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Minor Cities in a Metropolitan World: Challenges for Development and Governance in Three Hungarian Urban Agglomerations

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Minor Cities in a Metropolitan World: Challenges for Development and Governance in Three Hungarian Urban Agglomerations

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ABSTRACT *Minor cities represent urban centres on a sub-metropolitan scale which are struggling to integrate into competitive city networks characterized by intense, worldwide agglomeration processes. Lacking sufficient mass and often situated on Europe's geographic or socio-economic peripheries, they must balance specialization and diversification agendas, and develop effective urban governance to remain viable economic centres. This paper investigates ongoing urbanization processes and their effects on minor cities, illustrated by three case studies from Hungary. Findings suggest that development cooperation and the foundations of 'urban regimes' emerge even in small and institutionally weak city-regions, although the content, as well as organization of the resulting arrangements exhibit differences from the base model.*

1. Urbanization Without Limits? The Rise of Metropolis

Agglomeration is the underlying logic of urban development in the new space economy: both in the increasing focus on city-regions encompassing a central city (metropolis) and its functionally connected agglomeration as a spatial *framework* of global competitiveness (Parr 2005; Somlyódyné Pfeil 2011; Harrison 2012); and in the growing relevance of agglomeration *processes* in the development of the most innovative economic activities (Audretsch 1998; Lengyel and Mozsár 2002; Viladecans-Marsal 2002; McCann and Acs 2011). The link between the two is becoming ever stronger, resulting in the accumulation of further advantages in selected urban areas.

Agglomeration economies, owing to their conceptual origins to the Marshallian industrial district and rediscovered by regional studies to explain contemporary development processes, point towards the 'unstoppable' concentration of high value-added economic activities (Faragó 2010). The position of city-regions in this process is made firm by the spatially limited extent of their location advantages: transaction costs arising from

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transportation, communication and the limited accessibility of social networks counterbalance agglomeration economies (Fujita and Thisse 1996; Gordon and McCann 2000), enforcing a significant degree of concentration in certain types of economic activity. These forces establish a balanced system divided between the concentrated and specialized spaces of competitive urban economies, and their looser, less concentrated non-urban opposites.

The focus of inquiry has largely been placed on the most competitive centres of the global urban hierarchy, most notably the group of *world cities* (Sassen 1991, 2006; Saxenian 1996; Taylor 1997; Taylor and Walker 2001; Derudder et al. 2003; Erdősi 2003; Gál 2010) serving as the major centres (hubs) and distributors (gateways) of global flows. The most valuable and profitable segments of the post-Fordist economy (i.e. knowledge-intensive business services, Information and Communications Technology, media, design, R&D and corporate management), serving global markets and characterized by very high economies of scale, show intense agglomeration in these selected areas; and the more knowledge-intensive a given activity, the higher its global concentration (cf. Audretsch 1998 on the location of innovative industries). World cities, within an emerging system of ever closer cooperation, are furthermore linked to secondary centres or 'medium-sized metropolitan cities'. As Janssen-Jansen and Hutton note, 'metropolis' is not merely one possible form of development, but an imperative, even in its variable definition:

> In an increasingly globalizing world economy, the status of being a metropolis seems to be attractive and perhaps even a necessity. Each country uses its own definition for whether or not a city is a metropolis, and thus has a dominant position in its country. Metropolitan definitions are dynamic. (2011, 205)

As centres of post-Fordist production, cities are increasingly viewed as frameworks for public policy by both national governments and the European Union (EU). Governance, a concept often invoked in academic and policy discourse with insufficient rigour, has nevertheless developed a working, if ever-contested interface between urban government and economic policy (Boland 2000; Somlyódyné Pfeil 2008; Pálné Kovács 2010). Changes have been compelled in large part by the emergence of a power vacuum left by economic restructuring, globalization and the withdrawal of the neo-liberal state from a range of public functions, encouraging the multi-level division of power and the autonomous development activity of cities (Imbroscio 1998; Ache 2000). Building upon the concepts originally developed in the USA (Stone 1993, 2005; Mossberger and Stoker 2001; Imbroscio 2003; Kilburn 2004; de Socio 2007, 2010), the concept of *urban regimes*, coalitions emphasizing the cooperation of political and economic interests to effectuate urban renewal and economic development, has gained foothold, and been adapted to European circumstances as a development model for contemporary city economies (cf. the pioneering work of Harding 1997, 1999 highlighting the comparatively weaker local power, less significant land ownership and stronger central control of European cities).

Criticized by Lovering (1999), Keating (2001) and later Harrison (2007) as a new orthodoxy relying too much on idealized case studies resulting in projection mistakes; and by several authors as the privatization of governance resulting in new inequalities while lacking sufficient democratic legitimacy (Boland 2000; Moulaert et al. 2007; Somlyódyné Pfeil 2008; Etherington and Jones 2009; Nagy 2012), new approaches for urban regimes have been suggested to foster greater inclusion and social cohesion (Imbroscio 2003;

Deakin and Allwinkle 2007). Nevertheless, even the basic model offers advantages in bridging public and private concerns in urban development, and mobilizing endogenous resources towards the growth of urban agglomerations.

However, this understanding of the city-region itself is an idealized, even idiographic model, whose implications for growth and development policy are limited to a few outstanding centres situated on the higher tiers of the European and global urban network. Research has been conducted to test how the ideas of metropolitan development map to medium-sized city-regions, including a 2011 IPS special issue dedicated to this subject (Basten 2011; dell'Agnese and Anzoise 2011; Janssen-Jansen and Hutton 2011 and other contributors), but much less attention has been dedicated to how cities under the ideal size of 400–500,000 can and do adapt to the challenges of governance and development under increasing global and European competition.

This paper, written from the perspective of evolutionary economic geography but also utilizing the findings of the urban regime and regional innovation system literatures, examines the applicability of the dominant, city-region-based paradigm of development to secondary urban centres which lack the critical mass often found in European core areas, but whose agglomerations cover a significant part of Europe's urban space. Although it does not intend to offer an exhaustive analysis of the development problems that apply to them, it outlines the essential dilemma of *minor cities* and the problems they face in a metropolitan world, drawing attention to the significance of the choice between specialization and diversification. In particular, the inquiry focuses on the experiences of Europe's post-socialist periphery, where the lower level of urbanization coincides with weak local governance and an underdeveloped domestic business sector. Finally, the case studies, three Hungarian urban agglomerations which have experienced the challenges of industrial restructuring and establishing effective governance under post-socialism, highlight the main issues which face peripheral minor cities in building effective development cooperation. The experiences suggest that, while many of the conditions which characterize urban regime-led development in North American and Western European city-regions are absent or lacking, there are nevertheless lessons to be drawn for milieus characterized by less dense networks of actors, and the development coalitions of local stakeholders may provide the appropriate institutional arrangement to drive development policy.

2. Is Pluto a Planet? The Challenge for 'Minor Cities'

2.1. *Defining the Issues*

Analogies drawn from planetary science are commonplace in regional studies: parallels with planetary mass, fields of gravity, orbit and similar concepts offer convenient visual shorthand to demonstrate the behaviour of cities and their agglomerations. All is fine while we remain within the planetary realm, but doubts begin to emerge as we enter the zone where the 'planetness' of heavenly bodies starts to come into doubt. Can they be meaningfully discussed under the same breath? Alas! Poor Pluto did not make the cut, and has been demoted to a dwarf planet: but even under increasingly stringent criteria for planetary competition, it is not getting any larger, and will have to make do with its current capabilities. This is the situation many urban agglomerations are finding themselves in Europe, particularly on its geographic and socio-economic peripheries: their size, a particularly path-dependent criterion, precludes them from becoming key players in the global urban system. Can they compete at all, or are they condemned to further peripherization and the ongoing loss of population and critical resources? The issues which can bar them from effective competition are manifold: underdevelopment, a peripheral geographic position, disadvantageous economic structure or — most often — *inadequate critical mass to produce and exploit strong agglomeration economies*.

Small size undoubtedly counts as a disadvantage in urban competition; and there is a significant scalar bias towards large city-regions. Findings by McCann and Acs (2011) point towards cumulative, rather than convergence processes in city growth, whose benefit through spillovers go to the larger actors and their connected networks, even if the processes themselves are not necessarily scale-related, but rather global connectivity-related. But is there an entry threshold to be sufficiently connected? The authors suggest a population of 1.5–2 million people is needed in a city-region to 'achieve sufficient knowledge-related agglomeration effects to sustain local multinationals' (29). Janssen-Jansen and Hutton (2011), while acknowledging the essential role of *global city-regions*, also draw attention to the significance of *medium-sized metropolitan cities* 'in the two to four million population range', which have come to the vanguard innovation as 'processes of globalization have deepened and filtered downward within urban systems' (210).

This hierarchy implies the existence of *minor cities*, a third tier of cities which encounter the same forces of globalization and urban competition, but are at a yet lower size category; 100,000 to about 300,000 for the central city and below 1 million (often 400,000–700,000) for their extended hinterlands. Notwithstanding a recent book establishing a research agenda (Sucháček and Petersen 2010), and the overlapping, but separate issue of 'shrinking cities' (Pallagst et al. 2009; Ganser and Piro 2012; Martinez Fernandez et al. 2012), they have rarely been the focus of dedicated volumes or special issues, and are only starting to receive *systematic* attention outside scattered case studies. Recent exceptions include the results of an ESPON research project on 'second-tier cities' (Parkinson et al. 2012), as well as two highly relevant papers by Dijkstra (2013) and Dijkstra, Garcilazo and McCann (2013), both offering warnings about focusing too much on metropolitan issues without considering the advantages of a more balanced 'portfolio of places'.

The relative neglect of minor cities can be seen as a manifestation of the centre–periphery relationship: large cities actively shape and control territorial development processes, while their minor counterparts are often subject to intense external control (Sucháček 2010), manifesting through market pressures and the centrally dictated performance indicators of 'multi-level governance' (Kokx and van Kempen 2010). As Suvák (2011) warns, 'polycentric' development agendas are often transformed into normative bearers of functional hierarchies when they are applied to minor cities.

The existence and behaviour of agglomeration economies has been tested for minor cities by a variety of authors. Solé-Ollé and Viladecans-Marsal (2004) have found evidence of a steady growth surplus in city-regions with central cities of 100,000–300,000 inhabitants; increasing further above 300,000. Similar findings have been reported by Voith (1998) for large US cities, showing the privileged positions of city-regions above 300,000 and particularly 500,000 inhabitants, but also the gradual strengthening of agglomeration economies in the 1960–1990 period. A corporate demographic model on the example of Hungary (Koós 2010) has analysed the agglomeration of economic activities through enterprise formation and liquidation on the settlement level, demonstrating the systematic advantages of urban centres in the minor city category in enterprise survival rates over smaller towns. Finally, another Hungarian investigation conducted by Lengyel and Szanyi (2011) has tested for agglomeration economies on the micro-regional (LAU 1) level, finding evidence of Marshall–Arrow–Romer-type localization, but not Jacobs-type urbanization externalities outside the metropolitan area of Budapest.[1] The paper unearthed further significant differences between the effects of foreign and domestic ownership of capital — showcasing that the lower embeddedness of Foreign Direct Investment (FDI) has diminished the efficiency of knowledge spillovers for either type of externality.

The absence of critical mass and the lower density of the city-region's socio-economic space have other, far-reaching consequences for the prospects of development policy and innovation. Functional connections to the distant parts of the city-regions are weaker. Advantages from significant corporate centres are less likely to be found, and branch-plants, a mainstay of industry on the periphery, do not exert the same influence on their environment, often lacking functions and competences which can meaningfully connect with their surroundings, or lead to substantial local capital accumulation. Similar issues arise in the difference between imported and endogenous knowledge. More fragmentary, 'diaphanous' networks of smaller companies are often found around minor cities, representing less concentrated industrial organization than metropolitan areas. The entire clustering process, as Kasabov (2011) points out, plays out differently with a weak or absent connecting tissue of innovation-friendly business services and support organizations, even if periphery does not by itself preclude innovative growth (Benneworth and Charles 2005; Bajmócy 2006). Path creation is significantly harder, and there are limits to the efficacy of development policy (Nuur and Laestadius 2010).

Still, as shown by Dijkstra, Garcilazo and McCann (2013), 23 cities in the EU have more than 1 million inhabitants, with a population share of 12.3%, while there are 345 with 100,000 or more, representing 29.7%: a more than twofold difference. Aside from metropolitan advantages in productivity, sectoral diversity, global connectivity, knowledge and human capital, the economic performance of minor cities is substantial, and in the EU15, their growth outperforms metropolitan competitors. However, there are differences between the old and new member states: the EU13 are more dominated by their metropolitan areas, and experience rapid population decline in non-metro regions, while this does not hold for the EU15.

2.2. *Specialization and Diversification: Alternatives of Innovative Development*

Innovative development[2] in sub-optimally scaled, often peripheral city-regions faces a challenge which is less pressing in the metropolitan sphere. *Specialization vs. diversification* arises as the fundamental question of harnessing agglomeration economies through the two types of externalities. Specialization involves spillovers within locally established industries, and is a crucial force in producing localization externalities and driving cluster development. Diversification, on the other hand, involves spillovers among diverse industries, resulting in urbanization externalities. Going to the extremes of either option can result in failure: over-specialization may produce the rigidities of over-specialization and the symptoms of lock-in characteristic of Old Industrial Regions (Steiner 1985; Storper 1992; Grabher 1993; Boschma and Lambooy 1999), while over-diversification — no meaningful strength to show at all — implies a lack of urban cohesion, and represents the disintegration of socio-economic space, an insidious and certain path to becoming a shrinking city.

Although the metropolitan city-regions even in world cities exhibit specialization (notably in strategic, high value-added sectors), the need to choose is more emphasized for minor cities, which typically have too modest resources to excel in a wide range of activities. Specialization offers essential and clear advantages. Not only does resource concentration encourage the development of a few core industries and a focused innovation system around emerging clusters, it reduces the threshold the city-region needs to become competitive on international markets: *critical mass is easier to achieve, if only in a few industries*. Also, as we have seen, urbanization externalities are unlikely to emerge in non-metropolitan, peripheral city-regions. As a policy focus, diversification could seem like the less obvious option, and it is in fact considered less often in mainstream development policy. Yet there is also an upside to diversification which emerges in the long term. Diversified city-regions offering a broader knowledge base are more resilient, offering adaptability against the threat of external shocks and an increased aptitude to find and exploit advantageous evolutionary paths.

While there is a distinct trade-off between the alternatives facing minor cities, specialization and diversification are nevertheless not mutually exclusive categories, merely two manifestations of innovation that should be seen in balance (Figure 1). This balance, or scale provides an intuitive understanding of how agglomeration forces can work and *be made to work* in city-regions beneath a certain critical mass.

2.3. *Minor Cities and the Challenge for Post-Socialist Urban Governance*

The problem of minor cities is particularly acute in Central and Eastern Europe (CEE). The lack of critical mass and consequent weakness of agglomeration economies apply to most secondary urban centres with the exceptions of Poland and to a lesser extent Romania;[3] the city networks of unitary states exhibit the dominance of capital cities (high urban primacy). Contrary to optimistic predictions about CEE's 'entrepreneurial cities' and 'small baroque towns' a decade ago (Turnock 2001), historical path-dependencies and the advantages of global and European integration have mostly favoured capital and metropolitan cities, increasing the gap between the best and the rest — national

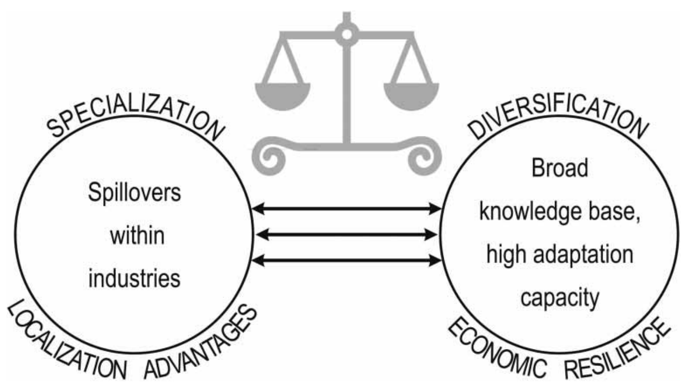

Figure 1. Specialization and diversification in innovative development.
Source: Author's construction.

convergence and sub-national divergence take place (First ESPON 2013). Only Poland's second-tier cities approach 50–80% of the capital's GDP contribution (in purchasing power standards (PPS)), while elsewhere, this ratio tends to be 25–50%, or even 10–25% (Parkinson et al. 2012). There are further European-level policy goal conflicts between increasing competitiveness by focusing on the 'pentagon', and the promotion of more balanced urban systems across the continent (Spiekermann and Wegener 2008). Division of labour and the distribution of urban functions through polycentric development might counteract individual disadvantages (Faragó 2006), but encounters fierce resistance in the competition for scarce resources between preferred centres, not to mention even smaller towns and parallel governance organizations.

The relative underdevelopment of CEE compared to the European core necessitates strong growth agendas: hence, the construction of urban governance might *logically* be biased towards what Stone (1993) identified as *development regimes*, coalitions mobilizing private investment for public action. However, beyond the problems outlined in the previous part, their formation is hindered by three issues.

- Private investment in the region is strongly FDI-dominated, and the low embeddedness or decision-making authority of managers may curtail their involvement in development coalitions, while the domestic corporate sector may lack leaders able to articulate economic interests with adequate legitimacy.
- Traditions of external (national or EU) control over development resources and insufficient practice create a 'planning vacuum' dominated by a 'project class' installed by, and representing the values and interests of the centres. The administrative system is low on trust and high on bureaucratic rigidities, emphasizing vertical coordination at the cost of local autonomy (Lux 2005; Horváth 2010; Pálné Kovács 2010).
- The decision-making preferences and knowledge of urban elites are often focused on fulfilling traditional tasks (asset management, infrastructure-building and public services), not strategic planning (Mezei 2006; Suvák 2010).

Altogether, the priorities of city governments can find it hard to accommodate the concerns and logic of economic development, something also confirmed by the case studies in this paper; instead, urban governance often points towards Stone's *maintenance regimes*, concerned with routine services and the status quo. With the exception of a narrow group of successful development coalitions (which often become favoured by 'good practice' case studies in policy and academia), this results in a mismatch between the growth needs and policy-implied development tasks of city-regions, and the capabilities of the actors supposedly carrying them out.

3. Case Studies: Towards Urban Regimes in Hungarian City-Regions?

3.1. *Methodology*

The third part of the paper concerns the experiences of three selected urban agglomerations from Hungary, with an eye towards exploring whether they exhibit the network-building and agglomeration processes characteristic of city-regions and (emerging) urban regimes. In addition to a qualitative assessment of restructuring processes, this section draws on the findings of interviews undertaken between June 2011 and February

2012. From the 119 structured interviews collected within a broader research project on the institutional development of urban agglomerations, this paper focuses on the 45 conducted with key stakeholders in economic development. Their aim was to chart stakeholders' cooperation networks, local embeddedness, involvement in development policy and strategic vision through a series of in-depth, qualitative questions. Through the results, also compared with the responses of local governments and Non-Governmental Organisations, it was possible to assess the extent and processes of urban regime formation.

Interviewees were selected from a database listing the most significant employers and taxpayers in the study areas. Some companies could not be reached due to maintaining their main offices in the capital, and having no local representatives who would grant interviews. This introduces a sample bias towards medium-sized manufacturing enterprises, where management was usually more accommodating. In this paper, no distinction is made between enterprises located in the central city or its agglomeration: the research has found no meaningful differences in these (often very path-dependent) location factors in the sphere of the economy. Additional interviews were conducted with senior policy experts, notably representatives of cluster organizations, chambers of commerce and industry and development agencies for a comprehensive view on economy–governance linkages.

The case studies, Pécs, Miskolc and Győr (Table 1 and Figure 2), were chosen from Hungary's eight non-metropolitan cities above 100,000 inhabitants on the basis of their intensive agglomeration processes.[4] Although Hungary is particularly mono-centric even among European unitary states, the cities are 'typical' representatives of minor cities in CEE in both population size and economic performance. Cities on a similar scale, with similar problems of economic restructuring and weak local governance characterize all but a few secondary urban centres across CEE, including the Baltics and South-Eastern Europe (Hajdú and Rácz 2011), with Poland's metropolitan areas as the only full, and Romania's potential urban poles as a partial exception.

3.2. *Restructuring Processes in Three Minor Cities*

At the initial point of post-socialist transformation, all three of the surveyed cities had to implement the new, democratic model of governance while being affected by the severe

Table 1. Basic data of case study city-regions, 2011

Criterion[a]	Pécs	Miskolc	Győr
Population (city)	156,801	166,823	131,564
Population (inner agglomeration w/o city)	25,628	40,433	58,539
Population (county)	388,907	678,261	451,827
GDP (PPS, % of EU27 avg. 2009)	45	40	69
Employment in primary sector (%)	5.1	3.4	3.1
Employment in secondary sector (%)	17.6	24.5	29.7
Employment in tertiary sector (%)	77.3	72.1	67.2
Unemployment rate (%)	14.6	17.9	6.3
R&D employment (as % of Hungary total)	4.4	2.8	4.2

[a]All quantitative data except city and agglomeration population are provided for the county level.
Source: Author's construction based on regional statistical yearbooks.

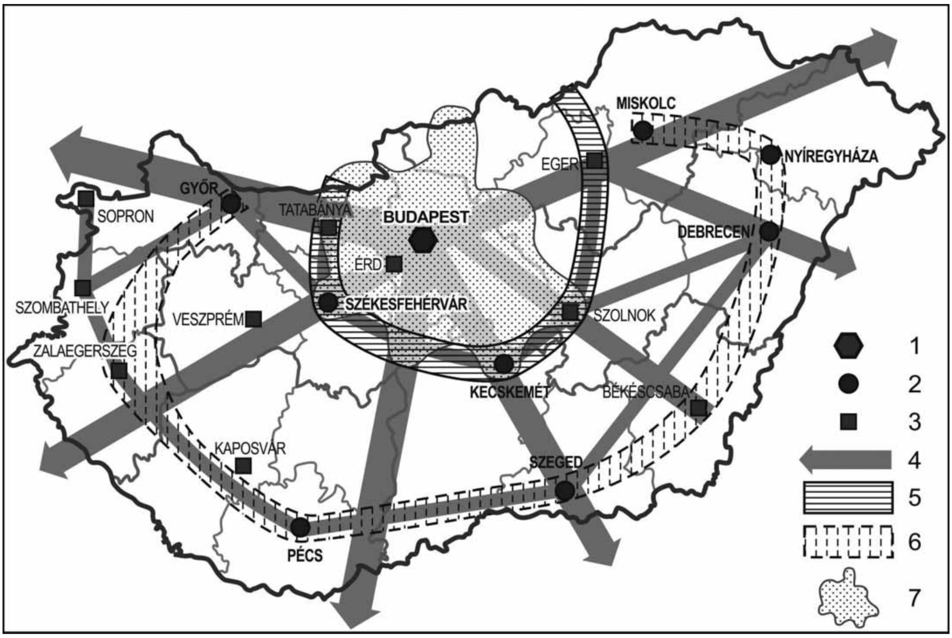

Figure 2. Hungary's urban network and main development axes. *Legend:* 1 — Metropolitan city (population 1.7 million); 2 — Minor city (population 100,000–250,000); 3 — Town (population 50,000–100,000); 4 — Main international and national development axes; 5 — Inner city ring; 6 — Outer city ring; 7 — Budapest city-region.
Source: Author's construction.

crisis of their industries. While significant renewal has taken place in all three cities, the case studies show that different restructuring paths have led to rather different degrees of success (Table 2).

Table 2. Development paths and regime formation in case study city-regions

Criterion	Pécs	Miskolc	Győr
Position in national space	Southern, peripheral	North-eastern, main corridor	North-western, main gateway
Clusters, operative (type & estimated size)	Cultural (medium) Machinery (minor)	Metal (major) Chemical (major) Machinery (medium)	Automotive (major) Machinery (major)
Clusters, emerging	Environmental Health & biotech	Infotech Precision instruments	Infotech
Future challenges	Reindustrialization Specialised knowledge base	Social inclusion High-road growth	Industrial upgrading Diversification
Regime type, current		None/maintenance-oriented	
Regime type, emerging	Progressive?	Development	Development

Source: Author's construction.

The most radical break with the past has taken place in Pécs, where the dismantling of the previously dominant coal and uranium mining and the low inflow of FDI has led to drastic de-industrialization. Policy has focused on the exploration of 'innovative' restructuring strategies based on culture-led regeneration (including a successful bid for the European Capital of Culture 2010 project; cf. Lux 2010a; Faragó 2012) and cluster development in knowledge-intensive industries. This process shows certain markings of an emerging *progressive regime* (Stone 1993), emphasizing quality of life (which became the slogan of a growth pole concept), the preservation of the urban milieu, quality of design and social engagement. Nonetheless, the willingness to innovate has not translated to effective urban governance, nor has it created a new, competitive industrial profile — while consumer services and the demand posed by one of Hungary's largest universities have been insufficient to sustain the city-region's economy and counteract peripherization processes.

In comparison with Pécs, Miskolc presents a clear-cut case of an Old Industrial Region undergoing painful depression with the gradual dismantling of large metallurgic complexes, but the survival of certain heavy industries such as chemicals and metalworking. The key question is not just one of industrial restructuring, but the need to counteract the heavy social damage. While the slow revival of manufacturing and an attractive industrial milieu for both foreign and domestic investors has become one of Hungary's low-key success stories, large segments of society remain outside the labour market due to low employability, and competitiveness still hinges too much on low-road cost advantages. The key actors in renewal were not the city government, but the city-region's industrial and business elite, building on the knowledge base of the University of Miskolc and various business promotion institutions.

The third case, Győr is the most successful: as a gateway city next to Hungary's western borders, it enjoys an advantageous location within CEE's main manufacturing integration zone, dominated by German automotive manufacturers (Frigant and Layan 2009; Pavlínek, Domański, and Guzik 2009) but also accommodating a surviving large enterprise and several medium-sized domestic producers (Grosz 2012; Rechnitzer and Smahó 2012). Under the favourable circumstances, traditions of machine industry could successfully adapt to new demands, representing *a virtuous form of path-dependency* resulting not in lock-in, but innovative restructuring with a smooth integration of new and old skills, and the rise of a competent managerial class. Although the current crisis had a strong negative effect on industrial activity in the short term due to Győr's embeddedness in European networks, medium-term adaptation has mostly been successful, and the city-region's main problem today is not unemployment, but extending its supply of skilled labour even further and growing in a way that avoids future lock-in effects.

These brief scenarios point to the significance of successfully transitioning productive traditions and institutional networks: it was not the most radical form of restructuring and abandonment of previous patterns which has proven the most successful, as seen in the service-led regeneration in Pécs, but the renewal of manufacturing in Győr, the city which has remained the most 'industrial' (although with a generous amount of luck in geographic position and industrial heritage). Outside metropolitan regions in CEE, industry is still the main carrier of economic differentiation, and the role of the service sector, while important, is limited (Lux 2010b). The evidence of urban regime formation is strongest where industrial networks thrive, suggesting a major role in the development of minor cities. In the restructuring process, gradualism and a focus on knowledge are the keys to success: successful adaptation through a mixture of FDI and the transformation of local companies offers the advantage of preserving valuable technical and institutional know-how, and keeping creative destruction to a level where it can serve renewal instead of disruption.

3.2. *Systematic Development? Evidence of Urban Regime Formation*

How ‘systematic’ or ‘organized’ are location advantages and the cooperation activities of enterprises? How integrated are economy, higher education, development policy and governance? The answers to these questions are our telling signs of emerging urban regimes and functional city-regions.

The organized nature of location advantages — the attractiveness of a city and its agglomeration as a coherent milieu — is one of the points which have returned again and again during research. Interviewees were disposed to evaluate their business environment as a set of interrelated factors: satisfaction with various aspects of their city as an economic centre was strongly tied to the general business climate, and this judgement even extended to quality of life and other ‘soft’ factors. In Pécs, where the lowest degree of organization was observed, respondents remarked on the lack of systematic local government intervention and policy support. As one interviewee put it,

> The city has one genuine advantage left, its Mediterranean charm which has enchanted its previous investors. But here it ends: the supply of skilled labour is missing, and vocational training is a mess. . . . Productive companies stay away from [development policy] because those who have tried have not received support from the city and the county, and wasted their money. (Senior Policy Expert)

Indeed, one of the most promising clusters in Pécs, that of machine industry, has emerged without meaningful policy attention or support, through the self-organization of an FDI plant and a range of local enterprises expanding into specialized markets. Only 18% of respondents mentioned an existing cooperation link with development organizations, significantly below the other two cities, where this was above 50%. Interviews in Miskolc commended the potential of the business environment and the city’s entrepreneurial university. In Győr, almost all interviewees mentioned the role of the city’s structured economy in their individual success:

> Győr is the country’s second best economic region. There are good opportunities to insert new kinds of activities into the environment. Competitiveness is strongly based on quality, and a circle of automotive suppliers has developed. (Senior Policy Expert)

> The city usually pays good attention to its industry, and gives it active support. There are multiple forums where there is continuous negotiation between enterprises and the city leadership. . . . Győr is specifically an industrial city, offering an excellent environment for a manufacturing company. It has good accessibility, but what matter are the extra advantages you get from the presence of other companies. (Manager, Medium-sized Machine Building Company)

Another way city-regions exhibit agglomeration processes is the integration of innovation and the economy; the relevance of these cooperation networks has been studied by a range of authors (Horváth 2009; Barta et al. 2011, Csizmadia and Grosz 2011), and further attention has been devoted to university spin-offs (Erdős 2011). Based on a typology by van den Berg, Braun, and van Winden (2001), Figure 3 maps strategic cooperation linkages in education and R&D. The different levels of integration stem from the ability of the city-region's economy to absorb knowledge and present demand for applied research, the disciplinary structure of universities (often the strength or weakness of technical and natural science faculties), but also their entrepreneurial attitudes. The latter was especially striking in the case of Miskolc, where the pro-active stance of the university to local demand has allowed it to develop, and even become a central nexus of development cooperation. The relationship was more two-way in Győr; with the business sector and higher education as equal cooperation partners, and the gradual intensification of cooperation. In Pécs, there was a notable gap between the university and the local economy; smaller spin-off companies are to be found in medical sciences and biotech, but other areas struggle with the weakness of knowledge transfer, disciplinary mismatch, and also different organizational cultures.

A final concern investigated here are the driving forces of development cooperation; that is, the fundaments of a potential urban regime in the making. None of the surveyed cities had operative urban regimes, but Győr and Miskolc both showed the beginnings of a development regime. The case of Pécs is less conclusive. Inasmuch as intentions are concerned, we could see the promise of a progressive regime, but this is not backed up by actual, strong cooperation links. It is possible that the city-region's economy is insufficiently 'dense' and specialized after two decades of de-industrialization; or that progressive regimes with a high dependence on creative occupations take longer to develop under non-metropolitan conditions and the concurrent draw of metropolitan spaces (cf. Rosenfeld and Hornych 2010; Lengyel and Ságvári 2011); but in the cultural and health industries, public institutions prevail and development is dependent on government subsidies.

City governments in the Miskolc and especially Pécs case studies were 'missing actors'. Their involvement in shaping restructuring and network-building processes has been

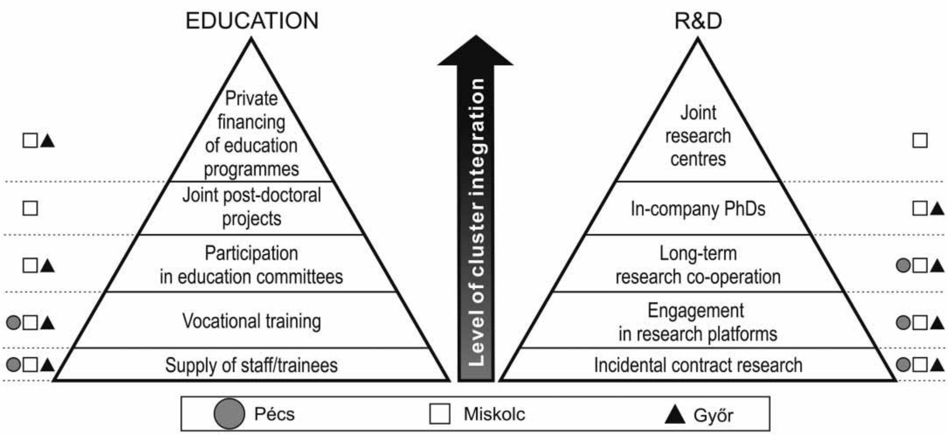

Figure 3. The economic integration of higher education and R&D.
Source: Author's construction based on van den Berg et al. (2001).

marginal due to their maintenance-oriented preferences, lack of development know-how and skilled personnel and their narrow understanding of development policy as the improvement of the physical environment, public services and municipal infrastructure. Thus, they have had little success in connecting to the economic sector. In their absence, it has mainly been the local business elite and actors involved in the development policy who have presented the clearest strategic visions. The bottom-up nature of organization, especially if local governments under increasing budgetary pressures and centralist constraints accentuating administrative instead of development functions (Pálné Kovács 2011) remain unable to develop their own structures of economic governance, has major consequences for the creation of urban regimes. The interviews have found evidence of valuable knowledge among senior company managers and development organizations (particularly chambers of commerce and industry), with both the inclination and ability to develop strategic cooperation: but this sort of organization so far has more presence in the private, rather than the public sector, something which is bound to dictate the origins and direction of regime-building activity. It is not the public sector which tries to organize private interests to assume previously public functions in urban development; rather, private actors perceive a need for organized competitive advantages, and try to translate this need to governance.

Contrary to the UK case where chambers of commerce and industry were routinely sidestepped in setting the agenda for city-region governance (Harding 1997), these Hungarian city-regions show more resemblance to the German model, where they occupy a vital position in the local elite and are crucial generators of relational and social capital (Maenning and Ölschläger 2011). This organizational form is perhaps also necessitated by the more fragmented networks and individual weakness of domestic enterprises, which require collective representation and concerted action in market coordination and policy transfer (Póla 2007). Although, unlike in Germany, Hungarian chamber membership is not presently mandatory, their role is expected to increase in the following years. In all three case study cities, chambers of commerce and industry have actively sought to formulate comprehensive development strategies, and encourage development cooperation among domestic and international companies. They have facilitated numerous training programmes, and have recently gained the right to supervise basic and advanced vocational training schemes, and (if necessary) refocus them on promising new activities. Their bridging role between business and urban governance was most successful in Győr, although that has much to do with a receptive local government — in Pécs, they have often been relegated to Cassandra’s role.

4. Discussion: Is the Urban Regime Paradigm Adaptable to Minor Cities?

The experiences of minor cities and their city-regions present an emerging research agenda in regional studies. Urban development may not count on ‘automatic’ success under conditions where metropolitan areas dominate, and the external control by national governments and metropolitan centres is bound to remain relevant. This position calls for new adaptive strategies which can guarantee that urban agglomerations which do not possess sufficient critical mass can still carve out an advantageous place within the current space economy. Resource concentration through functional specialization is the more obvious model of organizing innovative development, but a diverse economic structure also offers important long-term advantages via increased resilience.

The case studies in three Hungarian minor cities show that urban governance is still in an early phase where *full urban regimes have not yet emerged, but it is possible to observe groundwork which point in their direction*. All examined cities struggle with economic and institutional weaknesses characteristic of post-socialism and low urban mass, but nevertheless offer promising lessons in *adapting* a certain version of the regime model. The internal coherence of economic activity within their respective city-regions established new links between innovation and economic development, and the increasing number of actors with an interest in and capacity for development cooperation show that cooperation and institution-building matter. The case studies imply that a radical break with the past is hard to achieve, and there are substantial limits for path creation. Mobilizing endogenous resources and exploiting virtuous path-dependencies are crucial for successful adaptation.

These lessons apply mainly to Hungary, but they can also be generalized for minor cities across CEE (due to scale-based, structural and governance-related similarities), and with some limitations, have lessons for the broader European periphery. In particular, empowering local and regional development cooperation is bound to be vital in reducing the external capital dependency of the region, and achieving the deeper embeddedness of Foreign Direct Investment. Second, CEE countries still experience a high concentration of economic growth in their capital city-regions. This pattern can be interpreted as the first phase of Williamson's hypothesis (proposing that an initial territorial concentration of the economy will be followed by its dispersal); nonetheless, the socio-economic problems created during this phase deserve both scrutiny and adequate policy responses.

With differences in urban size and character, differences are bound to show in the *content* of governance minor cities will develop. Lacking strong capacities (or traditions) of governance and a robust domestic corporate sector which characterize North America and Western Europe, it is suggested that in CEE, more mosaic-like development coalitions of local stakeholders may provide the institutional arrangement that can provide a basis for effective development policy, although specific organizations may also emerge as the coordinators of this process.

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Notes

1. The metropolitan character of urbanization economies has previously been investigated by Brouwer, Budil-Nadvornikova, and Kleinknecht (1999) and van der Panne (2004) on the Dutch, and by Paci and Usai (1999) on the Italian example; although van der Panne offers no conclusive evidence of their differentiating role in the polycentric, heavily urbanized Dutch city network.
2. Innovation here is not assumed to be restricted to high-tech; but rather encompasses all new products, processes and socio-political patterns which can open up beneficial evolutionary paths for the city-region.
3. In the 4 Visegrad countries, Bulgaria and Romania, 97 cities are above 100,000 inhabitants, but two-thirds of them are found in Poland and Romania (Horváth 2012).
4. Miskolc, in particular, is the centre of a traditionally strong, although crisis-stricken polycentric city network which consists of eight additional cities between 10,000 and 34,000 inhabitants, and nine more between 5000

and 10,000. It has a more recently developed inner agglomeration of 40,000 inhabitants. The other two city-regions have a more monocentric structure, but have developed large agglomerations from a very low basis since 1989. While Hungary is facing severe demographic decline, the populations of the Pécs and Győr city-regions have stayed stable, although with strong suburbanization processes and the emergence of inner agglomerations with 25,000 and 58,000 inhabitants, respectively (Table 1) (Hardi 2012).

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