## Changing spaces of knowledge-based business services in Hungary

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### Abstract

Recently, the process of networking and knowledge production in business services has been widely discussed in the context of the liberalisation of the services' market in the EU, and of the integration of the emerging economies into international flows resulting in changing spatial division of labour, thus shaping an increasingly diverse geography of business knowledge in Europe. Although information technologies support the spread of business knowledge, proximity and accessibility 'still matters' due to the significance of personal contacts in knowledge-based activities, moreover, in new market economies, to the low level of adoption of ICT in rural areas and the uneven development of infrastructure. Therefore, the spectrum and quality of business services available in smaller (lower-rank) service centres conditioned local/regional economic development, by linking local markets and agents to interregional (international) flows in new market economies. In this paper, the flow of business-related information and knowledge shall be put in the focus, as an aspect and a source of uneven development and dependence in new market economies, under Neoliberal capitalism. The geographical scope of the following analysis embraces Hungarian cities and towns as business service centres, highlighting how non-metropolitan urban centres (thus, local economies outside the Budapest region) grew increasingly dependent on the capital city-centred knowledge and information flows, how such centres were highly differentiated by the erosion of local basis for information-based activities, moreover, how this process was reinforced by national as well as by EU-policies, reproducing uneven development and backwardness in peripheral regions of a new market economy.

Keywords: business services; knowledge economy; global flows; new market economies

### Introduction: New market economies in global flows

It was the very first time in 2004, when several East Central European<sup>2</sup> county towns appeared in the country reports of international property consulting

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<sup>&</sup>lt;sup>2</sup> 'East Central Europe' (ECE) is considered as a product of re-positioning post-socialist countries inside the post-Cold War Europe by many political geographers (see e.g. Young, C.–Light, D. 2001; Paasi, A. 2001; Ziegler, D.J. 2002; Jackson, L. 2004). The term has been

firms. Including cities outside the metropolitan region of national capitals in such reports indicated the changing position of smaller regional centres (by European scale, medium size towns) and their regions in global flows, primarily, as potential targets for distribution based activities (retail and logistics) and 'back office' business services for developers. This in turn rested upon a series of reforms for constructing a framework for highly liberalised market economies, driven by the mechanisms of the financial markets (IMF, World Bank) as well as by the bureaucratic institutions of the European Union during the 1990s (STENNING, A.–BRADSHAW, M. 2004; PICKLES, J.–SMITH, A. 2005; HARVEY, D. 2005).

At the time of EU-accession (2004), ECE countries were considered 'established' market economies, embedded into an increasingly dense network of business relationships<sup>3</sup>. The role (share) of the region in the international division of labour rested largely on a reasonable combination of advantages of geographical proximity, labour price and quality (skills) and of the stability of legal/institutional conditions. The embeddedness of East Central Europe into global flows through the European market (its core countries) was reflected by the dominance of EU15 investors in the region, and also by the structure of their investments, focused largely on lower value added elements of the value chain and on distribution-based services (Eurostat, 2008; BARTA, GY. 2005). However, the 'Visegrad Four' that received the earliest and al together the largest impetus of investments amongst emerging (post-socialist) markets were characterised by an increasing sectoral diversity and business relationships, that was reflected by the rising share of re-invested profit in FDI and also by the growth of international trade in the service sector. Nevertheless, the latter - particularly, the accumulation of national deficits in the trade of business services – also revealed the increasing dependence of ECE countries on the core regions in terms of business information and knowledge4.

In 'new economies' the establishment of the market institutions produced a highly centralised structure in information and knowledge flows.

used widely recently, nevertheless, its boundaries are not clear. The most pronounced bordering process was/is tied to the enlargement of the European Union ('Europe as an institute' [PAASI, A. 2001]), however, extending the boundaries of Central Europe eastward did not involve the post-socialist countries of the East Balkan in this geographical (geopolitical) category. Thus, East Central Europe is definitely post-socialist, but has uncertain geopolitical boundaries, that are subject to political and academic discourses and have historical ('pre-socialist') roots. Nevertheless, the 'Visegrad Four' countries, including Hungary to be discussed here have been considered as part of ECE politically and economically during the past 20 years.

<sup>&</sup>lt;sup>3</sup> Statistically, the 'integration' process was reflected by increasing share of transnational corporations (TNCs) in gross national products and particularly in export activities (Eurostat Yearbook 2008)

<sup>&</sup>lt;sup>4</sup> Magyarország 2007. KSH (Hungarian Central Statistical Office), 2008; www.ksh.hu

(Blažek, J. 2004; Nagy, G. 2005; Furman, J.L. 2001; Korcelli, P. 2005). The emerging information monopoly of capital cities was largely supported by the EU-accession (the equal treatment of EU-based firms, eased cross-border transactions, etc.) and the further liberalisation of flows of services in the European Economic Area. Changing macro-economic conditions stimulated a new wave of influx of capital into the 'new member-states', that reinforced centralised spatial structures in the region, through setting up new regional headquarters of EU15-based firms' eastward expansion and also by the increasing off-shoring activity of transnational corporations that were focused primarily on metropolitan regions (NAGY, G. 2005; FURMAN J.L. 2006; NAGY, E. 2007). The centralisation process was supported also by the newly established national bureaucratic institutions to control the distribution of EU-funds, that opened up the way not only for centralising the distribution of such resources (particularly, in new democracies where bargaining power of regions is relatively weak politically and economically)<sup>5</sup>, but also gave stimuli to the rise of networks of experts centred on the capital city – the emerging 'class' of project-related information brokers.6

Nevertheless, 'non-metropolitan' centres outside capital cites also grew as mediators of information and knowledge. Their position was established and reinforced in the transition period (1990s) when local agents (labour, enterprises, and local governments) were forced into permanent adjustment to the rapidly changing (increasingly liberalised) market conditions. In the early 2000s, the dynamism and economic prospects of such centres in the new power structures was defined increasingly by the multi-layered networks of relationships, that embraced not only the town/hinterland nexus (based on the control of local agents over different forms of capital), but also on i) changing relations to the capital city as the command centre of market regulation and the mediator of business information and knowledge (GAL Z. 2000; WAGNER, I. 2004; NAGY, E. 2005) ii) and on organisations i.e. firms and institutions driving global flows (AMIN, A.-THRIFT, N. 2002; HARVEY, D. 2005). This process was stimulated by adopting neoliberal national policies (e.g. shrinking the public service sector and liberalisation of flows) and largely supported by local elites<sup>7</sup> seeing their interests in globalisation that manifests in *neoliberal urban policies*,

<sup>&</sup>lt;sup>5</sup> E.g. the 'New Hungary' Program that is the national framework for the distribution of EU (primarily, ERDF) funds (2007–2013) was an initiative for a decentralised development policy (rested on NUTS 2 regions) in 2005/2006. The program was re-worked several times and its ultimate form is characterised by a strict control exercised by the departments (ministries) of the national government headquartered in Budapest, providing only 30% for regional operational programmes. The control of regions (local agents) over ERDF-resources was limited to particular sectors that rest on 'local potentials' (e.g. tourism).

<sup>&</sup>lt;sup>6</sup> After the EU-accession, about 3,000 firms were identified as the agents i.e. products and re-producers of the 'project-economy' in Hungary (Kovách I.–Kristóf L. 2005).

<sup>&</sup>lt;sup>7</sup> Primarily, the officials of the local government in key positions (TIMÁR J.–NAGY E. 2007)

such as supporting the influx of FDI into the local economy<sup>8</sup> (HARRIS, N. 2002; RACO, M. 2005; SKLAIR, L. 2001) and urban rehabilitation projects linked to the development of international tourism (SMITH, N. 1996; TIMÁR J.–NAGY E. 2007). Intensified flows re-shaped the relationships of such urban centres: they were integrated increasingly into global networks characterised by flexibility and contingency, that made the agents of local economies were increasingly dependent on the flows of information and knowledge (CASTELLS, M. 2000).

In the followings, the flow of business-related information and knowledge shall be put in the focus, as an aspect and a source of uneven development and dependence in new market economies – under Neoliberal capitalism. The geographical scope of the following analysis embraces Hungarian cities and towns as business service centres. These shall be put in the context of the changing and increasingly differentiated geography of knowledge-intensive business services and the changing division of labour inside Europe (second section). In the third section the emergence and the structural and organisational changes in the knowledge-intensive business service sector shall be discussed in the context of the transition and of the integration of the Hungarian economy into global flows. The analysis rests on the review of statistical databases (Eurostat; Central Statistical Office, Hungary), and also on a survey focused on business strategies, activities, and externalising business services amongst users and providers of services in three sample areas in Hungary<sup>9</sup>. In the fourth section, the changing geography of knowledge-intensive business services shall be discussed, as a source for dependence and backwardness.

### The diverse geographies of knowledge-based business services

In widely discussed concepts that interpret the contemporary economy as overlapping, mutually constitutive and constantly changing *networks* of firms, production systems and places (CASTELLS, M. 2000; AMIN, A.–THRIFT, N. 2001; DICKEN, P. 2003), the *providers of knowledge-intensive business services* are con-

<sup>&</sup>lt;sup>8</sup> Probably, the most spectacular process was the influx of retail capital in small i.e. nonmetropolitan centres that re-shaped the urban landscape (core areas as well as the fringe) rapidly. Retail restructuring was supported by the local government throughout ECE to accelerate modernisation of the sector and capitalize it politically in the 'post-shortage' societies.

<sup>&</sup>lt;sup>9</sup> The demand-side questionnaire survey was completed in 2001. Altogether 181 questionnaires were received and reviewed. The sectoral distribution of respondents corresponded with the structure of the national GDP, and also spanned the urban hierarchy. The survey was focused primarily on the largest urban centres that have dominant role in their region in providing business services. The survey was focused on three sample areas of which, each embodied a type (a model) of regional development. The supply side was 'mapped' through structured interviews (37) on the same sample areas.

sidered as primary agents (in many cases: gatekeepers) of information and knowledge flows. Business services provide a framework also for embedding international agents (e.g. TNCs' branches) into local/regional networks: they act as mediators easing governance tensions (e.g. by interpreting regulations, managing firm/state conflicts, etc.), bridging cultural differences, and help the accumulation and transmission of relational assets and tacit knowledge (related to a particular milieu) (FLORIDA, R. 2002; GERTLER, M.S. 2003; THRIFT, N. 2006). In this way, business service providers support local economic development by embedding firms (branches) entering the local market, improve the local branches' bargaining power in intra-firm relations and involve local agents in international networks (LINDAHL, D.P.–BEYERS, W.B. 1999; DANIELS, P. 1999; DICKEN, P.–MALMBERG, A. 2001).

Recently, the process of networking and knowledge production in business services has been discussed in the context of the liberalisation of the services' market in the EU, and the integration of the emerging economies into international flows, that resulted in changing spatial division of labour. (FAULCONBRIDGE, J.R. 2006; JONES, B. *et al.* 2008). Consequently, the geography of business information and knowledge grew increasingly diverse in Europe. Nevertheless, different forces and processes were/are at work that stimulate structural, organisational and spatial centralisation as well as decentralisation processes.

(i) Due to the complex and uncertain business environment, *networks* are (and will be) considered as sources of creative work (problem-solving services), flexibility and also stability, that maintain the dominance of small scale businesses in many segments of services. Although, networks can (very often, do) operate through ICT channels involving many experts in a number of interactions, the dispersion of knowledge-intensive services is constrained by the heavy centralisation of business-related decisions (firms' headquarters), the need for personal contact (for mutual trust and understanding of service providers and users), moreover, the concentration of knowledge (senior experts) in a relatively few major institutions – focusing also the opportunities of knowledge spill-over and providing favourable living conditions for the 'creative class' (SASSEN, S. 2000; FLORIDA, R. 2002; HUGHES, A. 2007).

(ii) In parallel, technology-based, as well as standardised services are organised in more centralised and hierarchical structures. Localisation of such services rests largely on classical cost factors, such as the price of qualified labour, that stimulated outsourcing (in many cases: off-shoring) of such activities (BRYSON, J. *et al.* 2004), that targeted also the eastern periphery of the European market.

The changing geographies of knowledge-based business services put the economic development of non-metropolitan centres/regions of East Central Europe into a new context. Although, information technologies support the spread of business knowledge, *geography* (accessibility) '*still matters*,' largely due to the low level of adoption of ICT in rural areas, the significance of personal contacts in information-based activities, and the uneven development of infrastructure (transportation; broadband data transmission, etc.) (ERDŐSI F. 2005; NAGY, E. 2005; NAGY, G.–KANALAS, I. 2009). Therefore, the spectrum and quality of business services available in small and medium size towns is highly influenced (and also indicates the trends of local/regional economic development,) by the linking of local markets and agents to interregional (international) flows in new market economies.

# Transition, integration and the development of knowledge-based services in Hungary

Hungary was the scene for a rapid integration into the new 'Neoliberal' order of the world by the early introduction of a legal and institutional framework of the market economy, large scale privatisation schemes and encouraging (receiving a relatively high amount of) foreign direct investments (FDI). The increase in the number of international agents that entered the market was unprecedented<sup>10</sup>, however, the investment rush calmed in the 2000s and international agents focused increasingly on (i) extending/stabilising their regional networks (involving domestic sub-contractors, reinvestment, e.g. by developing local/regional service basis) (ii) exploiting human resources locally (e.g. off-shoring knowledge-based services from Hungarian firms and institutions) and (iii) capitalising geographical potential by distribution-based service developments (retail, logistics) (BARTA, GY. 2005). Property market trends as well as changes in employment and value-added structure clearly reflected the shift towards services, especially, to information and knowledge-based activities (*Table 1*).

In parallel, Hungary-based firms grew active in East Central Europe and the Balkan increasingly from 2000 onwards<sup>11</sup>, by exploiting the privatisation process (e.g. in the energy sector and manufacturing) and also by greenfield developments (e.g. in the property sector). Although, large scale projects were major investments by Hungarian corporations, thousands of small firms were founded in border regions, relying basically on cross-border links in the service sector (SzóNOKYNÉ ANCSIN G., 2004). The increasing involvement in international (cross border) issues made Hungarian firms increasingly dependent on information and knowledge either provided by business service firms or getting it through informal (personal) networks (NAGY, E. 2007).

<sup>&</sup>lt;sup>10</sup> The number of firms with foreign capital (foreign share: over 10%) rose from 8 up to 25,000 (1988–1998). By 2007, the FDI in the owners' equity exceeded 96 billion USD.

<sup>&</sup>lt;sup>11</sup> Hungarian capital invested abroad rose from 1,5 billion USD up to 36.2 billion in the discussed period (2000–2007).

|                 | 5        | 0         |          | 0 0      | ,         |          |
|-----------------|----------|-----------|----------|----------|-----------|----------|
| Sector          | Other    | Finance & | Business | Other    | Finance & | Business |
| name            | services | Insurance | services | services | Insurance | services |
| Sector-<br>code | J-O*     | J         | K        | J-O      | J         | K        |
| Year            |          | HUNGARY   |          |          | BUDAPEST  |          |
| 1991            | 30.0     | 4.1       | 9.4      |          |           |          |
| 1992            | 33.2     | 3.7       | 10.8     |          |           |          |
| 1993            | 35.2     | 4.1       | 11.6     |          |           |          |
| 1994            | 37.4     | 5.6       | 12.0     |          |           |          |
| 1995            | 35.2     | 5.3       | 13.6     | 51.0     | 9.4       | 19.5     |
| 1996            | 35.5     | 5.4       | 15.9     | 51.3     | 9.5       | 21.8     |
| 1997            | 33.8     | 4.5       | 14.6     | 48.5     | 8.2       | 21.0     |
| 1998            | 33.8     | 4.1       | 15.0     | 49.2     | 7.9       | 21.8     |
| 1999            | 34.8     | 3.9       | 16.1     | 50.3     | 7.5       | 22.9     |
| 2000            | 35.1     | 4.0       | 16.8     | 51.7     |           |          |
| 2001            | 37.7     | 3.1       | 15.6     | 53.0     | 6.3       | 25.4     |
| 2002            | 39.5     | 3.4       | 15.6     | 53.8     | 6.6       | 23.7     |
| 2003            | 38.5     | 3.7       | 15.1     | 54.5     | 7.5       | 23.1     |
| 2004            | 37.7     | 3.4       | 14.4     | 53.7     | 7.6       | 22.9     |
| 2005            | 38.7     | 4.0       | 14.7     | 55.4     | 8.2       | 23.7     |
| 2006            | 38.9     | 3.9       | 15.4     | 56.8     | 8.0       | 24.0     |
| 2007            | 43.1     | 4.5       | 18.0     |          |           |          |

Table 1. The share of services within gross value added in Hungary (current prices, 1991–2007)

\* NACE codes are used, compatible with Eurostat nomenclature. *Source:* National accounts of Hungary, 1988–2006. Central Statistical Office, Budapest, www.ksh.hu

The market liberalisation process, as well as the entry of TNCs resulted in a radical turn in the scale and structure of international relations.<sup>12</sup> The process (particularly the restructuring of international business relations) was highly influenced also by the entry of Hungary into international organisations (OECD, NATO, EU). The EU-accession (as well as the programs/projects supporting it) stimulated a development in planning management skills and capacities of business and public organisations ('learning' EU bureaucracy), as well as in information-related services (e.g. management consultancy) that provided support for the adaptation to EU-standards. This process was supported also by the programmes<sup>13</sup> that targeted the 'physical' integration (energy, transport, ICT) of the economy in pan-European networks.

As a consequence, the global embeddedness of the Hungarian economy has been considered amongst the 'World Top 20' since 1998<sup>14</sup>. Whereas crises in 1994 and 1997 did not have a significant impact on the performance of the

<sup>&</sup>lt;sup>12</sup> The export grew from 8 billion USD up to 73.5 billion (1990; 2007), while the national import rose from 10 billion USD to 74 billion (current prices).

<sup>&</sup>lt;sup>13</sup> E.g. PHARE CBC and ISPA programmes.

<sup>&</sup>lt;sup>14</sup> See the calculations of the World Bank and the OECD.

Hungarian economy, the global hits from 2000s on (dot-com collapse, rise of global terrorism, the 2007 mortgage crisis, etc.) heavily affected it, e.g. by withdrawing investment schemes, slowing down the technology transfer, and by restructuring resources amongst regions (MOLNÁR, B.–SZÉPVÖLGYI, Á. 2005). Therefore, we may presume, the uneven (spatial) development was governed basically by the global embeddedness of local economies from the late 1990s on.

In the early years of the transition (1989–1996), the rapidly changing business environment, such as the liberalisation process and the emerging legal and institutional framework of the market economy stimulated a growing demand for advanced producer services. This process was supported not only by a market pressure for learning and adaptation (consequently, for buying/externalising services), but also by the enterprising 'rush'<sup>15</sup>. Thus, the increasing demand stimulated a rapid growth in the sector (e.g. in the number of service providers), particularly, in accounting, auditing, management, marketing and legal consultancy. In this period, due to the high uncertainty of market conditions stemming from the 'post-socialist' transition process, and from the unsettled business relationships and ethics, personal ties had a specific part to play: they supported minimising risks and substituted for a lack of quality control systems and references. Business service firms of overwhelmingly small scale (employing less than five persons) rested on capitalising the knowledge, professional experience and personal relations of the founders (owners). They were mostly 'generalists', providing 'routine' services for a wide spectrum of clients supporting their operation, however, they also offered specialised, knowledge-intensive services for prosperous and innovative partners<sup>16</sup>. (NAGY, E. 2005) As earlier empirical studies<sup>17</sup> suggested, in this period, the Neoliberal scheme for the post-socialist transition into a 'market economy' resulted in an increasing dependence on business information/knowledge and its providers.

From the late 1990s on, structural changes, such as the emerging 'posttransition' business milieu (i.e. declining inflation and interest rates and the consolidation of the legal and institutional framework of the national economy), the expansion and increasing regional/national embeddedness of TNCs, as well as the improving performance of domestic enterprises stimulated

<sup>&</sup>lt;sup>15</sup> As a result the number of domestic firms doubled between 1989 and 1996.

<sup>&</sup>lt;sup>16</sup> Interviews made with executives of 37 APS providing firms in 2001 suggested that, personal relations and reputation that rested on expertise were the essential elements of firm strategies in the early years of the transition. Furthermore, expertise was a basis rather for the broadening of the range of services provided than for adapting strategies focused on differentiation.

<sup>&</sup>lt;sup>17</sup>A questionnaire survey as made in 1993 in Szeged, gathering information about the activities and strategies of 57 local service providers in Szeged. In 2001, another survey was made in three sample areas in Hungary, about the business strategies, activities, and externalising business services amongst users (buyers) of services.

growth and also *differentiation in the demand for advanced producer services*. The shift towards an internationally embedded, increasingly information-dependent national economy was a highly selective process and resulted in segmentation of the market for business knowledge and information. The group of users was split up into two major pools:

i) an international one of advanced producer services dominated by powerful agents (dominantly, by TNCs), however, included also a group of 'globally linked', highly adaptive and dynamic domestic small and medium size enterprises in an increasing number, that benefited from the dense network of business relationships within major cities and/or in flexible production enclaves.

ii) a 'static' cohort of users that relied upon local markets (small, often family-run, enterprises with modest sales revenues suing chiefly routine services supporting their operations).

The growth of knowledge-intensive services, particularly, tax, legal and management consulting, IT and HR-related services was driven chiefly by the transnational and the dynamic domestic groups of users embedded into international networks. However, the demand was segmented also along business activities lines: producer services (in particular, business service firms) were highly over-represented amongst the users of a wide spectrum of information/knowledge-based services, while innovative manufacturing enterprises sought for legal and computer services, technical consulting and (more scanty for) R&D from external providers.

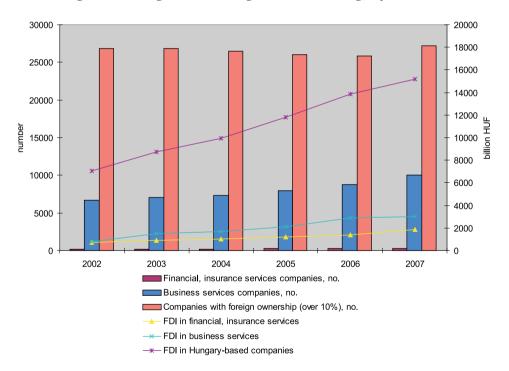
The above trends stimulated structural and organisational changes in the sector of knowledge-intensive business services. It was a highly dynamic and an increasingly international sector, that was reflected by the rising amount (and share) of FDI in the sector, and also by the expansion of international service providers<sup>18</sup>. The increasing complexity of tasks and of the business environment (e.g. the launching of EU regulations in auditing), and the introduction of international standards in the production process spurred the differentiation of service providers. There was an increasing gap between the major international agents and domestic (dominantly small scale) firms<sup>19</sup> as well as within the latter group, such as between dynamic (adaptive)

<sup>&</sup>lt;sup>18</sup> The share of sector 'K' rose from 7,3% up to 22% in foreign direct investments (1996–2007), moreover, the stake of foreign owners in joint ventures was also increasing. (Central Statistical Office, Hungary: www.ksh.hu; Figyelő Top 200, 2007).

<sup>&</sup>lt;sup>19</sup> The 'big four' has a 42% stake on the market of auditing and business consulting in Hungary, as major TNCs' subsidiaries rely on their services due to the complexity of tasks and increasing risks. The choice of service providers (as a strategic decision) is made 'outside' the national market, by chief executives in the TNCs headquarters. Meanwhile, 22 domestic medium size firms stabilised their position on the domestic market., They provided services (auditing, consulting) for dynamic domestic enterprises and subsidiaries of smaller international agents (SMEs). (Figyelő Top 200, 2002, 2003, 2004, 2005, 2006; Sanoma: Budapest.)

agents and firms pursuing more 'static' business strategy, as our 2001 survey suggested. (i) The majority of business service firms employed a 'generalist' or a 'mixed' strategy in the early 2000s, due to their limited access to capital, skilled labour and the lacking 'critical mass' of demand for specific (information-based) services in their region. (ii) Nevertheless, there was a trend toward specialisation, particularly in highly knowledge-intensive sectors, such as engineering consultancy, R&D and computer services. This dynamic (however, rather heterogeneous) group of domestic service providers relied basically on skilled labour, the extensive use of ICT in daily routine, business planning and strategic decision-making, and their highly structured professional and business partnerships, that support innovations at firm level, that in turn, stimulate growth and structural changes in their region (LINDAHL, D.P.–BEYERS, W.B. 1999; NAGY, E. 2005).

The liberalisation of the market of services, and the EU-accession of new market economies gave further stimuli to structural changes in the organisation of business information flows in the 2000s. Business services were outsourced (increasingly: off-shored) from East Central Europe (e.g. legal consulting, risk management, management consulting) by the firms of the



*Figure 1.* FDI in business services, 2002–2007 *Source:* Central Statistical Office, Hungary 2002–2008; www.ksh.hu

'core economies', and service providers introducing 'niche products' also entered the market (e.g. in public relations and advertisement) (PALÓCZ, É. 2005; GEREFFI, G. 2007; FALK, M.–WOLFMAYR, Y. 2008). Hungary was also particularly targeted after the EU-accession by international firms' strategies that resulted in an increasing involvement in flows of business services: foreign direct investment grew dynamically in sector 'K' (*Fig. 1*). Moreover, the external trade of business services was spurred by the above processes: it exceeded the growth rate of the rapidly increasing national export (about 10% annually) in the post-accession period. Nevertheless, the negative balance of trade of business services (in intra-firm relations, as well as in international trade) reflected also the dependence of the national economy on external sources of knowledge and information. A change in this trend was indicated by the positive and improving balance in IT-related services (2006–2007), and recently by rising export of R&D activities.

### The differentiation of service spaces

In the early 1990s, the geography of the sector was shaped by flows resting on the transition of the regulatory system and on the entry of domestic agents on the market *en masse*. Small scale domestic firms that responded to the increasing demand relied largely on qualified labour available locally, moreover, social (network) capital accumulated under the centrally planned system. In this way, the capital city, the centres of higher education and of public administration grew as the primary and secondary centres of flows of knowledge and information. Nevertheless, the emerging hierarchy was challenged by the consolidation of the legal and institutional framework of the national economy, the entry and expansion of international enterprises and by the improving performance of domestic firms.

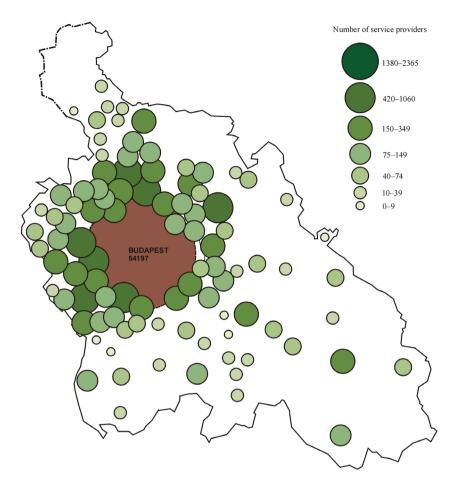
In the late 1990s, a dualistic structure emerged on the market of knowledge-based business services (see the previous section), that manifested itself in the geographical centralisation of users and providers of specialised services supporting global embeddedness, moreover, in the information (knowledge) monopoly of the capital city. This increasingly polarised structure was reinforced by the significance of personal relations (contacts) in knowledge exchange, by the high spatial concentration of demand due to the 'urban bias' of using such services, and the uneven development of ICT and transportation networks.

The shifts in the geography of knowledge-based business services were increasingly selective and they have re-organised the hierarchy of urban centres in Hungary. To understand the impact of recent changes discussed above, *the shifts in the role* (weight) *of business service centres were analysed*. Firstly, routine (regularly used) services<sup>20</sup> that are heavily dependent on accessibility and face-to-face contact (therefore, reflect the size of the local/regional market) will be reviewed to reveal the changing status of towns in the urban hierarchy and also the regional differentiation of the urban network. Secondly, particular groups of specialised services (highly reliant on information flow and skilled labour) shall be analysed as key agents of international embeddedness (R&D, software services; financial mediation/brokerage; to go into further details, advertising; management consultancy; market information; management consulting), that all were considered as keys for changing business strategy and setting up new (international) market relations by the firms we surveyed in 2001<sup>21</sup>. The post-2000 period was put into the focus of the analysis, when Hungary was considered as a 'settled' market economy, shown by the changing strategies of foreign investors including service providers in an increasing number (BARTA, GY. 2005). Moreover, shifts in spaces of business services also indicate the spatial impact of the changing position of new market economies in European flows, such as off-shoring of knowledge-based activities (GÁL, Z.-Sass, M. 2009).

The hierarchy of service centres was dominated increasingly by Budapest and the surrounding belt of suburban centres (small towns). (*Fig.* 2) This information monopoly emerged along several dimensions, such as i) the concentration of highly specialised service firms rested on specific skills and knowledge, ii) intra-firm division of labour competencies inside the networks of firms headquartered in the capital city, and iii) the concentration of international agents of business services in Budapest. The capital city's position was supported also by the FDI in distributive services targeting primarily this region (Koós, B. 2004). County towns were scenes of decentralisation of particular service activities (e.g. back-office functions; personal contact points for customers; information collection) (RAFFAY, Z. 2005; WÁGNER, I. 2004), but, such processes rather supported than challenged the centralisation process at national level.

<sup>&</sup>lt;sup>20</sup> Accounting; auditing; tax and legal consulting; marketing; management consulting; engineering services; advertisement; security services.

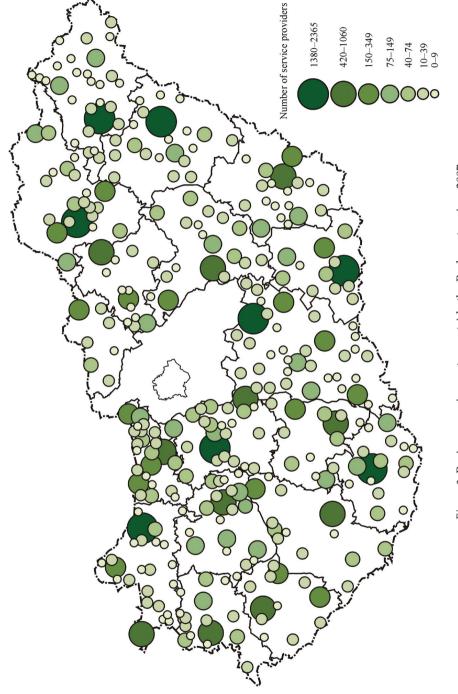
<sup>&</sup>lt;sup>21</sup> The selection of towns and cities that were defined as nodes of business information flow rested on statistical calculations. Firstly, the most important business service centres of the country were identified, which were determinant nodes in the number of locally existing firms, in the per-inhabitant, as well as in and per-company indices. Secondly, the centres of regional importance were clustered, those providing an access to business information demanded by local businesses. The choice of the centres rested on earlier studies, such as a research on 'Regional trajectories of economic restructuring' (2001), a gravity model of spaces of advanced producer services (NAGY E. 2002), and a questionnaire survey focused on the demand for business services in three regions that took different development paths during the transition period (NAGY E.–GÁL Z.–MOLNÁR B. 2002).



*Figure 2.* Business service centres outside the Budapest region, 2007 *Source:* The authors' calculation based on the database of Central Statistical Office "Cég-Kód-Tár"

The development of business services (through a positive feedback mechanism) was a source of *regional differentiation* of the urban network. The direction and scale of changes in 'routine' services rested largely on the size of local/regional economies, the dynamism of development, particularly, on the growth of small and medium size enterprises (SMEs). The following shifts were characteristic of the changing spaces of business information flows:

– Although, the international embeddedness of the national economy was deepened, therefore, the need for information was increasing in the discussed period, the relatively centralised spatial structure of oft-used business service remained, that was reflected by the increasing share of Central Hungary (including the capital city and its wider urban region).





– The development of routine services was highly dependent on the regional economic milieu: the proximity of TNCs (particularly, those involved in manufacturing) embedded into regional networks in the post-Fordist industrial enclaves had a basically indirect stimulating effect on services. Domestic enterprises integrated into international networks shaped by TNCs represented a highly structured (diverse) demand for business services and resulted in a relative improvement in the position of the centres, at higher, as well as at lower levels of urban hierarchy (up to 15,000 inhabitants) (*Fig. 3*).

– The suburbanisation process around the capital city (Budapest) had a direct effect on the spatial structure of economic activities also in the period 2000–2007: the growing suburbs had an increasing stake in the sector. This process was fed by FDI in services, and also by the rising number of local SMEs providing business services. It is very likely that this trend was supported also by residential suburbanisation in the form of the flight of highly qualified staff of such services from the capital city. Most of the small towns in this region have very high penetration rates in oft-used business services, as compared to the countryside centres in the same level of population (*Fig. 2*).

– In the economically lagging regions, two distinct development trajectories emerged. *In the first case*, the spatial structure was highly concentrated even in 'routine' business service activities, and it has not changed remarkably since 2000. As a consequence, only a few major centres offer business services for a wider region. Thus, even basic information for running businesses are not available for local agents, that reinforces the accumulation of backwardness, particularly, in the peripheral regions with poor IT and transportation infrastructure (*Fig. 3*).

– *The second type* offers more chances for development, as the access to business information (routine or oft-used services) is available for a wider range of local businesses, due to the larger number and a denser network of small and medium size towns. In this case, the relative closeness of business service centres resulted in better provided regions (*Fig. 3*).

As far as the urban network as a whole is concerned, the most significant change was the increasing regional imbalance in favour of the capital city's region. Moreover, slightly more than one hundred towns were identified as business service centres supporting the 'daily routine' of local enterprises, but this group is highly diverse in terms of dynamism and the spectrum of services provided, and does not have a uniform spatial distribution. In this way, centralisation of capital and organisation in business services manifested spatially as a capital city/national economy dichotomy, as well as problem of accessibility to local markets of business information and knowledge that support the reproduction of backwardness. This process is underpinned by the Neoliberal scheme for reorganising the systems of public administration that focus institutions, i.e. qualified labour, knowledge and information into

|   |             |            |           |           | »-<br>°  |             |             |          |             |          |            |         |
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| Year  | 2000        | 2007       | 2000      | 2007      | 2000     | 2007        | 2000        | 2007     | 2000        | 2007     | 2000       | 2007    |
| Budapest  | 60.8        | 57.6       | 51.5      | 52.7      | 59.9     | 58.4        | 62.3        | 58.9     | 59.0        | 55.1     | 56.2       | 48.4    |
| Pest county*  | 9.6         | 13.1       | 20.0      | 13.5      | 9.0      | 12.2        | 7.6         | 11.8     | 11.4        | 15.3     | 5.8        | 8.8     |
| Regional centres (5)  | 10.4        | 9.2        | 11.1      | 12.5      | 10.9     | 10.2        | 9.1         | 8.9      | 11.0        | 10.3     | 10.2       | 9.2     |
| Medium-sized towns (14)   | 7.3         | 7.3        | 6.7       | 7.3       | 9.3      | 7.9         | 9.6         | 7.1      | 6.8         | 6.3      | 10.0       | 8.5     |
| Total   | 88.4        | 87.2       | 88.9      | 86.0      | 89.1     | 88.7        | 88.6        | 86.7     | 88.2        | 87.0     | 82.2       | 74.9    |
| *Pest County is a unit of territorial administration. including the urban region of Budapest. Pest County and Budapest together | rritorial a | administr  | ation. in | cluding   | the urba | n region    | of Bude     | pest. Pe | st Count    | y and Bu | idapest t  | ogether |
| cover the NUTS 2 region Central Hungary.  | entral Hu   | ngary.     |           | )         |          | )           |             | 4        |             |          | 4          | )       |

Source: The authors' own calculation based on the Company Code Register (Cég-Kód-Tár) 2000/4; 2007/4 of the Central Statistical

Office. Budapest.

Table 2. The changing significance of clusters (types) of service centres in selected types of knowledge-intensive business services (2000. 2007)

5-7 major county towns ('regional centres' in Table 2), stimulating the flight of intellectuals form smaller centres, and raising new barriers for being involved in information flows.

The highly and increasingly concentrated spatial structure of knowledge-intensive business services supporting international market integration and adaptation clearly support the centralisation processes discussed above. The activities listed in Table 2 are only sporadic in smaller centres and virtually absent from towns with less than 10,000 inhabitants. Local service providers in such small centres are not rooted in the local business environment rather they are focused on a niche of the national market using the possibilities offered by ICT networks. In general terms, the centralisation of knowledge- and information-intensive services was an ongoing process in the group of county towns. The only scene of de-centralisation was the urban region of Budapest: 24 small urban centres of the Budapest urban region 'climbed up' in the hierarchy, they occupy the same position as smaller regional centres (serving areas with 50,000-300,000 inhabitants) outside the Budapest Metropolitan Region - while the capital city has lost of its signifi-cance since 2000 (*Table 2*).

## Conclusions

Construction of global networks of business relationships supported by the improved accessibility of peripheral/semi-peripheral regions and liberalisation of international trade has re-drawn the economic geography of Europe: due to the incorporation of 'emerging economies' into international flows (division of labour), new dimensions of socio-spatial disparities have emerged or became apparent in the 2000s. In this framework, East Central European countries (and among them Hungary) are considered as open, flexible and adaptive, and therefore significant target regions of the extension of global business networks. In the past few years, the *outsourcing of business and logistics services* and the closer integration of local markets (as a continuation of former developments seeking to improve efficiency) have taken centre stage. As result, corporate relationships have expanded both vertically (in emerging supply/sub-contracting systems) and horizontally (competition; cooperation/alliances of firms). This process enhanced the need for businessrelated information *about local/regional markets* for international agents and also for business knowledge sought by local firms to adapt and survive. The growth and expansion of business services that produce and/or mediate such intangible assets re-interpreted (highly differentiated) the role of East Central European cities and towns.

*Small and medium size towns* grew increasingly dependent on external resources (TNCs investments; national/EU public resources) for supporting economic restructuring and improving quality of life, due to their scale (i.e. the less diversified economic base and relatively small bargaining power) and being in an early stage of capital accumulation. Success in gaining such resources has always been largely dependent on knowledge-related strategies of local agents (firms, public institutions) that very often lack capacities (e.g. skilled staff, expertise in information management) sufficient for being involved in information flows. *The dependence* of this group of towns on centres of producing information is enhanced by *highly centralised spatial structures in Hungary*: the Budapest region preserved its dominance in information flows in the 2000s, particularly, by focusing highly specialised services and strategic functions of firm hierarchies. Meanwhile, traditional service centres of small scale (below 100,000 residents) are highly differentiated by the erosion of the local basis for information-based activities.

Increasing dependence on the (business) service economy of the capital city was reinforced by national as well as by EU-policies, furthermore, by the deficiencies in functions and bargaining power of the major county towns due to their relatively small size and lack of regional institutions. In this way, knowledge and information-based activities remain highly centralised and the accumulation of backwardness is maintained, particularly in peripheral regions of the national economy that are hit by accessibility (and adaptation) problems in physical and virtual (ICT) terms. Thus, an increasingly polarised space of information flows was produced by the changing (increasingly, globally embedded) economic structures in the post-transition era in Hungary.

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