*. New York: Basic Books.
- Florida, R. (2006) The flight of the creative class. *Liberal Education*, 92 (3): 22-29.
- Frenken, K. and R.A. Boschma (2007) A theoretical framework for evolutionary economic geography: Industrial dynamics and urban growth as a branching process. *Journal of Economic Geography*, 7 (5): 635-649.
- Gáková, Z. and D. Lewis (2008) Labour mobility between the regions of the EU-27 and a comparison with the USA. *Regional Focus*, n+2/2008.
- Ganne, B. (1983) *Gens du cuir, gens du papier, transformations d'Annonay depuis les années 1920*. Paris: Centre national de la recherche scientifique.
- Gibson, C. and L. Kong (2005) Cultural economy: A critical review. *Progress in Human Geography*, 29 (5): 541-561.
- Glaeser, E.L. and A. Saiz (2003) *The rise of the skilled city*. HIER (Harvard Institute of Economic Research); <http://www.economics.harvard.edu/pub/hier/2003/HIER2025.pdf> (accessed 6 March 2009).
- Glaeser, E.L. (2004) *Review of Richard Florida's 'The rise of the creative class'*. http://post.economics.harvard.edu/faculty/glaeser/papers/Review_Florida.pdf (accessed 21 March 2005).
- Gordon, I. and I. Turok (2005) Moving beyond the conventional wisdom. In: N. Buck, I. Gordon, A. Harding and I. Turok (eds), *Changing cities*, pp. 265-282. New York: Palgrave Macmillan.
- Gottmann, J. and R. Harper (eds) (1990) *Since Megalopolis. The urban writings of Jean Gottmann*. Baltimore: John Hopkins University Press.
- Gouldner, A. (1979) *The future of intellectuals and the rise of the new class*. New York: Seabury.
- Grabher, G. (2002) Cool projects, boring institutions: Temporary collaboration. Social context. *Regional Studies*, 36 (3): 205-214.
- Grabher, G. (2004) Learning in projects, remembering in networks? Communitarity, sociality, and connectivity in project ecologies. *European Urban and Regional Studies*, 11 (2): 103-123.
- Gritsai, O. and A. Treivish (1990) Stadiad concept of regional development. Centre and periphery in Europe. *Geographische Zeitschrift*, 78 (3): 137-149.
- Hall, P. (1997) The university and the city. *GeoJournal*, 41 (4): 301-309.
- Hall, P. (1998) *Cities in civilization*. London: Weidenfeld and Nicholson.
- Hall, P. (2004) Creativity, culture, knowledge and the city. *Built Environment*, 30 (3): 256-258.
- Hansen, H.K. and T. Nedomysl (2009) Migration of the creative class: Evidence from Sweden. *Journal of Economic Geography*, 9 (2): 191-206.
- Harloe, M. (1996) Cities in transition. In: G. Andrusz, M. Harloe and I. Szelenyi (eds), *Cities after socialism*, pp. 1-29. Oxford: Blackwell.
- Helbrecht, I. (2004) Bare geographies in knowledge societies - Creative cities as text and piece of art: Two eyes, one vision. *Built Environment*, 30 (3): 194-203.
- Jacobs, J. (1961) *The death and life of Great American cities*. New York: Random House.
- Jacobs, J. (1969) *The economy of cities*. New York: Random House.
- Johnson, P. (1997) *A history of the American people*. London: Weidenfeld & Nicholson.
- Keeble, D., C. Lawson, B. Moore and F. Wilkinson (1999) Collective learning processes, networking and 'institutional thickness' in the Cambridge region. *Regional Studies*, 33 (4): 319-331.
- Kloosterman, R.C. (2004) Recent employment trends in the cultural industries in Amsterdam, Rotterdam, The Hague and Utrecht: A first exploration. *Tijdschrift voor Economische en Sociale Geografie*, 95 (2): 243-252.
- Kondratieff, N.D. (1935) The long waves in economic life. *Review of Economic Statistics*, 17: 105-115.
- Kovacs, Z., A. Murie, S. Musterd, O. Gritsai and H. Pethe (2007) Comparing paths of creative knowledge regions. ACRE series, nr. 3. Amsterdam: AMIDSt.

- Krätke, S. (2003) Global media cities in a world-wide urban network. *European Planning Studies*, 11 (6): 605-628.
- Krugman, P. (1991) *Geography and trade*. Cambridge, Mass.: The MIT Press.
- Kunzmann, K.R. and M. Wegener (1991) The pattern of urbanization in Western Europe. *Ekistics*, 350/351: 282-291.
- Lambooy, J.G. (1997) Knowledge production, organisation and agglomeration economies. *GeoJournal*, 41 (4): 293-300.
- Landry, C. (2000) *The creative city: A toolkit for urban innovators*. London: Earthscan.
- Lash, S. and J. Urry (1994) *Economies of signs and space*. London: Sage.
- Lees, L. and P. Hohenberg (1995) *The making of urban Europe, 1000-1994*. Cambridge, Mass. [etc.]: Harvard University Press.
- Mahroum, S. (2001) Europe and the immigration of high skilled labour. *International Migration*, 39 (5): 27-43.
- Malecki, E. (1991) *Technology and economic development*. New York: Longman.
- Markusen, A. (1996) Sticky places in slippery space: A typology of industrial districts. *Economic Geography*, 72 (3): 293-313.
- Martin, R. and P. Sunley (2003) Deconstructing clusters: Chaotic concept or policy panacea? *Journal of Economic Geography*, 3 (1): 5-36.
- Martin, R. and P. Sunley (2006) Path dependence and regional economic evolution, *Journal of Economic Geography*, 6 (4): 395-438.
- Martin-Brelot, H., M. Grossetti, D. Eckert, O. Gritsai and Z. Kovács (2010) The spatial mobility of the creative class: a European perspective. *International Journal of Urban and Regional Research* (accepted for publication volume 35.1, March 2011, electronic version in March 2010).
- Mommaas, H. (2004) Cultural clusters and the post-industrial city: Towards the remapping of urban cultural policy. *Urban Studies*, 41 (3): 507-532.
- Montgomery, J. (2005) Beware 'the Creative Class' creativity and wealth creation revisited. *Local Economy*, 20 (4): 337-343.
- Musterd, S. (2004) Amsterdam as a creative cultural knowledge city: Some conditions. *Built Environment*, 30 (3): 225-234.
- Musterd, S. (2006) Segregation, urban space and the resurgent city. *Urban Studies*, 43 (8): 1325-1340.
- Musterd, S. and O. Gritsai (2009) Creative and knowledge cities: Development Paths and Policies from a European Perspective. *Built Environment* 35 (2): 173-188.
- Musterd, S. and W. Ostendorf (2004) Creative cultural knowledge cities: Perspectives and planning strategies. *Built Environment*, 30 (3): 189-193.
- Murphy, E. and D. Redmond (2009) The role of 'hard' and 'soft' factors for accommodating creative knowledge: insights from Dublin's 'creative class'. *Irish Geography*, 42 (1): 69-84.
- Obama, B. (2006) *The audacity of hope: Thoughts on reclaiming the American Dream*. New York: Crown.
- Oort, F. van, A. Weterings and H. Verlinde (2003) Residential amenities of knowledge workers and the location of ICT-firms in the Netherlands. *Tijdschrift voor Economische en Sociale Geografie*, 94 (4): 516-523.
- Peck, J. (2005) Struggling with the creative class. *International Journal of Urban and Regional Research*, 29 (4): 740-770.
- Peyroux, E., M. Grossetti and D. Eckert (2009) Becoming a knowledge city: The example of Toulouse. *Built Environment*, 35 (2): 196-203.
- Polanyi, K. (1944) *The great transformation*. New York: Rinehart and Co.
- Porter, M.E. (1998) Clusters and the new economics of competition. *Harvard Business Review*, 76 (6): 77-91.
- Pratt, A.C. (1997) The cultural industries production system: A case study of employment change in Britain, 1984-91. *Environment and Planning A*, 29: 1953-1974.

- Raveyre, M.F. and J. Saglio (1984) Les systèmes industriels localisés: Eléments pour une analyse sociologique des ensembles de P.M.E. industriels. *Sociologie Du Travail*, 2: 157-175.
- Salvemini, S. et al (2005) *La specificità della classe creativa a Milano: Sfruttare i punti di forza della città per supportare i creativi*¹. Milan: Research of the Bocconi University for the Chamber of Commerce of Milan.
- Sassen, S. (1991) *The global city: New York, London, Tokyo*. Princeton, N.J.: Princeton University Press.
- Sassen, S. (2002) *Global networks, linked cities*. New York: Routledge.
- Sawicky, D. (2003) Review of R. Florida, The rise of the creative class and how it's transforming work, leisure, community and everyday life. *APA Journal*, 69 (1): 90-91.
- Saxenian, A.L. (1994) *Regional advantage: Culture and competition in Silicon Valley and Route 128*. Cambridge, Mass.: Harvard University Press.
- Saxenian, A. (2006) *The new argonauts: Regional advantage in a global economy*. Cambridge, Mass.: Harvard University Press.
- Scott, A.J. (ed) (2003) *Global city-regions: Trends, theory, policy*. Oxford: Oxford University Press.
- Scott, A.J. (2006) Creative cities: Conceptual issues and policy questions. *Journal of Urban Affairs*, 28 (1): 1-17.
- Simmie, J. (2005) Innovation and space: A critical review of the literature. *Regional Studies*, 39 (6): 789-804.
- Stanilov, K. (ed.) (2007) *The post-socialist city. Urban form and space transformations in Central and Eastern Europe after socialism*. GeoJournal Library. Heidelberg: Springer.
- Storper, M. and M. Manville (2006) Behaviour, preferences and cities: Urban theory and urban resurgence. *Urban Studies*, 43 (8): 1247-1274.
- Taylor, P. (2004) *World city network: A global urban analysis*. London: Routledge.
- Taylor, M. (2005) Embedded local growth: A theory taken too far? In: R.A. Boschma and R.C. Kloosterman (eds), *Learning from clusters: A critical assessment from an economic-geographical perspective*, pp. 69-88. Berlin: Springer Verlag (GeoJournal Library, Vol. 80).
- Turok, I. (2004) Cities, regions and competitiveness. *Regional Studies*, 38 (9): 1069-1083.
- Vaattoovaara, M. (2009) The emergence of the Helsinki Metropolitan Area as an international hub of the knowledge industries. *Built Environment* 35 (2): 204-211.
- Van der Meer, E. (1997) The University as a local resource of expertise. *GeoJournal*, 41 (4): 359-367
- Yigitcanlar, T., S. Baum and S. Horton (2007) Attracting and retaining knowledge workers in knowledge cities. *Journal of Knowledge Management*, 11 (5): 6-17.
- Wu, W. (2005) *Dynamic cities and creative clusters*. World Bank Policy Research Working Paper 3509, February.
- Zukin, S. (1995) *The cultures of cities*. Oxford: Blackwell.

¹ Title translation: The specificity of the creative class in Milan: Exploiting strength of the city in order to support creative workers.