

# **From state socialism to global capitalism: Budapest on the way to creative and knowledge-based cities**

**Pathways to creative and knowledge-based regions: Case Budapest**

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# **From state socialism to global capitalism: Budapest on the way to creative and knowledge-based cities**

## **Pathways to creative and knowledge-based regions: Case Budapest**

**ACRE report [No.]**

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## ACRE

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## 0 Executive summary

Within Hungary, considerable spatial disparities can be detected in terms of economic performance, employment and demographic trends. The dynamic regions of the country include North-western Hungary along the Budapest-Vienna growth axis, the Lake Balaton region, and the agglomeration of Budapest. The Budapest Metropolitan Region (BMR) is located in the official EU-region of Central-Hungary, which is one of Hungary's seven NUTS-II regions, and it has altogether 2,4 million inhabitants. As part of an excessive suburbanisation process, and consequent deconcentration of population and workplaces (mainly in the service sector) the zone of agglomeration has gone through substantial economic and socio-demographic changes over the last 15 years.

The economic output of the Budapest Metropolitan Region has always been dominant within Hungary. This was further strengthened by economic restructuring after the change of regime in 1989-90. Due to political transformation and economic restructuring the old branches of the Hungarian economy collapsed and a new, post-fordist type economy evolved with strong ties to the EU and the world economy. This was earmarked by the explosion of service sector and development of high-tech industry. Due to the spectacular growth in commerce, business and financial activities the change was especially far-reaching in Budapest, where the weight of services on the labour market increased from 62.5 percent to 78 percent between 1990 and 2006. The rapid transformation of the economy was also fostered by foreign capital investments mainly in the fields of logistics, transportation, telecommunication, retail and high-tech industry. The BMR is nowadays the economically most advanced region of the country. In 2004 44.5 percent of the GDP was produced in the Central Hungarian Region, and 35 percent in Budapest itself.

After 2000 the Budapest Metropolitan Region managed to keep its leading position in the economic development and modernisation of the country in most respects. It serves as gateway for innovation and modern technologies, and national centre of most creative activities (education, R&D, media, finances etc.). Within the local economy industry is still important but in a transformed manner and with a gradually reducing share. In terms of output and employment the five most important branches are: chemical industry, machinery, food processing, woodworking and publishing. Within services the financial sector has been developing most intensely, other innovative economic branches in Budapest are information-communication technologies, life-sciences (medicine production, bio- and nano-technology), creative industries and cultural economy.

The contribution of copyright-based industries to the national economy in Hungary highlights the importance of creative industries very well. In 2002, the contribution of copyright-based industries to the gross output was 9,68 percent. The contribution of core copyright industries was 3,96 percent to national GDP, while the gross added value of copyright-based industries represented 6,67 per cent of the national economy's gross added value. According to this indicator the economic performance of creative and knowledge based industries places Hungary at the fore-front amongst the EU countries.

At the end of 2004 there were 264 thousand active economic organisations in Hungary operating in the field of *creative industries* and *knowledge intensive industries*, which made up 36,4 percent of the active economic organisations registered in the country. Within the creative knowledge sector the weight of BMR is especially outstanding in the fields of ICT

(53,6%), R&D and higher education (52,4%). In terms of revenues the share of BMR is also decisive in the field of R&D and higher education (77,5%) and in law and business services (66,6%). However, in 2004 in the BMR highest revenues per firm and per employee were registered in the ICT sector. With regards the number of enterprises, their employees and the quantity of revenues legal accounting, book-keeping and auditing activities, tax consultancy, market research and public opinion polling have the leading position in the BMR. With regards productivity the 'insurance and pension funding' branch has a leading role with 40,27 million Euro revenues per organisation, with respect the average income per employee highest figures are recorded in the fields of 'telecommunications' and 'insurance and pension funding', with 239 thousand and 177 thousand Euros respectively.

In Budapest policies facilitating the growth of creative and knowledge intensive industries can be identified on three different levels: national, regional and local.

Among national policies the most influential is the New Hungary Development Plan (NHDP) which defines the strategy for sustainable growth and competitiveness of Hungary for the period between 2007 and 2013. Comprehensive and specific development objectives have been defined in the NHDP as well as the thematic and regional priorities with the related Operational Programmes to implement them. Among the thematic priorities creative economy appears with great emphasis (e.g. establishment of the innovative knowledge based economy, development of human resources required for research/development and innovation). In addition the new Hungarian Cultural Strategy that sets the targets of cultural policy until 2020 also treats culture as means of stimulating economy and competition. The document defines four major objectives of cultural policy as establishing equal chances, value and tradition preservation, creating new values and stimulating other economic branches.

On regional level, the development of R&D and creative industries also enjoy high priority in the support scheme of the Operational Programmes. The Central Hungary Operational Programme aims to increase the international competitiveness and to strengthen the growth of knowledge-based economy in the region (i.e. Budapest and its wider environment). In this respect, the most significant targets are the stimulation of co-operation between the players of knowledge based economy, the development of the economic sectors (creative and cultural industries) of the region producing high added value and the creation of new innovative jobs. Within the Operational Programme the role of Budapest is highlighted as that of a development pole, integrating R+D and innovation activities in Hungary.

On local level, the Medium-term Urban Development Programme for Budapest (Podmaniczky Programme) gives clear orientation and priorities for the development of creative and innovative industries (cultural life, knowledge-based economy, IT sector) in the metropolitan area of Budapest. The programme outlines concrete projects within the full spectrum of sustainable urban development which aim to strengthen the position of Budapest amongst the competing metropolitan regions of Europe. The main priorities include the establishment of 'technopolis' areas in the Northern and Southern part of Budapest, the establishment of links between university, governmental and commercial bodies, and the creation of technology clusters, the support of the development of science parks and urban 'technopolis' quarters, the development of key organisations of a knowledge-based society (education, libraries, e-government etc.).

# 1 National background

## 1.1 Demographic context and socio-demographic structure

The number of population of Hungary was 10,076 million in 2006. The population figure of the country has been continuously decreasing since 1980 when it was 10,71 million. Over the last 25 years it meant a loss of 630.000 people, however, the decrease has been rather unbalanced in time. The population loss amounted to 334.000 people between the 1980 and 1990 censuses, whereas it was less in the following 16 years. It was mainly due to the steady immigration of younger, better-educated ethnic Hungarians from the neighbouring countries after the change of regime. Negative demographic trends have not changed after the turn of the new millennium: natural decrease as a consequence of very low fertility and birth rates (1,32 children born/woman; 9,72 births per thousand inhabitants), declining social security, negative consequences of overwork and unhealthy lifestyle equally contributed to the population decrease. In addition, the Hungarian society can be characterised by an ageing process. In 2006 only 15.4 percent of the total population was younger than 15, whereas 21.0 percent was above 60 years. Single persons constitute a growing part of the households, on the eve of the 2006 micro-census 23.5 percent of the dwellings were inhabited by single persons in the country.

In Hungary, strong regional disparities can be detected in the demographic structure (Figure 1.1). The natural decrease of the population is persistent in Budapest and Western Hungary, whereas in the eastern regions a modest natural increase has been recorded. Areas showing population increase in Hungary between 1990 and 2006 can be classified into two groups: regions of North-eastern Hungary and Southern Transdanubia owe their population growth nearly exclusively to natural increase. Other regions like Western Hungary, the surroundings of Lake Balaton and especially the Central Region including the suburban belt of Budapest show up growing population figures due to a positive balance of migration.

**Figure 1.1 Regions and counties of Hungary**

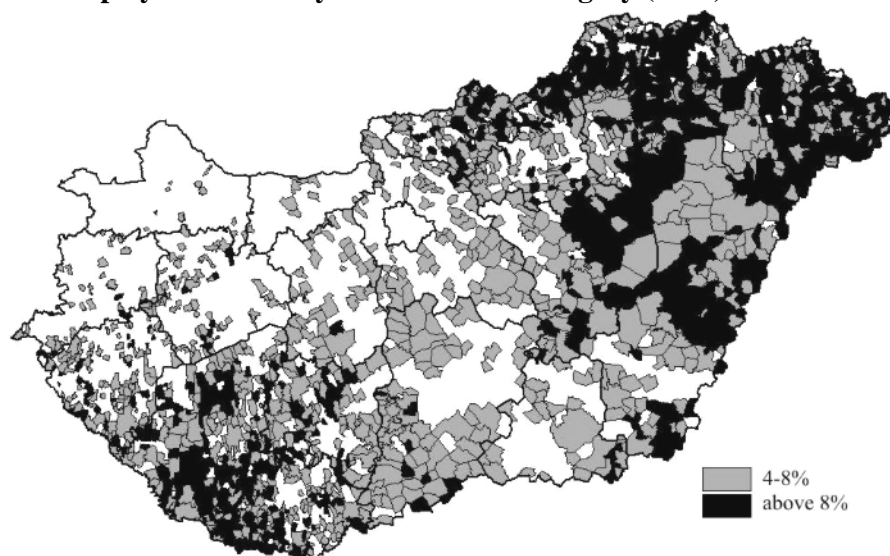


*Source: designed by T. Egedy and B. Szabó*

The level of economic activity also showed substantial changes over the last decades. After 1989, the level of employment has dramatically decreased. On the eve of the collapse of communism 5,5 million people were actively working in Hungary, due to the early retirement, the emerging grey economy and the withdrawal of women to household occupations this figure declined to 3,5 million by the mid-1990s. The geographical pattern of economic activity shows significant east-west disparities. In the economically prosperous western regions, the level of economic activity and employment is much higher than in the east (Nemes Nagy 2003). For instance 56.4 percent of the household-heads was actively employed in Győr-Ménfőcsanak-Sopron county (North-West) in 2006, whereas only 40.0 percent in Szabolcs-Szatmár-Bereg county (North-East). Budapest and the smaller villages show lower employment rates, whereas towns – especially those with 20-50 thousand inhabitants – exhibit the highest employment rates within the country.

Spatial patterns of unemployment also confirm this picture. Unemployment was not officially registered during communism, therefore unemployment rates skyrocketed in Hungary immediately after the change of regime. Between the autumn of 1990 and summer 1993 the number of registered unemployed rose from 50,000 to more than 700,000, and made up 13 percent of that active age within the society. Following the peak it started to decrease in response to the slow recovery of the Hungarian economy and by 2006 the number of unemployed reduced to 240,000 and thus, the rate of unemployment lowered to 5.2 percent. Regions with high rates of unemployment constitute a compact belt in North-eastern Hungary and to less extent in Southern Transdanubia, while low unemployment rates are concentrated in Budapest and the western border region (Figure 1.2). Regions with traditional heavy industries and/or weak agriculture located in the north-eastern part of the country have been hard hit by economic restructuring under the new market conditions.

**Figure 1.2 Unemployment rates by settlements in Hungary (2001)**



*Source: Hungarian Central Statistical Office (CSO, Hungary), Census – 2001*

The average level of education shows also marked regional variations in Hungary. This in turn has strong impact on the quality of labour force, its competitiveness and

adaptability to market conditions. The proportion of people without eight class of basic schooling is relatively high in the eastern regions and in the less developed parts of Southern Transdanubia (Kovács 2004).

Concerning the ethnic minorities, 93 percent of the country's population is Hungarian. Roma is the only bigger, sizeable minority in the country. In the 2001 census only 190,000 people indicated for his or her ethnicity and cultural background as being Roma, however, according to Roma organisations the size of this ethnic group can be estimated 600,000 people, i.e. 5-6 percent of the total population. They live in larger concentrations in North-eastern Hungary and in the southern part of Transdanubia, where they often make up 20-30 percent of the inhabitants, in some settlements being even in absolute majority. The Roma population stand out with high fertility rates and a grand family model which differs very much from the mainstream society.

## **1.2 Economic development**

In Hungary, the economic transition started earlier than the radical transformation of political institutions in 1989-90. Considering economic policy three distinct periods can be defined in the economic development of the country during state-socialism: - 1945-1968: the dominance of the Soviet model; - 1968-1982: the emergence of a unique Hungarian model (the so-called goulash communism); - 1982-89: a deepening economic and political crisis.

The first period of state-socialism could be characterised by forced industrialisation and orientation towards the heavy industry. Industrial production was the engine of regional economic development. Construction of so-called „socialist cities” took place, at the same time development of the infrastructure and services was neglected. As a result, the economic position of Budapest and other industrial centres strengthened, while villages declined not just economically but demographically and socially as well.

In the second period the rigid plan-directive system was replaced by indirect economic regulations which were accompanied by a civil liberalisation process. The first economic reform dates back to 1968, when the New Economic Mechanism was introduced. The general trend of the 1960s and 1970s was the levelling of economic development and social conditions among the major regions, counties and main settlements types. An important reform was the Local Government Act of 1971, which overhauled the 'council act'. Hungary joined the GATT in 1972 and the IMF in 1974, being the first country in East-Central Europe to do so. Due to market reforms Hungary was called as the „happiest barrack” in the former Eastern Bloc.

The third period of the 1980s brought about a twofold change in the economy: the expansion of the main industrial branches came to a halt and many large industrial plants formerly considered flagships of the state economy simply lost their importance; simultaneously new types of semi-private small enterprises were formed following comprehensive governmental decrees. Generally, the entire country got into deep economic depression after 1982.

With the change of political system in 1989-90 a deep and comprehensive transition process started in Hungary. One of the most important outcomes of the transition was the creation of an economic structure based on private property. Privatisation affected the

banking sector<sup>1</sup>, food industry, retail and service enterprises, the building industry, manufacturing and machinery right at the beginning. Strategic economic sectors like energy, and public services had not been affected until 1995.

The transition brought about sharp changes in the economic structure of the country in the 1990s. The most significant trend was the increasing weight of services. In 1990, 46,6 percent of the active earners were employed in the tertiary sector, which increased to 60 percent by 2006. Due to the spectacular growth in commerce, tourism, business and financial activities the change was especially strong in Budapest, where the ratio of services increased from 62 to 78 percent between 1990 and 2006. On the other hand, the role of industry and agriculture declined continuously until now.

One of the consequences of the political and economic transformation was economic recession in Hungary (Table 1.1). The year of 1991 was the deepest point of recession, when GDP declined nearly by 12 percent. On the other hand the ratio of unemployment culminated only in July 1993. Economic recession caused a drastic drop in employment, the socialist embourgeoisement was interrupted and the middle class shrank. At the same time social inequalities and polarisation within the society rapidly increased. The drastic fall in economic output stopped by 1994. Due to the fiscal stabilisation package and reforms undertaken in the enterprise, banking and public sector, after a short stagnation the economy of the country started to grow dynamically from 1997. The annual GDP growth amounted to 4-5 percent and the country got a real impetus and achieved remarkable results in competitiveness. After 2000 economic growth continued but its intensity slowed down (3-4 percent on average). By 2004 Hungary slipped back to the sixth place among the eight new East-Central European EU countries regarding growth dynamics, however, with regards the GDP per capita it could retain its favourable position behind Slovenia and the Czech Republic.

**Table 1.1 Changes of GDP in Hungary (%)**

1990	-3,5	1998	4,9
1991	-11,9	1999	4,2
1992	-3,1	2000	5,2
1993	-0,6	2001	4,1
1994	2,9	2002	4,3
1995	1,5	2003	4,1
1996	1,3	2004	4,9
1997	4,6	2005	4,2

*Source: Statistical yearbooks CSO Hungary*

The rapid deregulation of foreign direct investment (FDI) has played a very important role in the modernisation and internationalisation of the Hungarian economy. The first wave of FDI flowed into the automobile industry, packaging materials, telecommunications, financial services, banking and the construction sector. Electronic and computer industries and the retail sector have also been popular targets. Budapest has captured the highest share (more than 50 percent) of foreign capital invested in Hungary. Two-thirds of greenfield investments with foreign capital have been carried out in Northern Transdanubia (lying close

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<sup>1</sup> The privatisation of banks already started in the 1980s and continued during the 1990s. By the end of the 1990s the foreign share in the banking system was as high as 60 percent, while the share of the Hungarian state shrank to 21 percent. The rest was in the hands of Hungarian private investors.

to the Austrian border) and another 20-25 percent in the Western part of the Budapest agglomeration (Meusburger, 2001). Due to the liberalisation of economy by the end of the 1990s, almost three quarters of total exports were being produced by foreign multinationals, and 73 percent of Hungary's export was directed towards the European Union<sup>2</sup>

The socio-economic transition in Hungary has brought about substantial changes in the internal structure of the country. New dynamic regions as well as depressed areas appeared on the map of Hungary after 1990. The dynamic regions showed both rapid economic development, attracting new well-paid jobs, and societal development, attracting immigrants from other parts of the country. The technical infrastructure in these regions has also gone through rapid modernisation. To this group belongs North-western Hungary along the Budapest-Vienna growth axis, the Lake Balaton region, and the agglomeration zones of major cities, primarily of Budapest. Regions that were heavily industrialized during communism suffered the biggest loss during the transition and they kept declining even afterwards up to now (Northern Hungary Region and several areas of the Central Transdanubian Region). Regions, mostly agricultural in character, kept their low position in economic competitiveness or their situation became even worse (regions of the Great Plain).

### **1.3 Urban context**

Modern urbanisation in Hungary can be divided into three periods regarding the intensity and character of urban growth. The first period coincides with the capitalist modernisation of the country (including rapid industrialisation) which started from the 1870s and 1980s. The peak of first urban boom was the turn of the 19th century and it concentrated mainly to Budapest and a couple of industrial centres. Socialist industrialisation after 1950 generated the second major wave of urbanisation. As a consequence of the socialist urbanisation based on the planned economy, the network of medium- and large-towns developed quickly but industrialisation was not coupled with the development of sufficient infrastructural background (including housing) for everyday life. As Enyedi (1996) pointed out in the first long-term Hungarian urban development strategy, published in 1962, cities were classified by planners according to their capacity for accommodating industry. What meant, that their development prospects were designated according to this single criterion. Through this kind of strictly controlled urbanisation the communist state also tried to fulfil its main societal goals, which targeted the continuing enlargement of the industrial working class, and the abolishment of smallholders.

One of the most important characteristics of urbanisation and urban development in the period between 1950 and 1990 was the sharp increase in the number of towns. The systematic use of the 'legal factor' in urbanisation was partly connected with the growing state intervention and the centrally planned character of modernisation initiated from above. Due to the increase in the number of towns the level of urbanisation has also grown. In 1949 37 percent of the total population lived in the then 54 cities, thus, Hungary was still predominantly a rural country compared to the West. After that the urban ratio of the country increased steadily and by 1990 62 percent of the Hungarian population lived in cities. It

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<sup>2</sup> Germany and Austria were the most important foreign trade partners of Hungary: in 1998, 36.5 percent of total Hungarian exports went to Germany and 10.1 percent to Austria.

should be noted however, that a major part of the urban growth was the result of the administrative increase of the number of towns. The number of officially recognised towns in Hungary was already 166 in 1990.

Due to the liberalisation of the economy and changing migration patterns the whole process of urbanisation and urban development has changed in the third major period from the late 1980s. After the long decades of constant growth of cities and urban population Hungary faced a striking phenomenon with the relative decline of urban population after 1990. National urban ratios have been stagnating around 64 percent since 1990, though the number of settlements with town status has increased from 166 to 289 between 1990 and 2006. Altogether 123 settlements have been granted urban status in the post-socialist era, these are typically small towns with 5-15 thousand inhabitants, specialised for certain functions (e.g. tourism, manufacturing), or located in the agglomeration of Budapest and other major cities.

After 1990 the gap between towns and villages has somewhat narrowed, since the allocation of services became the outcome of market mechanisms. In this system villages and smaller towns gained more opportunities for infrastructural development, attracting new functions and jobs. On the other hand there has been a growing out-migration from urban areas and large cities to the suburbs throughout the 1990s. Suburbanisation is especially pronounced around Budapest generating massive population loss for the city (Kovács 2000).

Polarisation processes have been taking place not only between the upper and lower layers of urban system, but very often on the same level. Apart from Budapest, the few major cities which have been able to compete successfully for foreign direct investments and for international cultural and educational institutions are located mainly in Western Hungary (e.g. Győr, Székesfehérvár). These cities together with Budapest enjoy gateway functions within the country through which most of the international capital and innovations arrives. On the other hand the group of socialist cities (e.g. Oroszlány, Komló) and cities of heavy industries (e.g. Miskolc, Salgótarján), as well as the agricultural towns of the Great Plain in the eastern part of the country clearly belonged to the losers of transformation. The east-west polarisation of the settlement system is clearly the outcome of the changing economic fortunes of the regions (Dövényi & Kovács, 2006b).

In the present planning and administrative system of the country the oldest historically rooted elements are the counties. Hungary has 19 counties plus the capital city (Budapest) since 1950. This system was used extensively by the communist administration as a mezo-level of power. The Regional Organisation and Development Act No. 21/1996 introduced a new type of regional unit, and Hungary was divided into seven statistical planning regions made up by counties, intended to be analogous with NUTS-II regions of the EU. Budapest and Pest county together form the Central Hungary Region. Other territorial units are the „small regions” (168) based on the old „district” system which was abolished in 1984. This level corresponds the former NUTS-IV level and it is the proposed scene of project implementation.

Legally the major elements within Hungary's urban system are: Budapest (capital), county-seats (18), cities with county status (5), and other towns. As an outcome of the regionalisation of the country, Hungary has 6 regional centres in addition to Budapest (Figure 1.3). These cities are Debrecen (204 thousand inhabitants), Miskolc (174 thousand), Szeged (163 thousand), Pécs (156 thousand), Győr (128 thousand) and Székesfehérvár (102 thousand). There are two other cities with more than 100 thousand inhabitants that are not centres of an EU region Nyíregyháza and Kecskemét.



**Figure 1.3 County-system and major cities in Hungary**



*Source: designed by B. Szabó*

The determining legal and policy documents for regional development in Hungary are the Act 21/1996 on Regional Development and the National Regional Development Concept (OTK). The OTK, approved first by Parliamentary resolution 35/1998 already contained information with regards the main directions of urban development and the development of the urban network in Hungary. Practical implementation of this concept had been stimulated in recent years so that urban policy became part of regional development policy. The new OTK (97/2005) document now covers the integration of these issues, although it cannot replace an urban policy concept.

Urban development and some urban policy issues are increasingly implemented by the National Office for Regional Development, and to some extent by the National Office for Housing and Building under the supervision of a minister without portfolio for regional development and convergence. The Ministry of Local Government and Regional Development is responsible for managing settlements. The towns (and other municipalities) themselves bear primary responsibility for the implementation of urban policy in cooperation with their own citizens.

Current issues in the urban development policy:

- specification of urban policy issues and responsibilities at a governmental level;
- stimulation of cooperation between towns and the government, and within the governmental organisations;
- strengthening of Budapest's European metropolis function;
- development of the five larger cities as poles of competitiveness;
- strengthening the polycentric character of the urban network;
- strengthening the cross-border cooperation between cities;
- renewal of large housing estates.

Urban development issues are also included in the National Development Plan set out for the period of 2004-2006. The Regional Development Operational Programming focuses on rehabilitation of cities, improving physical, social and economic conditions. During 2007-2013 a determinative document will be the second National Development Plan (National Strategic Reference Frame), developed in tandem with the modified National Regional Development Concept. The 2007-2013 planning period concentrates on a polycentric urban system, including the development of 27 regional competitive poles within Hungary (i.e. technopolis, biopolis etc.).

#### **1.4 Creative industry and knowledge economy**

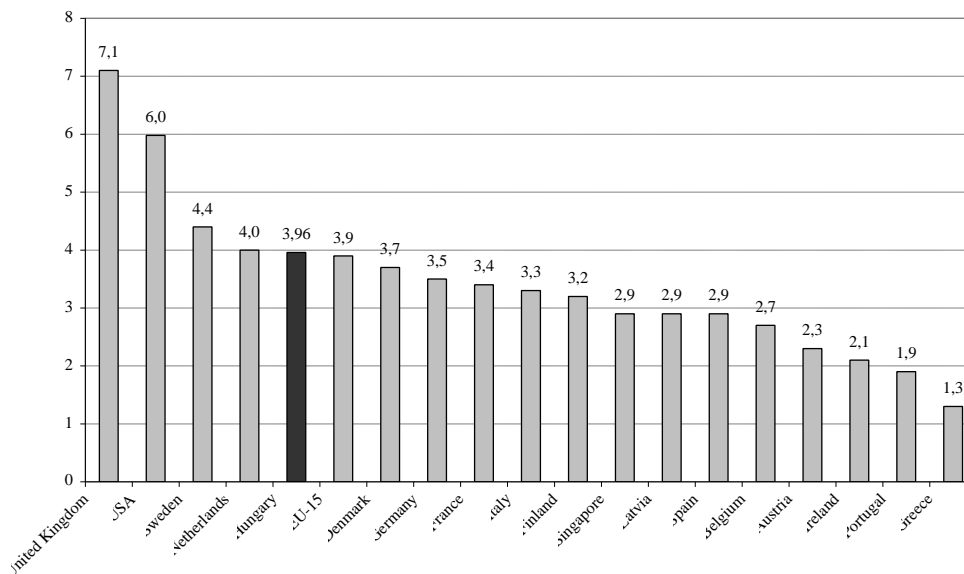
The spatial distribution of knowledge, skills and experiences with a market economy, technological capabilities and networks existing at the end of the 1980s determined to a large extent the development of creative industries. In this term Hungary's most important advantage was that its communist system became much less orthodox and repressive from the mid-1960s onward. Another important advantage of the country was that its new elite, promoted in the 1990s, studied abroad (scholarships, fellowships, scientific congresses) and gathered international experiences much earlier than citizens of most of the other post-communist states. However, Hungary was not homogeneous in the reception of modern economy. The western regions including Budapest adopted many important innovations and developments much earlier than the eastern parts, simply because they had exposure to them and their fields of interaction were directed towards other West European (mainly Austrian and German) centres of innovation. Nevertheless at the end of the communist period creative industry and knowledge economy was extremely concentrated to centres (major cities) in Hungary: the 20 cities at the top of the urban hierarchy comprised 80-100 percent of all Hungarian work places for university graduates. Budapest was the prime magnet for human resources amongst them, 45 percent of all university graduates living in the city came from other parts of the country. On the other hand small cities and villages almost totally lacked work places for highly qualified labour.

In 2002, the gross added value of copyright-based industries amounted to HUF 987 billion (4,06 billion EUR), which represented 6.67 percent of the national economy's gross added value. The contribution of copyright-based industries to the gross output was 3412 billion HUF (14 billion EUR), equalling 9.68 percent. Within this amount the weight of 'core copyright' industries was 1391 billion HUF (i.e. 40 percent)<sup>3</sup>. Thus, the contribution of core copyright industries was 3.96 percent to national GDP and 3.95 percent to gross output. Even on European level, the economic performance of national copyright-based industries is outstanding, which allows Hungary to be at the fore-front amongst the EU countries. The almost 4 percent share of core copyright industries in the GDP slightly exceeded the average (3.9 percent) of the 15 old Member States of the EU. By this, Hungary preceded for instance Germany, France and Italy (Figure 1.4). The total number of employees in the copyright-based industries was 278,000, which constituted 7.1 percent of the total employment rate.

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<sup>3</sup> The definition of core copyright industries see in Annex I

**Figure 1.4 Contribution of core copyright-based industries to the GDP**



Source: Hungarian Patent Office, 2005

## 1.5 Summary

Hungary has an ageing and shrinking society, however, considerable regional disparities can be observed in the demographic trends. The level of economic activity and regional pattern of unemployment also confirm this picture. Economically prosperous regions with a higher economic activity and lower unemployment rates are Central Hungary with Budapest and Western Transdanubia, less developed regions are Northern Hungary and Northern Great Plain and Southern Transdanubia with a higher ratio on unskilled and unemployed population.

After the change of regime in 1989-90 a deep and comprehensive transition process started in the Hungarian economy. The most important outcomes of the transition were: the creation of an economic structure based on private property (privatisation), the internationalization of the Hungarian economy based on foreign capital investments, the transformation of planning and administrative territorial system, together with rapid social and spatial polarisation processes in the society.

The less orthodox and repressive communist system prior to 1990, the spatial distribution of knowledge, skills and experiences with a market economy after 1990, the technological capabilities and networks existing in Hungary provided for the country quite a good starting position in creative and knowledge based industries on European level. The future development strategy of the country focuses on strengthening the cooperation between different economic sectors and urban and administrative levels.

## **2 Introduction to the Budapest Metropolitan Region (BMR)**

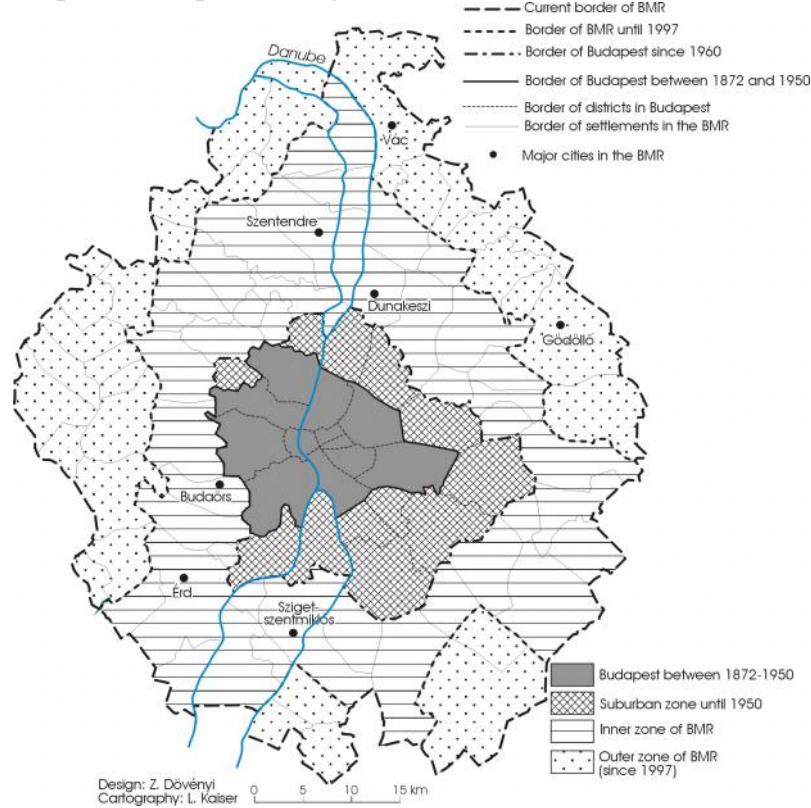
### **2.1 Geographical context**

The Budapest Metropolitan Region is located in the official EU-region of Central Hungary, which is one of Hungary's seven NUTS-II regions. The settlement system of the Central Hungary Region can be subdivided into three segments: i.) Budapest, the capital city of Hungary; ii.) the agglomeration zone of Budapest, including officially 80 settlements, and iii.) the rest of Pest county – excluding Budapest and its metropolitan region – with 106 settlements (i.e. municipalities). The geographical conditions of BMR are very favourable. It lies in the centre of the Carpathian Basin a wider physical (und cultural) geographical unit, at the meeting point of the mountains and plains on either side of the Danube. Historically this is the core region of Hungary where the density of population, as well as economy has been well above the national average, and except for some shorter periods this has been the main political centre of the country in the last thousand years. The main natural axis of the region is the Danube which served as a thoroughfare for many centuries, and at the same time it was a sharp dividing line between the eastern and western parts of the country.

Budapest, the capital city of Hungary is the principal political, cultural, commercial, industrial and transport centre of Hungary. The area of the city is 525 sq. kilometres: Buda lying on the west bank of the river comprises one-third of the area, while Pest situated on the east occupies two-thirds of its territory. Much of Buda is built on hills and is surrounded by the forest-covered Buda Mountain Range, where the highest point is the János Hill (527 m). Pest lies on a gently sloping plain, the inner city on this side is 100 m above sea level. Budapest currently has a population of 1,7 million inhabitants, which has been continuously decreasing since the mid-1980s when the peak was 2,1 million. Administratively the city is subdivided into 23 districts, 6 on the Buda side, 16 in Pest and 1 on Csepel-Island between them. Each district can be associated with one or more city parts named after former towns within Budapest and they serve as independent municipalities (Tasan-Kok, 2004).

The zone of agglomeration comprises the suburban settlements around Budapest which maintain strong ties with the city, lying in its daily commuting zone. After the 'decapitation' of the former suburban zone in 1950 when 23 settlements were attached to Budapest as part of the communist administrative reform, gradually a new zone of agglomeration evolved (Figure 2.1). Through the development of the metropolitan transport network the city expanded its zone of influence dynamically in the 1950s and 1960s. Already the National Settlement Development Concept (OTK) approved in 1971 specified a new zone of agglomeration around Budapest, which consisted of 44 independent settlements. The functional connections between the suburban settlements and Budapest were further intensified by new forms of economic cooperation and migration of labour after 1990; this was also recognised by regional planning, when the Hungarian government extended the boundary of the agglomeration with its decree in 1997. Today the agglomeration of Budapest officially consists of 80 settlements, some of them are legally towns others villages. Budapest and its agglomeration have altogether 2,44 million inhabitants and with this figure it is the largest metropolitan region in East Central Europe (Földi, 2006).

**Figure 2.1 Budapest Metropolitan Region**



The settlements of Pest county form 15 statistical micro-regions (NUTS-IV units) out of Hungary's 168 micro-regions. Towns and larger villages concentrate predominantly along the main transport corridors made up by radial motorways and railways leading from Budapest to the countryside. Areas lying between these corridors are typically of rural character, with lower population and settlement densities. In the northern and western hilly areas of Pest county smaller villages (with population below 2000) prevail, whereas in the south and east, which is part of the Great Hungarian Plain a mixture of large villages (above 5000) and scattered farmsteads is typical. A special settlement zone is formed by the most populous commuting villages around Budapest, some of them designated as towns after 1990.

## 2.2 Demographic context

According to the Hungarian micro-census held in 2005 the number of population in Budapest are 1,696 million. General indicators on demographic profile and migration patterns equally reflect the strong presence of suburbanisation in the metropolitan region after 1990. In Budapest the population loss caused by permanent natural decrease was further exacerbated by migration, whereas in the zone of agglomeration the small-scale natural decrease was easily counterbalanced by the massive outflow of people from the core city (Table 2.1). As a result of these demographic processes the population figure of Budapest decreased by 321 thousand between 1990 and 2005, at the same time the number of

population in the agglomeration zone grew by 25 percent and reached 719 thousand by 2005. The 80 settlements belonging to the officially recognised agglomeration zone around Budapest contain nearly two thirds of the population of Pest county. Also the value of population density here is nearly three times higher (360 persons/km<sup>2</sup>) than in the rest of the county. The close vicinity of Budapest does not allow evolving larger towns. In Pest county there are 40 settlements with town status but only one (Érd) has more than 50 thousand inhabitants.

**Table 2.1 Natural increase and migration (1990-2004)**

	Number of birth	Number of death	Natural increase	Immigration	Out-migration	Balance of migration	Population change
Budapest	244459	405160	-160701	810183	915408	-105225	-265926
Agglomeration	103923	110988	-7065	595286	442326	152960	145895
Rest of Pest county	64911	86171	-21260	254148	215535	38613	17353
Central-Hungary	413293	602319	-189026	1659617	1573269	86348	-102678

*Source: Central Statistical Office (CSO), Budapest*

Similarly, to the whole country Budapest and its surrounding can be characterised by a marked ageing process. Central Hungary (i.e. Budapest and Pest county) has the highest value of ageing index among the seven Hungarian EU regions with 112.3 percent (for Budapest it is 145.5 percent). On the other hand, the average life expectancy is much above the national average in Budapest it is 70,5 years for men, and 77,4 years for women, in Pest county it is 69,1 and 77,05 years respectively.

Since 1998 the level of employment has been continuously increasing in the BMR. In 2005 63.3 percent of the age group between 15 and 64 was actively employed (65.4 percent in Budapest), and both figures are well above the national average (56.9 percent). The ratio of white-collar employees is very high (56.7 percent), just like the proportion of people working for the public sector (37 percent). In terms of wages, the level in Budapest is 27 percent above the national average.

Tertiary sector has been continuously growing in importance in the BMR, the number of employees in the services has doubled in the last ten years. Within industry machinery and chemical industry are the leading branches as far as the numbers of employees are concerned.

Until 2002, unemployment had decreased considerably when it was 4 percent in the BMR as compared to the national figure of 5.8 percent. Since then the ratio of unemployment has been slightly increasing in accordance with the national trends. Latest figures from 2004 are 4.4 percent for Budapest, and 4.7 percent for Pest county, in the later seasonal fluctuations and regional differences being relatively strong.

Due to Budapest, the general level of educational attainment in the BMR is much higher than the national average. In the adult age group (18+) 54.1 percent of the population holds secondary education (national figure is 38.4 percent), whereas the ratio of people with higher education is 13.6 percent, nearly double the national average.

## 2.3 Main economic specialisations

The Budapest Metropolitan Region is the economically most advanced area of the country. In 2004 44.5 percent of the national GDP was produced in the Central Hungary Region, 35 percent in Budapest itself. The per capita GDP produced in the Central Hungary Region was 159 percent, in Budapest 205 percent and in Pest county 89 percent of the national average (Table 2.2).

**Table 2.2 The per capita GDP (EUR, in Purchasing Power Parity)**

Area	1995	1996	1997	1998	1999	2000	2001	2002	2003*
Budapest	13 664	14 683	15 949	16 983	18 571	21 663	23 389	26 296	26 642
Pest county	5 489	5 778	6 617	7 066	7 833	8 112	10 099	10 925	11 428
Central Hungarian Region	10 902	11 629	12 701	13 476	14 708	16 488	18 314	20 329	20 643
Hungary	7 550	7 919	8 519	9 116	9 732	10 564	11 549	12 402	12 818
EU 25	15 233	16 011	16 856	17 647	18 523	19 765	20 495	21 170	--
EU 15	16 869	17 679	18 570	19 421	20 369	21 695	22 463	23 162	--

Source: EUROSTAT, \*National accounts 2002-2003, CSO, Budapest

Between 2000 and 2004 in Budapest a decisive share of investments concentrated in the service sector: 77 percent of the total investments and 75 percent of the foreign capital investments flowed into the service and public service sector. In Budapest the share of services from the value added reached 80 percent, which is a significant share even by EU standards. In the economy of Budapest within service sector the activity of real estate and economic services takes the leading position with respect to productivity. It is followed by processing industry keeping its original position. Within economic services banking has taken over the primary position, the financial transactions having produced a 140 percent growth in the local tax revenues. The increasing significance of financial transactions in the local economy is indicative of the fact that with strengthening monetary controlling functions Budapest is following the structural transformation trend prevailing in the European metropolitan regions.

In 2005 the number of registered enterprises in Budapest was 354.000, which meant a 7 percent growth compared to 1995. The number of enterprises per 1,000 inhabitants in Budapest was double the national average. The entrepreneurship based in the capital city represented 29 percent of the national figure. It is typical of Central Hungary that the number of medium-sized enterprises is below the national average. The majority of the enterprises, however, are small-enterprises with 0-9 employees (Figure 2.3).

**Table 2.3 The number and classification of enterprises by number of employees in the Central Hungary Region 2003**

On the basis of data from 2003	0 person	1-9	10-49	50-249	250-	Total
	Unknown					
Budapest	147733	92021	8153	1394	292	249593
Pest county	57974	36121	2811	417	71	97394
Central Hungary Region	205707	128142	10964	1811	363	346987
Share of the given category (percent)	59.0	36.9	3.2	0.5	0.1	100.0
CHR / Hungary (percent)	37	43	40	37	67	39

*Source: Statistical yearbook CSO, Budapest, 2003.*

In 2005 enterprises were established in greatest number in real estate and economic services (with a share of 46.3 percent), which was followed by commerce and repair (18 percent), other individual and public services (8 percent), industry (6.6 percent) and construction (6.0 percent). In Hungary the number of enterprises with foreign ownership per 1,000 inhabitants is 2,5, in Budapest the same figure is 8.

## **2.4 Position in European networks and hierarchy**

In former centuries there were two periods when Budapest could gain an important role in the life of the eastern part of Europe. In the first period during the 15-16th century – except for Vienna, Prague and Krakow –, there was no urban centre of comparable size and significance in East Central Europe. Few centuries later the political compromise with the Habsburgs in 1867 opened the second great phase of development in the history of Budapest, which lasted until World War I. With a population of 280,000, Budapest was only the seventeenth largest city in Europe in 1873, but by the 1910 census, the population had reached one million and the city had advanced to seventh place in Europe. Budapest had an economic and cultural influence stretching beyond the borders of the Austro-Hungarian Empire to the Balkans and northern Italy and it was a real competitor for Vienna in many respects.

The position of the Budapest metropolitan region in the European networks has not essentially changed until the end of the 20th century, i.e. until the change of the communist regime. Due to the less rigorous political system after World War II in Hungary, Budapest entered the post-socialist period with a relatively good position among the east European cities. Thus, globalisation process in the last two decades as well as the advantageous geographical location of the region made possible for Budapest to accumulate economic organising functions and to become a prime political, economic and cultural centre in Central and Eastern Europe.

In previous centuries, the role of politics or production was the determining factor for a metropolis' central position. Today, the determining factor is mainly the position they occupy in the financial sphere and commerce. After the change of regime these branches of economy developed very intensively and by now Budapest became the main financial and commercial centre of south-eastern Europe.

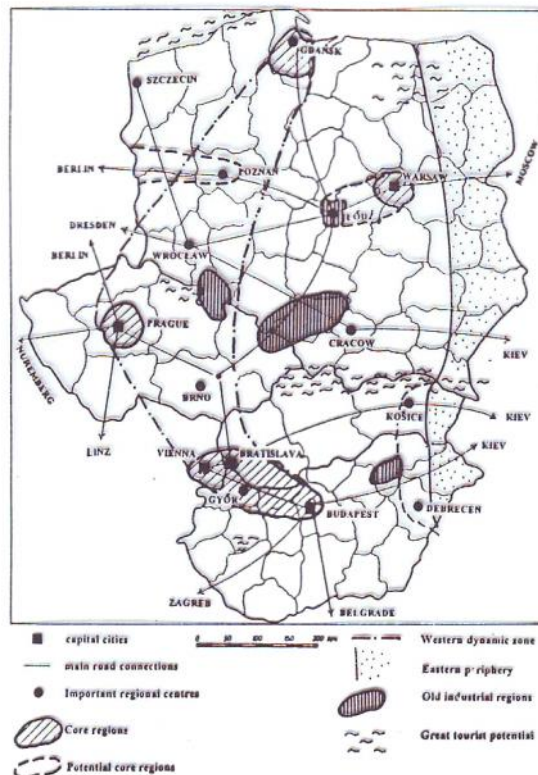


A metropolis can attract transnational company headquarters and fulfil a commanding role in the world economy only if it can also collect business-related services whose main customers are the transnational companies. Budapest and its region attracted nearly half of the foreign capital coming to the country after 1990; however, only few transnational company headquarters have settled in the Hungarian capital.

Capital, knowledge and information-demanding activities influence the central role of large metropolitan regions in the globalising world economy. Consequently, the number of congresses and conferences organised in a city reflect to what extent it is able to transmit knowledge and information and to organise information and knowledge exchange. Budapest – as a member of an exclusive club that organised more than 150 conferences in 2006 – was at the top of the European list. With this result, Budapest was also ahead of Berlin, Rome, Madrid and Stockholm. The city competed with regionally important metropolises like Berlin or Madrid and with leading European co-ordinating and organising centres such as Brussels or Paris by successfully hosting international conferences that were significant in knowledge and information transfer.

According to Gorzelak the *regional pattern of Central Europe* can be best described as the “Central-European boomerang” (Gorzelak, 1996). This fictitious “boomerang” contains the dynamic cities and their regions that have the best chance to be a counterpart of the “blue banana” of the West European countries (Figure 2.2). However, it is not a consistent formation because the Budapest-Bratislava-Vienna triangle also has a special role. This is the region where the transition to a market economy was perhaps the fastest and which became a region of growth already by the mid-1990s.

**Figure 2.2 Regional pattern of Central Europe and the “Central-European boomerang”**



Source: Gorzelak, 1996

The Budapest agglomeration is also part of a secondary Central European development axis which connects Budapest, Vienna, Prague, Leipzig and Berlin and can also extend towards Hamburg and Copenhagen. Budapest is a significant point in this secondary European network, because it is the conjunction of different development zones. In addition, the European regional pattern also includes the Budapest-Balaton-Venice-Milan axis. From a Hungarian point of view, if this axis becomes stronger, Budapest may join the “European sunbelt” in the Mediterranean, which is one of the most rapidly developing regions within the European Union. Another possible future perspective, called the “consumer market blue banana and the production zone boomerang”, is based on the idea that the semi-peripheral position of Central and Eastern Europe including the Budapest metropolitan area will significantly decrease after joining the European Union. The most important consequence of this change will be a boom in economic relations between Central and East European cities. Therefore, the “Central European boomerang” will become an important industrial production zone. In this sense, the biggest possibility for the emergence of such a zone is in the Budapest-Győr-Vienna-Brno-Bratislava pentagon. What can be predicted from the current trends is that the Budapest Metropolitan Region may become logistic, distribution or organisation centre, but it will not have any co-ordinating or decision-making responsibilities on European level.

## **2.5 Summary**

Budapest, the capital city of Hungary is the principal political, cultural, commercial, industrial and transport centre of the country. Because of its favourable geographical position and the concentration of the development potentials including skilled labour, all the economic, education and transportation systems show a mono-centric pattern in Hungary, with strong dominance of the BMR.

In the economy of the Budapest Metropolitan Region (BMR) service sector plays an outstanding role. Within service sector the activity of real estate and economic services takes the leading position. Thanks to the economic dynamism of Budapest, the Metropolitan Region shows the lowest unemployment rates in Hungary.

Budapest's integration into the European metropolitan system is very successful in the knowledge-demanding transfer activities. In the future the Budapest Metropolitan Region may become logistic, distribution and organisation centre.

## **3 Historic development path in the Budapest Metropolitan Region**

### **3.1 Historic development path before 1950**

#### *3.1.1 Population structure*

At the time of its legal creation in 1873 Budapest was still a provincial place by European standards<sup>4</sup>. The upper-class normally lived in Vienna, and the language of the town was dominantly German. The last three decades of the 19th century was the first peak of urban and economic development in the history of Budapest. Due to an extensive industrial growth the social composition of Budapest also changed fundamentally. For instance, at the turn of the century only 64,000 people were employed in industry, a figure which doubled in the following decade. This extensive late 19th century capitalist development turned Budapest from a provincial town into a modern, cosmopolitan metropolis (Lukacs, 1989). The rate of population growth was especially dynamic during the last decade of the 19th century (45 percent in one decade), which was the highest among contemporary capitals. The extensive industrial development created a significant demand for labour and housing, which resulted in mass immigration and a housing construction boom.

World War I and the consequent dissolution of the Austro-Hungarian Monarchy altered the spatial relationships of Budapest. Until 1919 Budapest was the capital of a much larger state. In 1920 Hungary lost 71 percent of its territory and 66 percent of its population and the weight of Budapest in the socio-economic pattern of the country became disproportionately large.

During the inter-war period the development of Budapest slowed down. This was partly connected with her extreme size and the economic stagnation of the country. The rate of population growth was also much lower than in the previous decades, and since the natural increase was almost zero throughout the whole period, the registered population growth could be attributed purely to immigration. This was also the epoch of extensive suburban growth. The population of the suburbs increased from 130,000 to 540,000, between 1900 and 1949. This flow of labour from the provinces to the suburban belt led to the rapid expansion of the 'red outskirts' (e.g. Csepel, Újpest). On the eve of World War II 62 percent of the Hungarian industrial output, and 45 percent of the country's blue-collar employees concentrated in the BMR. Soon after the war these suburbs were attached to Budapest, in part to counterbalance the 'right wing' bourgeois city. In fact, Budapest and her surrounding settlements (what we call Budapest today) reached the peak of their population growth with 2 million people already by 1941. As a consequence of the World War II the population of Budapest dropped by more than half a million, and the pre-war figure was reached again only in 1972.

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<sup>4</sup> Budapest, as one of the youngest capital cities in Europe, was officially established only in 1873, through the unification of three independent and geographically more or less separated towns: Buda, Pest and Óbuda.

### *3.1.2 Industrial structure*

In 1870, 45,000 people were employed in industry (including handy-crafts) in Budapest. There were only a few major factories, such as the shipyard at Óbuda and the Ganz ironworks. Subsequently, the manufacturing industry developed rapidly and Budapest, on account of its position as national capital and with its excellent location. In 1890 the working class already constituted almost 40 percent of the urban population. More than 51 percent of the nearly 237,000 manual workers were employed in industry; most of them worked in large-scale industry, as the proportion of wage labourers in small enterprises was less significant. After the turn of the century there were already 337,000 industrial workers in Budapest. Most were skilled, and had an income higher than the national average for workers.

The most important branch of large-scale industry was the milling industry, and Budapest was one of the largest centres of milling industry in the late 19th century. The milling industry was followed by several other branches of the food industry, such as meat processing (with huge slaughterhouses and feedlots), and the canning industry. Thus, the first wave of industrialisation was based on the processing and partial export of agricultural products. The engineering industry was the next to appear, and its development was closely linked to the production of agricultural and food-processing machinery, and to the increasing transport needs (engines, railway wagons and ships). By the turn of the century the engineering industry had taken over as the leading branch (with 37,000 employees in 1910). The chemical industry (productions of fertilizer and pharmaceuticals) also appeared at the end of the nineteenth century.

Industry was located primarily on the Pest side of the city. The Danube (as a line of transport and source of water) and the railway stations where raw materials arrived were powerful attractions for industrial developments in their neighbourhood. Small-scale industry such as printing and clothing factories were established mainly in the inner residential zone.

The industry of Budapest – with the exception of some transitory booms – was in constant crisis during the inter-war period. In 1922, manufacturing industry production was barely half its 1913 value. Despite the boom between 1925 and 1929 (the industrial production value of 1929 was 12 percent higher than that of 1913), stagnation continued in the typical industrial branches of Budapest, such as engineering and the food industry. The minor boom was due to the late expansion of the textile industry.

The Great Depression shook the very foundations of industry in Budapest. Production value dropped by half (to one-third in the case of engineering industry) between 1929 and 1932. The capacity of engineering industry remained only partly utilized during this period. Only some big engineering works – like Ganz – succeeded in improving their external market position with their up-to-date products (diesel engines, electric locomotives, high-capacity transformers). Within the engineering industry structural changes were favourable: the manufacture of electric machinery and of communications' equipments developed fast, mainly because of foreign capital investment (e.g. Phillips, AEG, Siemens).

Small-scale industries remained significant during the inter-war period, employing 115,000 people (owners and employees together) in 1938, almost 40 percent of total industrial employment.

### *3.1.3 Governance/policies*

The 1872 Act on the Capital, since which the city's administration system has been regulated by separate law spelt out who were the main officials of the capital. The rights of local

government were exercised by the elected representative body of the capital in the regular plenary sessions. The general assembly had the right to determine the conditions of economic activities (including local taxes), to take loans, and to delineate the administrative districts and constituencies. The officials were elected by the representatives for a period of seven years. Half of the members of the representative body consisted of the largest taxpayers, so that only one half was elected. Until the 1890s, only 3 percent, and even in the 1910s, 5 percent of the total population was entitled to vote. The districts of the capital had very limited autonomy. They were subordinated to the municipal body of representatives. The 1893 Act on the district magistracy granted the districts powers similar to those of the autonomous settlements, but the head and members of magistracy were elected by the municipal body of representatives, and the population could no longer elect their representatives into the bodies governing the districts. The expanding and modernizing administrative organisation of the capital concentrated upon the development of the infrastructure, on urban policy, and on the handling of social tensions that came with metropolitan growth.

The principles and organisation of the government of Budapest changed little during the inter-war period. Due to electoral reforms the ratio of voters increased to 30 percent of the adult population. The internal territorial division of the city changed with the expansion of the population and the built-up area (in 1872 the capital was divided into ten, and in 1930, into fourteen districts), and the plan for a 'Greater Budapest' (the administrative union of the peripheral settlements with the capital) took shape and was ultimately accomplished in 1950.

The history of urban planning in Budapest is closely related to the centralizing efforts of the Habsburgs, and also with the attempts of Hungary to separate and form a nation-state. In the last decades of the 19th century the Hungarian government, in rivalry with Austria, wanted to create a big European city through the merger of the three independent towns (Buda, Pest, Óbuda). For these reasons, the Hungarian government decided to establish a comprehensive planning authority in the form of the Municipal Commission of Public Works. The members of the Commission were delegated by both the government and the cities of Pest and Buda on the basis of their expertise. The Commission of Public Works undoubtedly expressed the centralizing efforts of the Hungarian government, and it was inevitably detrimental to certain local urban interests. The Commission of Public Works was given control over urban investments and the implementation of regulations by the government. City planning was permeated by the idea of order, when the roads and streets were traced, the height of buildings set, and palaces and pairs of fountains were built in an identical style.

The situation that evolved underwent slight changes after World War I. Planning became increasingly autonomous and dynamic in the capital. This was made possible by the fact that, by that time, only two authorities were dealing with planning: the Commission of Public Works and the municipality of Budapest. The city planning mechanisms of the inter-war period did not essentially change the broader spatial and social processes which had unfolded during the previous period.

#### *3.1.4 Social polarisation*

In the 19th century the bourgeois development of the city was mainly determined by the socially almost homogeneous German and Austrian petit bourgeois and middle bourgeois strata. Another major component of the bourgeoisie was the Hungarian artisans moving in from the agricultural regions of the Great Plain: the tailors, button makers and boot makers.

By 1872 a radical social and economic differentiation had taken place among the citizens of Pest, which saw the beginning of the evolution of the different groups that made up the modern grand bourgeoisie. Their number was still small, around 1,000 families only. It was the merchants who were best able to retain their position among the old grand bourgeoisie through trade and the manufacture of wine, tobacco and wool. By this time the grand bourgeoisie was dominated, by representatives of commerce and manufacturing industry. This modern, internally diverse grand bourgeoisie was united in its basic interests, but sharply differentiated in terms of family ties, residence and daily human contacts. Social polarisation created groups within not only the grand bourgeoisie, but also the peripherally positioned masses of the petit bourgeoisie.

The hierarchy of nationalities concealed a hierarchical social order: the proportion of patricians, public officials, and grand and middle bourgeoisie was higher among the Germans, while that of the petit bourgeoisie and the poorer plebeians was higher among the Hungarians. Gradually, as Hungarianisation spread, German dominance was reduced to the control of power. The Hungarianisation noted by contemporaries was only partly the outcome of the growing proportion of Hungarians. It was also due to the growing assimilation of the Germans and Slovaks in the city. The strong Hungarianisation taking place among Jewish families was also significant. After its emancipation the Jewish community played an important role primarily in trade. In 1870 the proportion of Hungarians had reached 46 percent, and the other nationalities constituted 54 percent. In 1880 Hungarians constituted almost 57 percent of urban society, Germans 34 percent, and other nationalities about 9 percent. In 1890, the share of Hungarians approached 68 percent, whereas Germans dropped to 15 percent. During the twentieth century, the ratio of Hungarians within the population of Budapest continued to rise: in 1900 it was 80 percent, and by 1949 it had stabilized at around 99 percent.

During the 1870s and 1880s, workers gradually became polarized according to income levels, housing conditions, and also based on industrial traditions. The middle strata, which were weak both in number and in capital, formed an increasingly closed group. After the turn of the century, the number of economically independent entrepreneurs decreased among them, and the majority tended to be professionals, and middle- and higher-level bureaucrats in public administration with good incomes and property.

In the inter-war period grave social, economic and political crises sharpened the main features of the social structure that had developed by the turn of the century, to become even more marked. The number of manual workers grew, while the middle strata continued to shrink as a result of an internal structural transformation that saw the number of economically independent people decrease and the proportion of white-collar workers, salaried state officials and intellectuals grow.

### *3.1.5 Physical infrastructure/layout of the city*

Budapest owes a large part of its building stock and virtually its entire urban structure to the late 19th-century urban boom. The city itself was carefully planned by the powerful body of the Council of Public Works. The Council elaborated an imposing master plan which laid down the main features of the spatial development of Budapest, setting the direction of expansion, earmarking the functions of the different districts, and dividing the city into land-use zones. Its regulations set the purposes of buildings, the size of plots, the height of the houses, as well as the material of the walls (Enyedi & Szirmai, 1992). Architecturally, the

outcome was fascinating, a neatly built town consisting of four- and five-storey buildings in eclectic style, displaying full harmony (Picture 3.1).

The central part of Budapest was virtually built up by the eve of World War I, and it is separated into two strikingly different parts by the Danube, the flat Pest and the hilly Buda. The streets on the Buda side of the city are narrow and irregular in pattern, due to the topography. The regular street layout of Pest presents a strong contrast. The pattern is spider-web like, comprising circumferential boulevards and radial avenues, providing good accessibility to all parts of this section of the city. Functionally, Buda has preserved its predominantly residential character, whereas Pest became the domain of business and commerce.

### Picture 3.1 Inner-city buildings in Budapest



Source: by T. Egedy 2006

The spatial expansion of the city greatly affected the geographical distribution of the population. The city centre, namely the present governmental and shopping centre of Pest, already had an annual population decrease of about 2 percent between 1880 and 1935. The demographic centre of gravity of Budapest has shifted gradually from the city centre to the outlying districts since the beginning of the 20th century (Enyedi & Szirmai, 1992).

## 3.2 Historic development between 1950 and 1990

### 3.2.1 Population structure

The overstrained industrial development of the 1950s and the consequent demand for labour attracted many immigrants from the provinces which resulted in very intensive population growth again in Budapest during the first decade of state-socialism. Other factors of the dynamic population growth were the post-war baby-boom and the administrative measures introduced by the communist systems including the complete prohibition of abortion and direct support for families in the form of child-care benefit. The average rate of the annual population growth in this era was even higher than at the peak of the capitalist industrial development.

1956 saw a break in the rapid population growth of Budapest, when approximately 100,000 people fled from the city abroad. However, urban development speeded up remarkably again after the revolution, mainly as a response to the forced collectivisation of agriculture. The higher standard of living and vast job opportunities attracted masses of landless proletariats towards Budapest and other industrial centres.

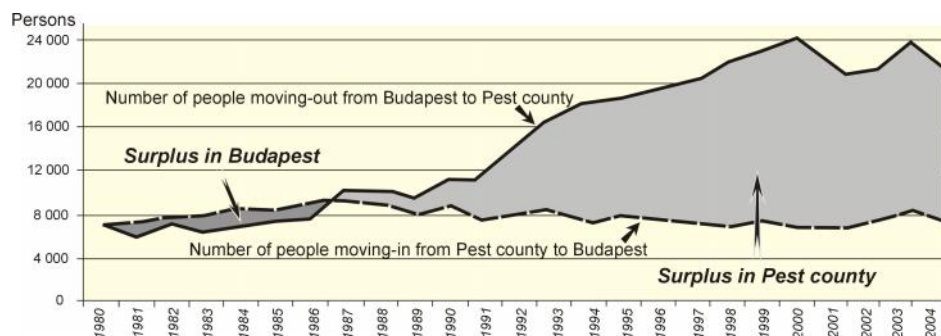
Table 3.1 highlights the main demographic tendencies of Budapest and the agglomeration in the decades between 1949 and 1989. The natural increase started to decline in Budapest already during the 1960s, however, this trend could not be observed in the settlements of the agglomeration. Positive demographic tendencies of the 1970s can be explained by the new social welfare programme passed by the government in 1971 and the second wave of the post-war baby-boom. The positive impacts of the programme could not be kept on the long run and the 1980s were already characterised by a natural decrease. During the 1960s and 1970s the in-migration to Budapest could still compensate the natural decrease of the city, however, in the 1980s, the population dynamics of Budapest and its surrounding suburban belt changed. The natural decrease of the city was no longer compensated by the in-migration from the countryside. As a consequence, the population figure of Budapest dropped from 2.059.000 to 2.016.000 within one decade, while the population of the suburban belt continued to grow from 410,000 to 413,000 between 1980 and 1990. Suburbanisation in the Western sense did not emerge around Budapest until the late 1980s. It is only since 1987 that the urban ring has grown faster than the urban core due to the outward migration of people from the city (Izsák & Probáld, 2001) (Figure 3.1).

**Table 3.1 Natural increase, net migration and population change in the BMR**

	Natural increase			
	1949-1959	1960-1969	1970-1979	1980-1989
Budapest	84840	-17727	-373	-98246
Agglomeration	39433	20290	38539	1841
	Net migration			
	1949-1959	1960-1969	1970-1979	1980-1989
Budapest	129450	154485	58516	55701
Agglomeration	32617	60172	49700	-1555
	Population change			
	1949-1959	1960-1969	1970-1979	1980-1989
Budapest	214290	136758	58143	-42545
Agglomeration	72050	80462	88239	286

Source: Statistical yearbooks CSO, Hungary

**Figure 3.1 Migration between Budapest and Pest-county (1980-2005)**





Both the core city and the agglomeration faced an ageing process after World War II. As a consequence of the ageing process the proportion of inhabitants over 60 became considerably high in Budapest, but it had also grown in the agglomeration by 1990 (Table 3.2).

**Table 3.2 Composition of population by age groups in the Budapest Metropolitan Region**

	Budapest				Agglomeration		
	0-14	15-59	60-X		0-14	15-59	60-X
1949	18,0	70,6	11,4	1949	25,0	64,0	11,1
1960	19,7	65,2	15,1	1960	24,8	62,0	13,3
1970	14,2	67,0	18,7	1970	20,9	64,5	14,6
1980	18,0	61,8	20,2	1980	23,6	62,3	14,1
1990	17,4	61,0	21,6	1990	21,1	62,8	16,1

Source: Statistical yearbooks CSO, Hungary

The changes of employment structure followed the main restructuring processes of the state socialist economy. The forced industrialisation of Budapest in the 1950s, and the countryside in the 1960s, and later in the 1980s the continuously increasing role of the tertiary sector all had an impact on the employment structure of the BMR. In 1990 the leading sector of the economy in Budapest was already the tertiary sector, while the ratio of persons employed in industry shrank to 36.3 percent. The agriculture – just like earlier – played a negligible role. Industry was in the zone of agglomeration so far of higher importance in the employment structure, however, could not keep abreast of development of the service sector (Figure 3.3).

**Table 3.3 Employment structure by economic sectors in the Budapest Metropolitan Region**

	Budapest				Agglomeration		
	Agriculture	Industry	Services		Agriculture	Industry	Services
1949	2,0	46,1	52,0	1949	-	-	-
1960	1,8	55,0	43,2	1960	15,1	49,4	35,5
1970	2,7	53,9	43,4	1970	12,5	59,8	27,7
1980	3,9	45,0	51,1	1980	12,6	48,6	38,9
1990	3,0	36,3	60,7	1990	9,6	41,4	49,0
2001	0,5	21,3	78,2	2001	1,7	30,8	67,5

Source: Statistical yearbooks CSO, Hungary

### 3.2.2 Industrial structure

The economy of Budapest has always been the largest single industrial agglomeration in Hungary, showing dynamic development in the post-war period. The forty-five years between 1945 and 1990 have been dominated by state ownership of the overwhelming part of industry (nationalisation took place between 1946 and 1949). Large-scale investments in heavy industry during the 1950s generated migration waves from various – predominantly agricultural – regions to Budapest. The supply of workforce has first started to dwindle in Budapest as early as the middle of the 1960s. This turned the suburban belt into an attractive location for industry. However, the local economy of the agglomeration had limited

importance as 40-60 percent of local people were employed in Budapest. Although restrictions for industrial development in Budapest were extended during the 1970s and covered the whole agglomeration, construction and enlargement of a few mammoth industrial plants continued unimpeded. Since the 1970s the number of industrial jobs has begun to decline even in the agglomeration zone, indicating the beginning of the post-industrial development stage (Barta, 1999) (Figure 3.4).

### 3.4 Decrease of industrial work force in Budapest (1965—1989)

Year	Numbers	Absolute decrease	Absolute decrease ( percent)	Yearly rate of decrease ( percent)
1965	620 313	-	-	-
1970	602 312	18 001	2.1	0.4
1975	519 936	82 376	13.7	2.7
1980	427 478	92 458	17.8	3.6
1985	341 852	85 626	20.0	4.0
1989	288 045	53 807	15.7	3.9

Source: *Statistical yearbooks of Budapest, CSO, Hungary*

In 1987, enterprises located in Budapest employed 346,000 people in the city (22.7 percent of the industrial employees of the country). Of the total number, 282,000 were employed by state-owned firms, 45,000 by co-operative industries, and only 19,000 by private small-scale industry.

The structure of industry has not changed significantly. Though the food and textile industries have shrunk (the milling industry has practically disappeared), and the engineering industry has strengthened its role, essentially all the manufacturing branches succeeded in wrenching some investments and development from the government. The old branches of industry formed strong lobbies and often close personal ties with the party authorities (Figure 3.5).

**Table 3.5 Changes in different branches of industry in Budapest (percent of employees)**

Branch	1955	1969	1987
Chemicals	5.8	7.5	10.8
Engineering	8.9	9.5	8.9
Means of transport	11.5	9.7	9.2
Electrical engines	5.1	5.7	5.4
Telecommunications technology	5.1	8.3	11.3
Precision machines	4.1	5.6	7.1
Mass produced metal goods	6.4	5.3	4.0
Textiles	13.0	10.3	8.2
Food	7.2	6.4	9.1
Handicraft	5.6	5.4	0.8

Source: *Statistical Yearbook CSO, Hungary, 1988*

In the 1970s, due to government measures the state-enterprises of Budapest moved some of their (often-obsolete) branch-plants to the countryside. Productive labour left Budapest, whereas enterprise management and the white-collar occupations stayed. As a result the number of manual workers fell by 23 percent, but that of white-collar occupations by only 10 percent between 1975 and 1987 (while gross industrial production grew by 2.2 percent). In 1975, there were 2.31 manual workers for every white-collar employee, whereas this figure was only 1.19 in 1987.

No significant industrial activity could develop in the Budapest agglomeration before the transition because Budapest's industry could not have survived without the labour force of the agglomeration. Labour shortage was becoming ever more acute from the middle of the 1960s, so that strict measures were introduced to control the establishment of industrial production (and other economic activities) in 44 settlements around the capital. The sparsely built-up settlements of the agglomeration retained therefore a distinct rural character with an underdeveloped infrastructure. On the other hand, the share of commuters has reached unprecedented figures in Budapest's economy (Kovács, 1994).

The geographical location of industry has been influenced by various factors. Natural conditions played a role: for instance, the abundant water of the River Danube favoured the development of industries requiring water; the abundance of building materials and the flat land of Pest allowed for industrial estates requiring a lot of space, for the airport, and for warehouses of the railways. The building regulation of 1894 divided the capital into four zones, and permitted industries only in the fourth belt. The building regulation of 1914 established eight zones in Budapest, of which one – the seventh (K bánya, Ferencváros, Kispest, Pesterzsébet, i.e. the south and south-eastern parts of Pest) – was specifically earmarked for industry. When the inner suburban belt was added to this territory in 1950, the industrial zones became parts of the inner zone of the city.

The industrial zones have gradually expanded along three important axes of transport since the middle of the 19th century: 1.) the territory between the Danube and the oldest railway line, running north between Budapest and Vác; 2.) the territory along the Budapest-Cegléd and Budapest-Hatvan railway lines to the east and south-east; 3.) the territory between the Budapest-Kelebia-Belgrade railway line and the Danube to the south. All three axes are located on the Pest side. During the past 100 years, industry had drawn further away from the city centre along these axes, but the suburbs out along the axes were also strongly industrialized. On the right side of the river, the Buda Hills hindered the development of industrial zones, and the aristocratic and grand bourgeois population of Buda blocked its growth too. To the north (Óbuda) and south, two minor industrial concentrations developed next to the Danube. The industrial estates of Óbuda produced building materials (from the local raw materials), and attracted industries which required a plentiful water supply (such as textile dyeing). The southern zone was located on the river but was quite independent of it, and its growth was mainly due to the large area of flat land and the Kelenföld railway station.

In the zone of north Pest several branches of industry were present. The most important engineering factories were the Ganz Shipyard and Crane Factory, the Láng Engineering Works and Tungsram (electric machines, lighting equipment). The whole range of the leather and shoe industry was to be found. Of the districts of Budapest, the largest number of industrial workers was employed here. The industrial zone of southeast Pest is the most excessive. Brick production and the quarrying of limestone were begun in the early 19th century, and a multi-faceted food industry developed around the cargo depots. Other

industries are also represented here: the large engineering factories (Ganz MÁVAG, Orion), the two largest Hungarian pharmaceutical companies, and the textile industry. The chemical industry and engineering also have a prominent role. The industrial zone of Csepel used to be totally dominated by heavy industry. The industrial zone of southern Buda is the youngest of all. The structure of industry is up-to-date: the engineering industry has a prominent role, and the electronics industry is quite significant. The southern part of the zone (Budafok) has a more traditional industrial structure (wood-processing and wine cellars having the largest export trade). The zone of Óbuda to the north was a very traditional industrial zone made up of the textile industry and shipbuilding. The industrial zone of southern Pest stretches along the eastern bank of the Ráckeve branch of the Danube, opposite the island of Csepel. Here the dominant branch of industry is food processing, based on the raw materials arriving from the Plain.

Old industrial zones are pulling back and residential areas are occupying their place. This is partly because the inner residential zone can only spread towards the industrial zones (mainly on the Pest side). As a consequence of the replacement of industrial areas and due to the shrinking labour force the size of industrial areas did not increase significantly until 1980. It amounted to 45 km<sup>2</sup> in 1986 — approximately 9 percent of Budapest's total territory (Kiss, 2004).

### *3.2.3 Governance/policies*

In 1949 the country passed a socialist constitution, and the system of councils was introduced in 1950 (Act I of 1950). The system of councils was an organisation of public administration that differed in its basic principles from local government. Local councils were set up in each community, and the traditional system of counties and the special administrative status of Budapest were retained. 'Involving the masses in the administration of their own affairs' was an important task of the councils; therefore, they had a relatively high number of members, with different occupational groups, ethnic minorities, age and gender groups and so forth enjoying proportionate representation. The councils were 'responsible' for their community — not only for its public administration, but also for sports, cultural life. Societies, associations and organisations which private individuals had set up were not permitted to operate in the local community.

The introduction of councils was a major break with the traditions of Hungarian public administration (which followed the Central European traditions). The adapted Soviet model was so incapable of operation that as early as 1954 a new Act on councils was passed which increased the autonomy of the local councils, and their direct subordination to central government was partially replaced by subordination to the county councils. The third Act on councils passed in 1971 departed even further from the original Soviet model in so far as the representation of the electorate and local government were included with the administrative functions as basic tasks of the councils. However, the councils did not become real local authorities, partly because of their financial dependence upon central government, and partly because the real level of decision-making was the local (regional) party organisations.

The administrative apparatus of the council was in the hands of the secretary of the executive committee. The council operated specialist committees as well, the task of which was to control, propose and review, but primarily to participate in the different development programmes. The administrative apparatus, which answered to the executive committee, was

made up of specialist agencies (such as the departments of public education, health, etc). These organs controlled a number of institutions, including schools and hospitals.

After the Communist takeover in 1949 the Commission of Public Works was abolished in Budapest; its sphere of authority on development and planning was handed over to the newly-established Ministry of Building and Public Works. The Ministry, however, only had a formal decision-making right, as it was the Council of Ministers which took the decisions on the most diverse issues of urban development. Central authority subordinated the processes of planning to its own ideological and economic interests. Urban development was interpreted as a sector of the national plan. Stress was laid on its subordinate role. The state socialist political structure, and the centralized management of society, eliminated the possibility of local planning. Decisions on issues of urban development were made within the internal bargaining processes of state institutions, independent of the inhabitants, socially interested groups, or the public. The post-war development of Budapest implies that 'socialist urban planning' and management could not fulfil its original aim in many respects. It was not able to abolish housing shortage, diminish the privileged position of Budapest within the country, or to decrease the scale of segregation (Kovács, 1992).

#### 3.2.4 Social polarisation

After 1945, in line with the political changes, huge social transformations took place in Hungary. The wealthiest sections of the former landlord and capitalist strata (in Budapest this comprised 7.9 percent of the population by the 1941 census) left the country by the end of the 1940s. In Budapest, the rapid expansion of heavy industry and the consequent high rate of immigration considerably strengthened the working class. The elimination of the private sector led to the dissolution of the petty bourgeoisie, which was the leading stratum in shaping the pre-war face of Budapest. The biggest loser of socialist transformation was probably the urban intelligentsia. The anti-middle class, anti-intellectual nature of the regime became more obvious, the state socialist policy of equalisation brought a considerable change in their position and their living conditions sharply deteriorated.

In keeping with its ideological objectives, the new political (communist) elite and the political and economic bureaucracy was built by the representatives of the working and peasant classes that had been in a disadvantaged position in the pre-1945 system. In the country as a whole, almost 90 percent of the political leaders and 65 to 70 percent of economic managers had blue-collar backgrounds in the 1950s. Within the active earners the share of blue-collar workers stopped growing, and their proportion began to fall after 1960, although they continued to represent the most significant group in society (Table 3.6). Before the war the wage difference between white and blue collar employees was 2,5-3,0 to 1, in favour of white-collar professionals this virtually disappeared by the 1960s (Enyedi & Szirmai, 1992).

**Table 3.6 Changes in the structure of active earners by type of employment (percent)**

	Blue-collar workers	White-collar workers	Independent employees
1941	60.4	23.4	16.2
1960	67.6	28.6	3.8
1970	54.9	42.9	2.2
1980	50.4	47.6	2.0

Sources: Census Data of 1941, 1949, 1960, 1970 and 1980

As far as social segregation is concerned, the anti-segregation policies in the 1950s and 1960s were reflected in decreasing residential segregation. Housing was proclaimed to be a universal right, and state construction in the 1960s and early 1970s diminished housing segregation. After 1968, residential segregation started gradually to increase again, it was mainly the outcome of the liberalisation of economy. Economic difficulties in the 1980s further intensified this segregation trend, consequently urban inequalities grew remarkably in Budapest. Very rich areas with luxurious architect designed detached or semi-detached houses contrasted with overcrowded tenement blocks from the Austro-Hungarian period, with very poor living conditions and unhealthy environments. The crowded dwellings and outdated infrastructure of the inner-urban slums provided very poor living conditions, where buildings deteriorated visibly.

The increasing social and residential segregation also appeared in the suburbs, where many have moved permanently during the 1980s. In this suburban segregation process the white-collar strata gravitated towards the environmentally more attractive hilly areas to the north and west of Budapest, whilst manual workers were preponderant on the eastern and southern sides of Pest.

### *3.2.5 Physical infrastructure/layout of the city*

The first signs of suburban development around Budapest can be traced back to the end of the 19th century and the first decade of the 20th century. Because of its favourable geographical position and the systematic concentration of the development potentials, all the traffic routes, railways, roads were developed in a mono-centric arrangement around Budapest. The mutual dependency of the city and the countryside further strengthened the mono-centric structure of the major traffic infrastructure. The first period lasted from 1870 until 1914 and was characterised by the industrialisation of the neighbouring settlements and by the transformation of villages into satellite towns. Satellite and resort towns developed to the north of the city along the Danube River; these were suburbs inhabited mostly by the 'white-collar' middle class. The new transport axes defined the direction in which the city and the suburbs could expand. During this period the 16 villages and 7 towns — today forming peripheral districts of Budapest — practically grew on the contemporary Budapest of a smaller size (see Figure 2.1).

The second stage in the development of the agglomeration occurred between the two World Wars. The substantial growth of the industrial sector and the extremely high rents inside the city resulted in a significant development of settlements located on the edge of Budapest, including towns like Újpest, Csepel and Kispest which became medium sized cities with 50-60.000 inhabitants. The idea of the administrative unification of the capital and its neighbouring settlements was first suggested at the end of the 1930s. This period of modernisation — decades after it would have been timely — ended with the official foundation of Greater Budapest in 1950 when 23 settlements (including six towns) were incorporated in the capital city.

The third – state-socialist – period brought about major changes in the development of the agglomeration. Thanks to the massive housing construction, the incorporated peripheral districts experienced very high population growth between 1950 and 1990, mainly due to an influx of people from inner-city areas. However, the residential mobility from downtown to the periphery took place within the city boundaries. Structurally, the city could be divided into

two distinct parts, a densely built-up central city, and an outer peripheral belt comprising a mixture of system-built concrete housing estates and garden cities. The differences between these two zones are fairly visible, both architecturally and functionally. The expansion of the central city has occurred concentrically from the centre outwards, whereas the suburban zone has tended to mushroom from several isolated nodes which used to be independent settlements (Kok & Kovács, 1999).

This state-socialist stage in the development of the agglomeration was characterised by a policy of forced industrialisation and by massive migration towards the capital. Apart from a chronic housing shortage, moving to Budapest was further impeded by administrative restrictions: only people who had worked or studied in Budapest for 5 years could acquire accommodation and settle down in the city. This resulted in a new wave of commuting from the rapidly growing settlements outside the new municipal boundary of Budapest. Thus, significant development of the housing market could be found in the agglomeration, mostly in the form of private self-help construction. People who moved here were mainly semi-skilled or unskilled workers in Budapest's industrial sector or employees in lower ranks of the state administration. The state-socialist period also brought about change in the physical layout of the BMR. The official delineation of the agglomeration's outer boundary in 1971 was preceded by lasting debates. 43 settlements were finally classified as belonging to the agglomeration zone, an area which extended 1 143 km<sup>2</sup> and contained about 400.000 inhabitants.

In the fourth period after the political changes of 1989 and 1990 the process of suburbanisation accelerated sharply, and a new period began in the evolution of the suburban ring around Budapest.

### **3.3 Development path in the Budapest Metropolitan Region between 1990-2000**

#### *3.3.1 Introduction*

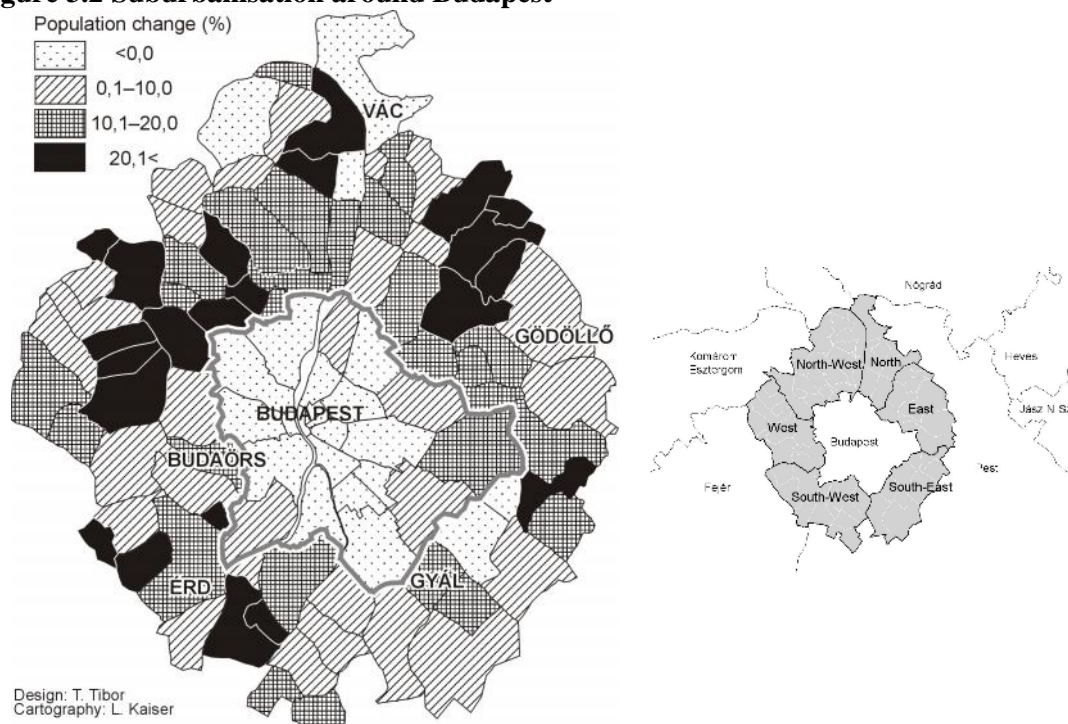
The change of political and socio-economic system produced immense transformation in the socio-economic characteristics and the related spatial features of what is called now Budapest Metropolitan Region. The first signs of this transformation were already detectable in the late 1980s, the change however, became multifaceted and hugely accelerated after 1990. The most fundamental change occurred in the composition and spatial distribution of population, the structure and location (spatial preference) of industrial activities and services. All these were closely related to the changes in the physical layout of the Metropolitan Region. The spatial pattern of up- and downgrading areas within the BMR cannot be simply translated into the success of the agglomeration zone and the downfall of the core-city. There have been factors that influenced substantially the potentials and dynamism of areas in each spatial unit.

#### *3.3.2 Population structure*

The total population of the Budapest Metropolitan Region has been declining since the beginning of the 1980s. The rate of decrease however became a lot more intense after the change of system, in the 1990s. The population decline was already 98 percent by 1990 relative to 1980, while it was as high as 95 percent in 2001 relative to 1990. In the BMR there was a considerable difference between the magnitude and direction of population change in the core-city and its agglomeration zone.

While between 1990 and 2001 the population of Budapest decreased by 14.3 percent, that of the agglomeration grew by 18 percent. The share of the population in the agglomeration was 22 percent in 1990 and 27.6 percent in 2001. The rapid increase in car ownership and the deregulated land market speeded up the migration into the suburban areas. Budapest as a whole lost appr. 15 percent of its inhabitants after 1990: the population figure decreased from 2,02 million in 1990 to 1,70 million in 2006, a loss of 302,000 inhabitants. The agglomeration belt's total population reached 738,000 by 2006, while the overall population of the metropolitan region (BMR) stagnated around 2,4 million. This represents one-quarter of Hungary's total population. Concerning the demographic changes the area of the agglomeration was revised in 1997 and accordingly the number of settlements involved increased to 78. By now it is 80 because of the settlement detachments. The continuous movement of the population towards the agglomeration and beyond resulted in the increase of the number of settlements with more than 10,000 inhabitants, the growing number of places with town status, and in general the degree of urbanisation. The suburbanisation of the population affected the areas over the agglomeration zone especially the ones along the main traffic routes (railway lines and highways), which all joined the commuting zone of the capital city (Figure 3.2).

**Figure 3.2 Suburbanisation around Budapest**



Basically, suburbanisation to the agglomeration as a whole was a mixed process. For some – the high-income households – a move to the agglomeration was the way to attain a luxurious life style in an attractive residential environment. For others, it was the only way to have a decent dwelling. Migration into the agglomeration from elsewhere is more connected with work. People who find a job in Budapest have trouble finding an inexpensive dwelling in Budapest.



The population of the Budapest Metropolitan Region not only decreased after 1990 but – in line with the national tendencies – started to show the marked signs of ageing. In Budapest the ratio of people over the age of 60 grew from 21.59 percent in 1990 to 23.0 percent in 2001. An even more alarming trend was the sharp fall in the share of population below 15. This value fell from 17 percent in 1990 to 12.8 percent in 2001. Within Budapest an especially high representation of people over 60 (with a noteworthy overrepresentation of the elderly female population) characterises the historical inner districts, while a relatively younger population structure could be found in the more dynamic outer Pest and southern Buda districts. The agglomeration zone – as the major destination of the young households' relocation – showed a more balanced population structure.

The period of 1990-2001 is seen as the second great wave of suburban development, which started in the mid-1980s, but could fully evolve only after the change of system and the liberalisation of the housing market (Beluszky, 1999). It is only since 1987 that the agglomeration zone has been growing faster than the urban core (Budapest) due mainly to the suburban-bound relocation of people leaving the city. The map below shows the rate of population change in the BMR between 1990 and 2001.

The districts of Budapest which have suffered the greatest population loss are the downtown districts, the historical core (1st and the 5th districts) as well as the inner city of Pest (6th and 7th). However, the major sources of population growth in the agglomeration zone in the 1990s were more the better-off districts on the Buda-side of town.

Population growth over 30 percent could be experienced in some places, which were already the target areas of suburban migration in the late 1980s and the first half of the 1990s. These settlements are located mainly in the western sector of the agglomeration: the villages of the mountains in the west and in the north and the places with ideal conditions for transport (M1, M7 motorways) in the southern agglomeration zone.

In the second half of the 1990s the interest of households relocating shifted to the north-eastern sector of the agglomeration, which also provided a nice environment but with more moderate housing prices. A special feature of suburbanisation in this period was the outward migration of the socially disadvantaged as well, whose target area was the much less attractive south-eastern sector of the agglomeration zone and the areas beyond the BMR. According to the map in the 1990s, the population increase in this part of the agglomeration zone was lot more moderate. Also permanent unemployed inhabitants and those who became excluded from the housing market left the city and moved to villages in far-away regions of the country.

As results of the growing population of the suburbs the member of settlements with over 10,000 inhabitants also grew, by 2001 there were already 23 settlements in this category and 9 exceeded 20,000. Town status was given to 18 settlements between 1996 and 2005 partly because of the considerable population increase.<sup>5</sup>

### *3.3.3 Industrial structure*

Soon after the change of system the old structure of the Hungarian economy collapsed. The impact of the economic breakdown was tremendous but was still the least dramatic in the Budapest Metropolitan Region compared to the rest of the country. Also the economic

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<sup>5</sup> Pécel, Gyál, Pilisvörösvár, Göd Veresegyház, Budakeszi, Dunaharaszti, Pomáz Visegrád, Gyömr , Tököl, Vecsés, Dunavarsány, Fót, Szigethalom, Kistarcsa, Ócsa, Úll .

recovery was much quicker in the capital city, just like its integration into the European and world market which commenced in the first half of the 1990s. It was due to the outstandingly high concentration of human and financial capital, highly developed infrastructure and means of production. Typical for the weight of Budapest in the Hungarian economy that in 1996 35 percent of the total national GDP was produced here (Kovács, K. 1999), and the per capita GDP was 181 percent of the national average (Barta, Gy. 2000).

Budapest and the rest of the Metropolitan Region became the magnet of capital investments in the 1990s: besides the aforementioned conditions causing its high competitiveness, Budapest became a major target of FDI for its good geopolitical position and the favourable cost factors (Barta, 1999). From 1990 to 2000 57 percent of the FDI arriving in Hungary was concentrated in Budapest. In the Metropolitan Region in 2000 there were 16,000 enterprises of foreign interest, which represented 60 percent of the national figure. Nearly 90 percent of these were based in Budapest itself. In the BMR the capital subscribed by these companies was 2356 billion HUF (9,4 thousand billion EUR) of which 87 percent was subscribed by foreign companies (CSO, 2003). The greatest number of enterprises with foreign interest was established in commerce while the greatest share of foreign capital investment went into the industries (Nagy, 1999). The enterprises of foreign interest tend to exclude local partners from ownership. By the end of the 1990s 60 percent of these companies were 100 percent owned by foreigners (Barta, 2000).

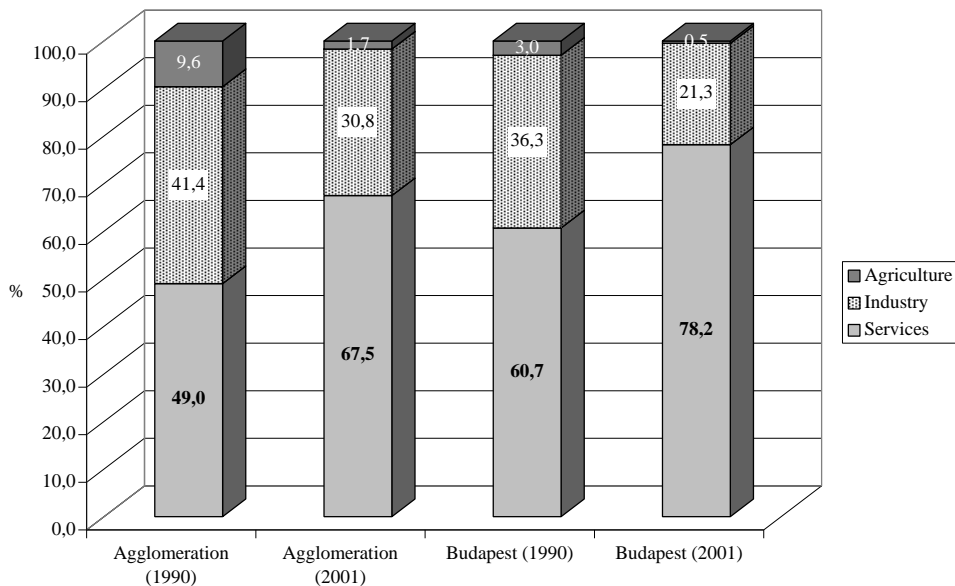
The structure of economy fundamentally transformed in the 1990s. Large state companies were privatised and/or disintegrated. Accordingly, employment in the BMR reduced dramatically in the 1990s. Only between 1992 and 1997 the number of active wage earners reduced by more than 200,000. Meanwhile the volume of production increased, only in 1997 the GDP growth was as high as 5 percent (Barta, Gy. 2000).

This shows that even besides massive decrease of employment production was able to grow in the 1990s due to the improvement of productivity and the transformation of the economic structure. The structural change of economy was supported by the change of employment structure, which reflects the direction and tendency of change.

As Figure 3.3 shows, the withdrawal of industry was marked in both the agglomeration zone and the city but the relative decline was still greater in Budapest lowering the share of industrial workers to almost 20 percent of the active population. The decrease of industrial employment was also noteworthy in the agglomeration but its share still remained 10 percent higher. The share of services grew by 18 percent compared to the year of 1990 but in Budapest its weight was originally greater. It was nearly 80 percent by 2001, while remained under 70 percent in the agglomeration zone. Agriculture became even more negligible than before having gone through a much substantial decline in the agglomeration zone than in the city.

The structural change of the economy was coupled with the spatial reorganisation of economic activities in the Budapest Metropolitan Region. In Budapest the traditional almost continuous industrial zone forming a crescent, considerably shrank and segmented (Barta, 2000). Little traditional industrial production (e.g. machinery, chemical industry) was left and even this type of industrial activity changed. On large industrial plants heavy industry was often replaced with light industries such as food industry, printing, confection etc..

**Figure 3.3 Change in the structure of employment in the BMR**



Source: Census data CSO, Hungary, 1990 and 2001

Some of the old industrial areas successfully changed function: the service sector took over and revitalised areas with better location. Yet, most of the old industrial plants remained under-utilised in the 1990s leaving immense, polluted and unattractive brownfield areas behind.

The growth of service sector was the obvious consequence of the economic transformation after 1990. Financial, commercial, real estate and tourism services grew in weight and concentrated in the capital city. The service sector kept its strongholds in the CBD of the city and started to spread towards the adjacent residential areas by the main thoroughfares and in the large transportation hubs of the city. Large companies also started to establish their headquarters office and commercial centres on the very edge of the city but already in agglomeration settlements (e.g. Budaörs).

In the agglomeration zone a fundamental change occurred in the 1990s compared to the relative economic vacuum of the socialist period (Nagy, 1999). Right after the change of system, particular areas of the agglomeration mainly at the motorways – due to their excellent location – became the major target areas of foreign capital investments mainly in logistics, transportation and retail. These were the south western areas of the BMR close to the M1-M7 motorways. For greenfield investments these locations proved to be the most preferable. The destination of companies (both Hungarian and multinational) on seeing the saturation of this zone discovered other areas with preferential location. In the second half of the decade, areas in the northeast and southeast of the BMR by the M3 and M5 motorways respectively also became preferred destinations as well as areas by major roads leading to the north of the metropolitan region (e.g. Szentendre).

In 2001 the density of enterprises in Budapest was 134,6 per thousand inhabitants, while in the agglomeration zone it was 95,6/ per ten thousand inhabitants. A major difference in the form of enterprises was that in the agglomeration zone the single-person ventures had a higher representation with 52 percent while in Budapest their share was only 38 percent. The

distribution of the enterprises (especially SMEs) within the agglomeration zone followed the pattern of suburbanisation. The greatest positive deviances to the average density of SME-s in the agglomeration could be observed in the northern and the south-eastern parts of the agglomeration, while the greatest negative deviation was in the south-eastern part of the BMR.

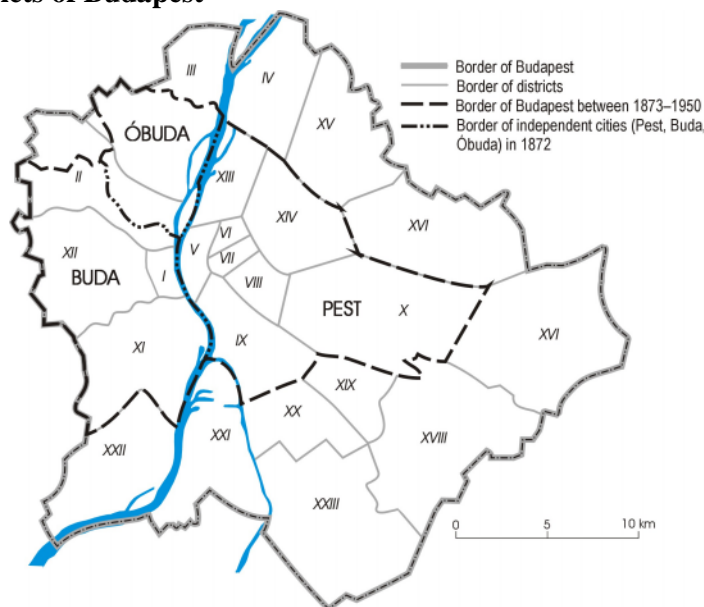
Commuting moderated the sharp differences between the employment rates within the BMR. However, the trends broadly followed the pattern of enterprise activity. At the end of the 1990s, due to the concentrated capital investment in the south-western part of the agglomeration the shortage of labour force became marked, which resulted in a reversed commuting (from Budapest and from other settlements to the agglomeration) (Bakes, 2006).

### 3.3.4 Governance policies

The change of political system caused a fundamental change in the governmental and administrative system of the country. The local councils under the direct control of the state were replaced by the democratically elected local governments. Act 65/1990 re-established self-governance in Hungary communes enjoyed equal rights independently from their size or legal status. Until 1997 the Budapest Agglomeration included 43 settlements and the city of Budapest. In 1997 by the 89/1997. (V.28.) governmental decree the Budapest Agglomeration grew to 78 settlements and Budapest. Thus, in 1997 there were 102 independent self-governed units in the BMR: Budapest, 23 city districts and 78 agglomeration settlements (due to separations their number grew to 80 up to now).

In Budapest, there was 22 elected local governments on the district level (which grew to 23 by the division of the 22nd district in 1994) plus one for the entire city of Budapest (the Budapest City Government) (Figure 3.4). The agglomeration settlements also elected their own governmental bodies, meanwhile they all belonged to a higher administration level, that of Pest county and of which Budapest is independent.

**Figure 3.4 Districts of Budapest**



Source: designed by the contributors

In spite of the fact that in the 1990s the coexistence and interdependence as well as the physical linkages of Budapest and its agglomeration zone were further intensified Budapest Agglomeration remained only a statistical but not an administrative (not even a real planning) unit.

Right from the beginning of the 1990s it was extremely complicated to harmonise interests and development plans on the territory of the BMR. The conflicts were developed over the clashing interests of the districts and the City Government on the one hand, and between Budapest and the agglomeration settlements on the other. The agglomeration settlements with the problems caused by growing suburbanisation had also different interests from the rest of Pest county, where they administratively belonged to.

The major contradictions the two-tier administrative system of Budapest holds are mainly due to the overlapping spheres of responsibility and the conflicting political interests. In some respects Budapest remained centralised (strategic development of the infrastructure, public transportation) while others such as the distribution of resources followed a decentralised model (Perger, 1999). No coherent policies of e.g. housing could be developed as housing became the responsibility of the distinct local governments.

For the coordination of responsibilities overarching administrative units it was legally allowed to ally and act in the legal form of 'local government associations'. The associations however were not based on real partnership but on compromise mostly with the interest of successfully competing for development resources. Common interests of city-districts and suburban settlements of the same location or type were already realised in the 1990s which increased the intention of cooperation but these embodied in real forms of cooperation and projects only after 2000.

It was only after 1996 (Act on Regional Development) that the Development Board of the Budapest Agglomeration was established which was intended to integrate representatives from the public private and the non-profit spheres. The Development Plan (Concept) of the Budapest Agglomeration was the product of this period (1998-99). The Concept was never put into practice lacking the governmental assent. The Board ceased to operate by the establishment of the Development Board of the Central Hungarian Region in 1999. Within the Regional Development Board the affairs of the agglomeration are dealt with by a sub-committee within the Strategic Planning Board.

The plans prepared for the development of the Budapest Agglomeration were only enough to call the attention to the dangers of the uncoordinated competition for development resources for inhabitants and investments, which led to wasting resources and environmentally unsustainable development already in the middle of the 1990s.

### *3.3.5 Social polarisation*

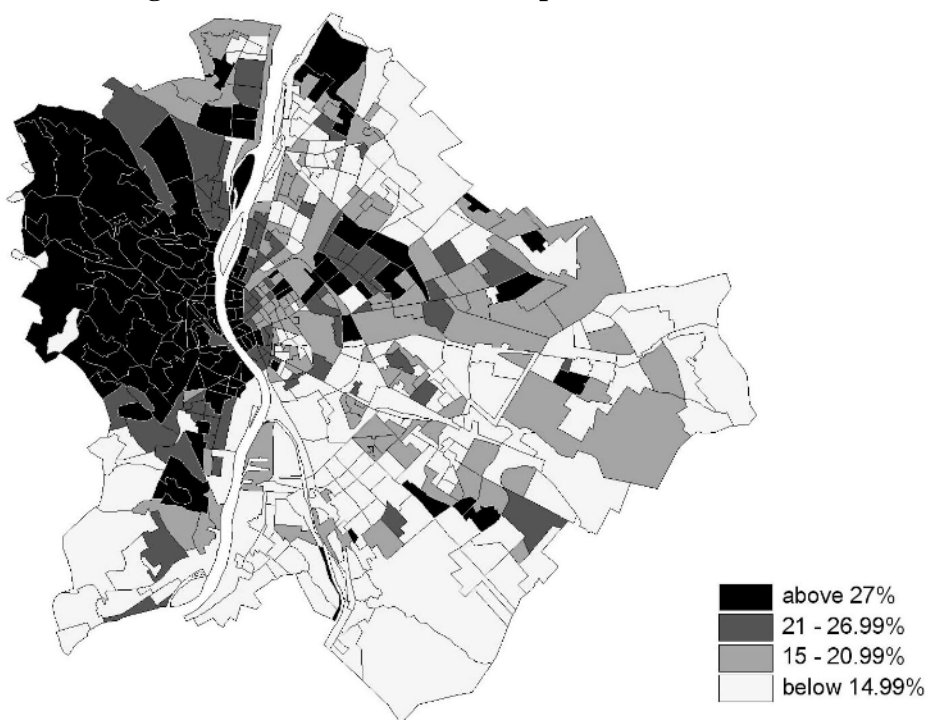
The socio-economic change generated an overwhelming transformation in the whole Hungarian society after 1990. The consequences of the social restructuring expressed in social and spatial mobility of people was nowhere more marked and distinguished than in the Budapest Metropolitan Region. The replacement of the old state-socialist economic structures by the post-fordist economy intensified social mobility and launched a substantial polarisation process, with a growing distinction between the lowest and the highest segments of the society. In Budapest and its agglomeration zone the scale of impoverishment was a lot less striking in the 1990s than in the poorest regions of the country but the relative difference

between the poorest and the richest social groups was the highest in the country: social polarisation reached its greatest extremes on the territory of the BMR.

Social mobility generated also spatial mobility therefore social polarisation manifested in extreme patterns of spatial segregation. Marked segregation patterns in Budapest could already be seen in the 1980s but took extreme forms only under the neo-liberal socio-economic conditions of the 1990s.

Spatial segregation can be interpreted inside Budapest and in the relation of the city and its agglomeration zone. The traditional (stereotypical) division of the better-off Buda (western) and the lower class Pest (eastern) sides of Budapest was kept and further strengthened in the 1990s (Figure 3.5).

**Figure 3.5 Ratio of graduated inhabitants in Budapest**



*Source: Census data CSO Hungary, 2001*

The concentration of the well-educated and entrepreneurial population was marked on the Buda side of the city especially in the middle and northern parts (2nd, 12th, 3rd and certain neighbourhoods of the 11th district). There was another concentration of the dynamic social group on the Pest side in the 14th district (Zugló area), which is often referred to as a Buda type Pest district, as well as in particular areas of the outer Pest side districts, which are parts of the garden city zone. High-income people in the extremely fashionable districts express their status via their building form of gated communities symbolically protecting themselves from the “rest” of the society.

The socially disadvantaged people were mostly concentrated in the inner city areas – especially in the south – where the worse housing standards prevailed still in the decade of the 1990s. This area was generally associated with low housing quality, high density and low status ghetto or ghetto type areas with high concentration of Roma population. Besides

representing very low standards in housing quality these areas were also more associated with poverty, unemployment, criminal elements and constant threat of violence.

Another concentration of lower-class people was a housing form rather than one particular urban zone the housing estates. The social composition of housing estates became more homogeneous after 1990. Between 1990 and 2001, more than 110 thousand people left the housing estates in Budapest, meaning a 15.2 percent decrease (Kovács, 2005). Only the households with no other options were stuck in the high-rise buildings against their will. The shares of elderly and socially disadvantaged groups rapidly increased in these housing types too.

For the period of 1990-2001 the evolution of a similar spatial segregation pattern can be seen within the agglomeration zone, which is attributed to the spatial preferences of the more mobile segments of society. The upwardly mobile households with higher income household-heads first concentrated in the originally more affluent western settlements of the agglomeration zone. By the second half of the 1990s due to a certain degree of saturation and the extremely high prices the new destination of suburban residential relocation was the north-eastern part of the agglomeration belt. Suburbanisation developed another dimension of social polarisation in the agglomeration settlements, the segregation of the newcomers and the original population. In these municipalities, the high status new inhabitants are often completely separated from the old village and its inhabitants, their lifestyle differ substantially and in the early years of the 1990s it often led to conflicting interests.

Meanwhile the south eastern part of the BMR and areas beyond the agglomeration – with much less attractive places, worse accessibility and therefore with considerably lower real estate prices – became the destination of low status people, who for affordability problems needed to leave the city. Intra-settlement conflicts also appeared in these places but were targeted at certain households mainly due to prejudice, fear of violence and theft by the low status newcomers.

### *3.3.6 Physical infrastructure / layout of the city*

The change of system and the liberalisation of the mechanisms forming the city structure resulted in substantial physical restructuring of the city. The socio-economic transformation coupled with weak and inconsistent development policy and planning the value of the different functional zones in the Metropolitan Region was reconsidered. The development prospects were almost fully dependent upon how the market evaluated areas, therefore free market caused the up- and downgrading process of urban zones changing their importance in the BMR. Within the Metropolitan Region with no doubt the winner was the agglomeration zone.

In the 1990s the interdependence of the core city and the agglomeration zone became stronger. The settlement branches developed along the railway lines and major roads became even more closely linked to Budapest than before. Due to the development of individual car use the settlement network of the agglomeration started to produce an expansive and spontaneous growth driven by the free market and local interests (Koszorú, 2000).

Certain infrastructures such as motorways and bridges over the Danube became extremely important to make the free and smooth movement of individuals and goods possible. Their construction made areas attractive for further capital investments in housing, industry, commerce and other activities. The most essential project of the 1990 was the still (2007) incomplete M0 ring around Budapest. The intention behind was clear: connecting the

motorways radiating from Budapest to divert the immense transit traffic from the city centre, and to make the flow of traffic easier within the agglomeration zone. The missing consistent development policy and consensus as well as the strong local lobbying forces caused the project slow down. Starting from the M1-M7 motorways in the west by the end of 1990s it just crossed the Danube in the south and reached M5, which leads to the south-eastern part of the country.

Another important project of the 1990s was the construction of the Lágymányos Bridge (the southernmost bridge for road traffic in Budapest). The construction works commenced in 1992 and were completed in 1995. The new bridge was crucial in easing the burden of the other bridges judged to be too few well before the change of system. The bridge connected areas which already in the late 1990s became scenes of massive public and private investments giving way to the development of a new centre of the city in the new millennium.

The new road infrastructure contributed to the upgrading of the agglomeration zone in a diversified way, meanwhile the city also became far too diversified regarding the intensity of capital investments and dynamism. In the 1990s in physical sense the greatest sufferers were the inner city historical residential areas with a massive dilapidating housing stock. The other obvious losers – where hardly any funding for renewal was going – were the housing estates of the 1960 and 1970s as well as the old industrial zone which became mostly derelict derelict brownfield zone.

The economic decline of the 1990s caused the general decline in housing construction as demand was very limited. Housing construction in Budapest fell under 8 000 units per year immediately after the political changes. The worst years came between 1992 and 2000 when on average there were 3000 housing units annually built in the capital city. The construction companies focused on the needs of high status people, which determined the location of larger scale housing constructions in the suburbs, in the villa quarter and the green belt of Budapest in the early years of the 1990s. Both state and market investments avoided the inner city old housing stock. Only one regeneration program survived the change of system in the middle part of the 9th district (Ferencváros). The systematic regeneration projects were only in the phase of preparation in the late 1990s. In the last years of the 1990s market also started to show growing interest towards the inner city areas, especially where the regulations were looser and market got free hand for transforming the old urban texture.

Another type of areas in decline was the brownfield, which – by the change of economic structure – lost function. Brownfield areas formed a nearly continuous belt on the Pest side intermingling with housing estates and derelict land. On the west in Buda only the waterfront areas in the north and the south of Buda meant quite a concentration. Brownfield investment though cheap did not prove to be preferable for the investors in the 1990s going after suburban location with good accessibility. The Hungarian Railways closed most of its huge transfer stations and kept only the large passenger stations and the smaller passenger stations intended to be connected into the suburban railway network. There were alternatives for the utilisation of the brownfield zone but the 1990s did not see the breakthrough in finding the ultimate solution.

New functions of the new capitalist city left their mark on the city layout and the cityscape. Large-scale office developments and other commercial investments appeared breaking the old architectural unity of the city. Larger commercial developments were constructed in internal transportation hubs and occupied larger and larger sites on the edge of the city by busy roads.



### 3.3.7 *Tolerance, openness, diversity*

Being the capital city of a country in the very heart of Europe, lying at the crossroads of cultural exchange, Budapest could never shield itself from international economic and cultural influences. The openness of the country and therefore these influences fluctuated in their intensity according to the historical situation. After 1990 no limits were placed on the free movement of people, money and cultures. Hungary and mainly the Budapest Metropolitan Region became part of the globalised world and a new destination for people from various corners of the planet.

In the 1990s the country was the destination of mainly people from the neighbouring countries. People came for various reasons but mainly for economic purposes. An exception was the wartime in Yugoslavia when refugees came but mostly stayed away from the capital city. People in masses arrived from the neighbouring Romania mainly for economic purposes. These people were mainly of Hungarian nationality with hope of better working possibilities and a better living standard.

They arrived in the greatest numbers in the years of the deepest economic crises in the early 1990s, therefore while tolerated some were looked at as foreigners taking the working possibilities for lower wages. With the stabilisation of the economy by the end of the 1990s these voices mostly disappeared. Their representation “among foreigners” also reduced from 78 percent in 1990 to 44 percent in 2000 (CSO, 2003).

The ‘immigrants’ from America and Western Europe mostly came to Hungary to represent multinational companies, often sent out by the management (Keresztély, 1998), but there were also some fortune hunters among them. These mostly high status expatriates from the advanced capitalist countries did not segregate themselves but integrated into the local higher status society.

Another relatively small but very influential group of immigrants was the Chinese. According to estimates by 1992 there were 40,000 people of Chinese origin in the country. By 2000, the number of Chinese in Hungary with a residence permit dropped to a little under 10,000, of whom over 80 percent was concentrated in Budapest; already at the end of the 1990s there were also thousands more undocumented Chinese. Nonetheless, this group is still the most visible of the immigrants.<sup>6</sup> In spite of their relatively large number and community living they did not transform whole neighbourhoods according to their cultural traditions. In part, the lack of concentrations was due to the deliberate policy of the highly autonomous district governments not to let an enclave evolve; none of them wanted to take on the responsibility of dealing with any complications that concentration might entail. (Földi & Van Weesep, 2006)

Besides the foreigners, settling in Budapest other minority cultures also strengthened in the city. Such was Jewish Orthodoxy, which shrank considerably and was hidden in the heart of the inner city, 7th district for decades. In the late 1990s a revival of the old traditions started, shops reopened, but more for the sake of the revival of the neighbourhood than due to the actual revival of the Jewish community.

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<sup>6</sup> Other Oriental or African immigrants may not have reached a critical number, their culture may not be so much based on community values, or their economic activity may not be commerce. At any rate, they are not so much on the scene.

Budapest did not become a classic example of multicultural cities in the 1990s though diversity became part and parcel of the local life. Racism had extreme manifestations from time to time, nevertheless Budapest did not become a dangerous city in that respect.

### **3.4 Summary**

Budapest as capital city of Hungary was established in 1873. In the life of Budapest the last three decades of the 19th century and the first decade of the 20th century was the peak of urban and economic development. The extensive capitalist development in these decades turned Budapest from a provincial East European town into a modern, cosmopolitan metropolis consisting of four- and five-storey buildings in eclectic style, large scale industrial areas, and modern infrastructure. This time also was the first period in the development of agglomeration around Budapest.

During the inter-war period the development of the Budapest Metropolitan Region slowed down. However, the substantial growth of the industrial sector and the extremely high rents inside the city contributed to the expansion of the suburban zone. This period of modernisation ended with the advent of state-socialism and the official foundation of Greater Budapest in 1950 when 23 settlements were incorporated in the core city. The next – state-socialist – period in the development of the BMR was characterised by a policy of forced industrialisation and by massive in-migration to Budapest. As a consequence of the forced industrialization throughout the 1950s, the forced industrialisation of Budapest in the 1950s, and the countryside in the 1960s, and later in the 1980s the continuously increasing role of the tertiary sector all had an impact on the development of the BMR.

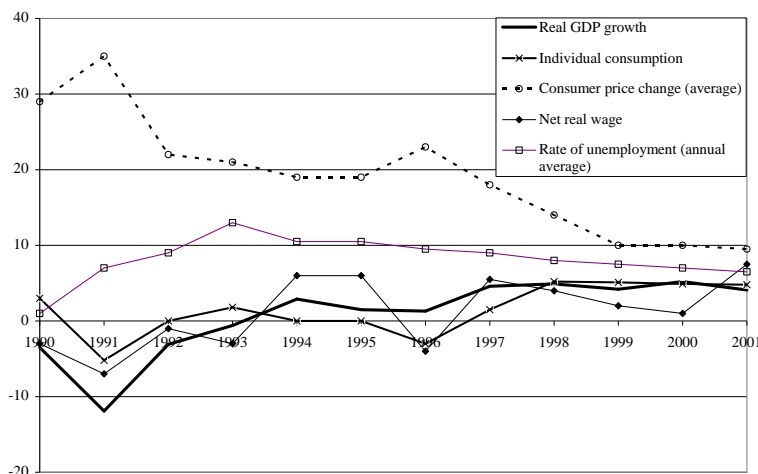
The fourth development period of BMR since 1990 is seen as the second great wave of suburban development around Budapest, which started in the late-1980s, but evolved only during the transition process after the change of system. At the same time spatial and social polarisation processes became obvious within the society and on the housing market, which led to emerging social (e.g. poverty, minorities) and economic (e.g. disadvantaged neighbourhoods, deprivation) problems in the BMR.

## 4 Current situation in the Budapest Metropolitan Region (2000-2007)

### 4.1 Recent economic development

The macro economic conditions of the country stabilised by 2000 and at the turn of the century Hungary was in a very promising position regarding its economic growth. Due to the stabilisation policy GDP grew by 25 percent in 5 years (1996-2001), unemployment reduced below 6 percent, national debt shrank to one-third. The spatial disparities however did not diminish i.e. in Budapest and the Metropolitan Region the intensity of economic growth compared to the national average became even more dynamic after the macro-economic stabilisation of the country (Figure 4.1).

**Figure 4.1 The macro-economic indicators of Hungary between 1990 and 2001 (in percent of the previous year)**



Source: CSO, Hungary, 2003.

In the improving economic context the conservative government (1998-2002) started to *re-centralise* the economy and adapted the long forgotten policy of making the state the engine of economy reducing the role of the market. By 2002 about half of the total incomes was centralised and redistributed. The return of the old economic model resulted increasing national debt, weakening competitiveness, shrinking savings and shaking investors' trust towards the Hungarian currency. Low inflation was only due to the deflation world economic context (Várhegyi, 2004).

By 2006 Hungary got into the last third of the new EU member states with only 4.4 percent GDP growth. The forecast of the World Bank was even worse for 2007 with only 2,2 percent, this is half of the value of the second least promising Slovenia. (Világ gazdaság, 25 01 2005)

In the past six years the Budapest Metropolitan Region managed to keep its leading position in the country in most respects. Industry is still important but in a transformed

structure and with a gradually reducing share. The five most important branches are: chemical industry, machine industry, food processing, woodworking and press. As for services the financial sector is still developing the most intensely.

The growth and location of investments reflect the uncertain macro-economic situation and also the increasing interest in the agglomeration zone and the areas beyond.<sup>7</sup> Between 2001 and 2004 the share of the Central Hungarian Region (including Budapest Metropolitan Region) from the value performed by investments was 38 percent. Within the CHR Budapest remained the main target of investors but the share of Pest County – mainly with target areas in the agglomeration zone of Budapest – grew from 26 percent to 31 percent by 2004 reducing the share of the capital city. After 2000 the growth rate of investments became moderate in the CHR compared to the rest of the country. It grew only by 2,1 percent, while in the country by 20 percent. In Budapest the volume of investments relative to 2000 increased in 2002 by 2.2 percent and in 2004 by 1 percent. In the years in between however decrease could be observed: in 2001 a decrease of 6 percent and in 2003 of 5 percent.

Between 2001 and 2004 in Budapest the largest share of investments (22,1 percent) went into transportation, logistics and postal service, 21 percent still went into industry, the third most important target was real estate and economic services (13 percent) almost equalling with commerce and repair (12.2 percent). In Pest county (including the settlements of the agglomeration zone) industry is still very important with a share of 49.1 percent in investments. In 2001-2003 31.5 percent of the total investments in Budapest was made by companies of foreign interest, in Pest county (including the agglomeration zone) the share was a lot higher (46,4 percent) for the same period.

Due to the alarming trends of the Hungarian economy the intensity of foreign capital investments reduced between 2001 and 2003. In three years their share from the total investments reduced from 36 to 28 percent in Budapest. The reduction was more marked in Pest county (including the agglomeration zone), where it fell from 58 percent to 36 percent.

In the period from 2000 the relationship of the national and the local government kept changing according to the actual governmental approach to the capital city. The right wing government was replaced with a leftist-liberal coalition in 2002. Lots of projects frozen before due to the conflicting interests of the national and the local government were launched in the capital city. Much more mega-projects have been realised in the past 6 years than ever before since the change of system. Naturally, besides the more harmonious policies other factors such as a stabilised economy at the turn of the new millennium and greater investors' interest were also important factors.

Recently, under the pressure of the worsening economic situation and the pressure of self sustainability more and more local governments have contracted for common projects. Such cooperation was made between the 6th and the 7th districts and the City Government for the renewal of a street in the historical centre. Intentions of closer links even common administration was on the agenda in the inner city districts on the one hand, and the Outer Pest side districts on the other. None of these initiatives have reached a more mature stage.

The economic and spatial changes of the Budapest Metropolitan Region were at their most intense on the metropolitan periphery. Not only did the existing functional areas change in the process of transition but new areas of economic growth with novel functional

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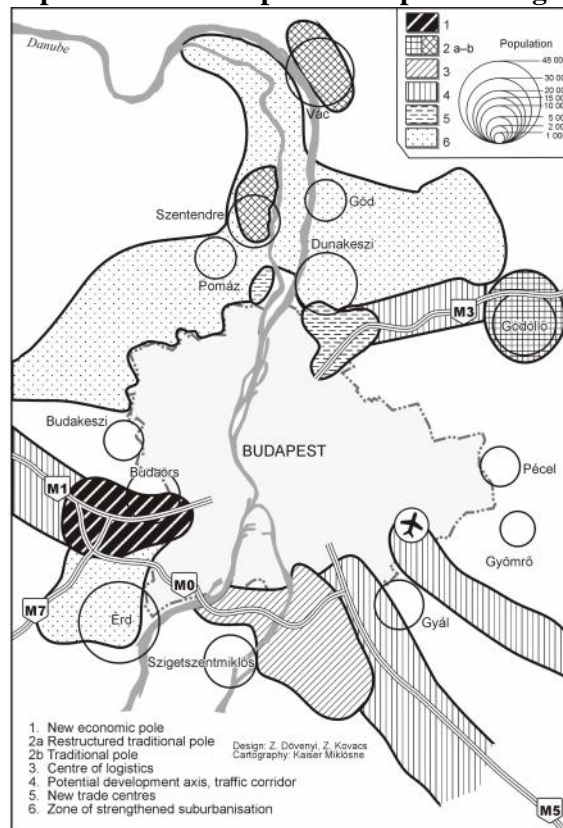
<sup>7</sup> Investmensts in Central Hungary, 2006 – CSO, Hungary

specialisations emerged. According to empirical evidences three new economic poles arose as a result of the restructuring process: Gödöllő town and its surroundings, Szigetszentmiklós-Dunaharaszti-Soroksár and Budaörs-Törökbálint (Figure 4.2). The economic pole around Gödöllő did not emerge within the green belt but by restructuring an existing commercial area. The long-term objective is the formation of a "Technopolis" through synergies of knowledge-oriented industries, and private and academic research.

The area Szigetszentmiklós-Dunaharaszti-Soroksár in the south of the metropolitan area along the M0 ring-motorway evolved into a logistics axis extending from the inner into the outer periphery. Massive investments in recent years and several major projects turned this part of the southern periphery into the biggest logistics centre of Eastern and Central Europe. Today the logistics zone is an important commercial transport hub between the Balkan/Western Asia and West-Europe (Dövényi & Kovács, 2006a).

Budaörs-Törökbálint is perhaps the most important growth pole in the metropolitan periphery of Budapest. In the 1990s the region around Budaörs and Törökbálint very quickly changed into the most dynamic economic area of the Budapest metropolitan area. The reasons for this success were two-fold: the beneficial geographical location and business-friendly local politics such as flexible policies for land-use and, by metropolitan Budapest standards a very low business-tax rate (1.7 percent). Due to the dynamic development processes in the growth pole of Budaörs-Törökbálint over the last decade, a multi-functional business-zone has evolved, which is a mixture of modern industrial and office complexes as well as retail and recreation facilities. It is primarily a zone of green-belt locations the initial finance for which came mainly from private investors rather than the municipality.

**Figure 4.2 Development poles in the Budapest Metropolitan Region**



As a conclusion it can be stated that recently the Budapest Metropolitan Region has been able to keep its leading economic position in the country. Mainly because of the economic drawback the interest of investors has shaken. The structure of economy has shown a further marked shift from industry towards the services. In the capital city nearly 80 percent of the value added was produced in the service sector, which is outstanding even by EU standards (SM, 2006). Regarding the pace of structural change within the MR there have been still differences between Budapest and the agglomeration zone, Budapest being more advanced in the process of transformation.

## **4.2 Growing and declining economic activities and evaluation of labour force**

The traditional branches of economy mainly in agriculture and in industrial production kept declining after 2000 but with a lesser intensity, as by recent times the market economy has already sorted out the non-competitive branches of economy in the BMR. As hinted in Chapter 3. heavy industry has almost completely ceased to exist in Budapest (metallurgy disappeared when the Csepel Works was shot down in 1992), what is left is machine industry and it is tied to the fragmented large industrial complexes transformed into industrial parks.

As the consequence of decline in the material intensive branches of economy the Hungarian National Railways – as the one and only railway company – closed all the stations and warehouses in Budapest, which were formerly related to freight transport. As the stress of freight transportation shifted to the roads logistics moved out of the city to the areas by the motorways in the agglomeration zone.

What was left from the production sector is concentrated in few old industrial areas in Budapest and in newly established industrial parks in the agglomeration zone. They are successful with a bit of a general slow-down and stagnation in most recent times (2006). In Budapest in 2006 42 percent of the industrial production originated from chemical industry, and 28 percent from the machine industry their volume of production expanded by 0,2 percent and by 8 percent respectively.

In Pest county with the agglomeration zone included the most important branch of industry was machine production with 60 percent of the total industrial production. This branch produced a 10 percent increased in the volume of production compared to 2005.

In spite of the fact that what was left from the production sector is prospering in Budapest and even more in the agglomeration zone does not exclude the that the other sectors mainly in the service and knowledge intensive sectors dynamically raising their importance and share in the economy of the BMR and the national economy as well.

### *4.2.1 Growing economic sectors*

The increasing importance of the innovative sector has been obvious in the past 15 years yet, it has become a real player in the game recently.

Innovative economic branches in Budapest include info-communication technologies, life- and physical sciences (medicine production, bio- and nano-technology), creative branches and cultural economy. While the supporting activities of the innovative sector are firstly the R+D, secondly services and production of the supplying companies and outsourcing companies and lastly the infrastructure (logistics, technological parks human infrastructure).

According to local and international experts R+D especially in the aforementioned branches of economy has very good perspectives and significant investors' interest has been shown especially in the capital city and the Metropolitan Region.

#### *4.2.2 R+D activities in Budapest*

By international independent rankings Hungary seems to have achieved an outstanding position regarding the R+D based high technology potentials recently<sup>8</sup>. Nevertheless, in Hungary R+D spending expressed in the share of GDP means only half of the EU average (1.85 percent). In 2004 181,5 billion HUF (726 million EUR) was spent on R+D activities, which was 3.3 percent more than a year earlier. The growth rate however lagged behind the growth rate of GDP, therefore the share of R+D expenditure from the GDP reduced from 0.95 percent to 0.89 percent by 2004.

Yet, the productivity of the innovative economic branches largely contributes to the competitiveness of Budapest in recent times and the importance of the new economy is expected to further increase in the near future.

R+D – just like higher education – is over-represented in the Budapest Metropolitan Region. In 2004 63 percent of the R+D expenditure was concentrated in Budapest. 44 percent of the Hungarian research institutions were based in the capital city. Only in Budapest the R+D spending was 109 billion HUF (436 million EUR). It meant 3.7 percent growth to the previous year. The research institutes (including state, university and other) on average spent 97 million HUF (388 thousand EUR) on research and development, which was double of the similar places elsewhere in the country.

In Budapest 87 percent of the R+D spending was going into the actual research and development activity, while the rest into R+D-related material investments. This rate of these investments reduced considerably from 2000 to 2004 from 21 percent to 13 percent. The drop was more serious than in the country on average, where it fell from 17 percent to 14 percent.

The number of people working in R+D was 25,480 in 2004, which was 2.5 percent more than in 2000 and represented 60 percent of the national total. The number of researchers and developers increased by 6 percent in the same period. 51 percent of the total research topics and development projects are concentrated in Budapest of which 36 percent is basic 38 percent is applied research and the rest falls in the category of experimental development.

#### *4.2.3 Innovation infrastructure*

High technology and other innovative activities tend to choose locations where similar activities are concentrated. The partly state but mainly market driven developments have appeared in Hungary in the late 1990s but started to grow rapidly only in the past 5 years.

In Budapest the most renowned ones in Budapest are INFOPARK and Graphisoft. Infopark is located on a formerly under-utilised marshland explored by the aforementioned Lágymányos bridge, on the Buda side. The complex is located in the proximity of the Technical University and the Eötvös Loránd University of Sciences. The popularity and therefore the increasing demand for more office space is due to the proximity of the universities but the companies

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<sup>8</sup> In the scoring of the OECD – Science Technology and Industry Hungary achieved the 6<sup>th</sup> position. In the Global Competitiveness Report the Hungarian Research Institutes received 4.8 points on the on a score-board of 7. On the European Innovation Trend Chart Hungary got 0.31 point from the maximum of 0.35.

also expect to profit from the synergy of their activities<sup>9</sup>. Graphisoft, a well-known software development company, decided to establish a technology park with the partial revitalisation of the former Gasworks in Óbuda, offering office spaces for such IT and biotech companies, like Microsoft and SAP.

In spite of the fact that the representation of companies with innovative activity is considerable in the technological parks of Budapest the general experience and surveys show that the intensity of cooperation and diffusion of knowledge is still limited. The real essence of technological parks is missing, there are only few examples of involving researchers from e.g. the Technical University.

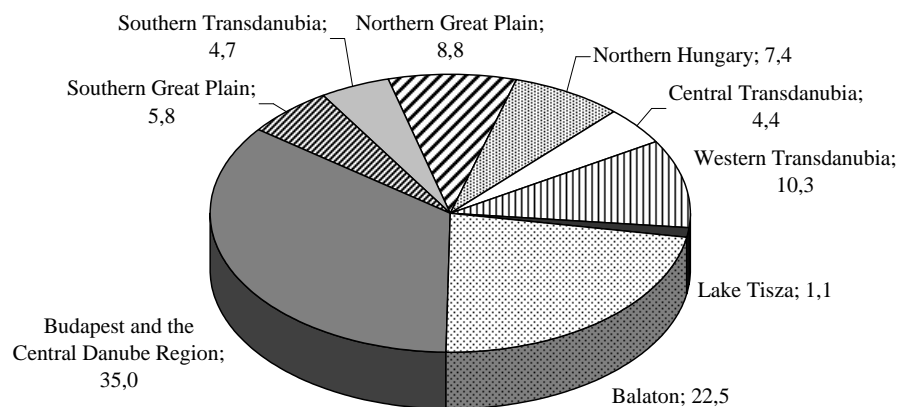
One of the other infrastructural related activities that have grown in importance recently in the Budapest Metropolitan Region is *logistics*. This affects the whole Metropolitan Region and even more the Agglomeration Zone than the actual city. International experts are aware of the high potential of Budapest in this activity but still – due to the incomplete infrastructural background – it lags behind its possibilities. Even under these circumstances BMR is the base of the largest inter-modal logistic business in East-Central Europe. The Budapest Intermodal Logistic Centre was started to be built in 2003 and is expected to be completed by 2007. It is connected to the highway network around Budapest.

Smaller logistic centres have been developing by the major highways but mainly on M1-M7 and also M3. There is a trend that the logistic investments tend to appear further out of even the Metropolitan Region by the aforementioned highways. In the 1990s the developments insisted on locations as close as possible to Budapest, while recently it is not such a serious criterion.

#### 4.2.4 Tourism

Budapest has remained the main tourist attraction of Hungary (Figure 4.3). However hard the agglomeration zone settlements try to attract more visitors they remain far behind. No doubt however that the development of tourism in Budapest produces improvement of statistics in the agglomeration zone as well. The longer the stay of the visitors the more probable that they also take into the program some of the attractions in the agglomeration zone (Gödöllő – Sisy cult, Domony-folklore programme).

**Figure 4.3 Arrivals by tourist regions (share in %)**



Source: Preliminary data CSO Hungary, 2006

<sup>9</sup> Some companies contracted and present in INFOPARK: IBM, HP, T-Com, T-Online, T-Systems, Nissan, Mazda, Winsdom, Epson, Sanyo Electric, Satyam, Sensenet, Searchlab, FreeSoft.



The importance of tourism in the total income of BMR was increasing after 1990. In Budapest in 2006 over 80 percent of the visitors staying at least over night were from abroad while the native visitors remained under 20 percent in all seasons of the year. In Pest county, where the agglomeration zone is located the reverse was the case, however the rate of foreign visitors from below 20 percent in February almost tripled in rate in the summer season reaching almost 50 percent in August (Table 4.1).

**Table 4.1 The number of visitors in Hungary**

	Budapest			Pest county		
	foreign	native	total	foreign	native	total
	number of visitors					
2004	1 979 266	360 935	2 340 201	96 891	171 231	268 122
2005	2 155 891	386 935	2 542 632	81 808	185 144	266 952
2006	2 053 244	378 419	2 431 663	82 266	177 711	259 977

Source: CSO, Hungary

The number of visitors kept growing until 2005 in the Budapest Metropolitan Region. In 2006 a decline occurred compared to the previous year. The decline was sharper in Pest county (93.2 percent of the previous year). In Budapest the number of visitors also fell by 4.8 percent. The decline was a bit larger with respect to the foreign visitors 5.2 percent while in the case of natives was only 2.4 percent (Table 4.2). Within the tourism industry of Budapest the most important tourist products are cultural-heritage, MICE and health tourism (Michalkó, 2001).

**Table 4.2 Arrivals, guest nights and average length of stay in Budapest**

	Commercial Accommodation		Hotels	
	2006	2006/2005	2006	2006/2005
	Domestic			
Arrivals (thousands)	378	-2.6%	312	-3.8%
Guest Nights (thousands)	871	-0.3%	725	-1.4%
Average Length of Stay (nights)	2,3	+2.3%	2,3	+2.5%
	International			
Arrivals (thousands)	2053	-5.2%	1933	-5.8%
Guest Nights (thousands)	5177	-7.5%	4875	-8.3%
Average Length of Stay (nights)	2,5	-2.5%	2,5	-2.6%
	Total			
Arrivals (thousands)	2432	-4.8%	2245	-5.5%
Guest Nights (thousands)	6048	-6.6%	5600	-7.4%
Average Length of Stay (nights)	2,5	-1.9%	2,5	-2.0%

Source: Preliminary data CSO Hungary, 2006

#### 4.2.5 Cultural economy

Being the specific cluster of the metropolitan regions cultural economy – in close relation with leisure and tourism – is one of the most dynamically developing elements of the economy of the Budapest Metropolitan Region. Besides the other innovative branches cultural economy also has its greatest stronghold in Budapest in Hungary. The Agglomeration Zone has a much less articulated role in this field in spite of the fact that undeniably there are raising cultural sub-centres.

The actors of cultural economy are not only the cultural mega institutions but it is more and more a network of related small and medium enterprises. The increasing importance and productivity of cultural economy in Budapest is a result of the macro-economic stabilisation the strengthening and multifaceted demand that is why its weight became significant in the past 5-6 years. It has also become a key factor in the physical and moral renewal of the city-centre assisting in the revival of the historical rundown residential zone. Like in other sectors of economy the participation of market actors (as professional organisers and as supporters) and also that of the civil ones outweigh the importance of the state, however missing central support still affects the sector very sensitively.

Budapest concentrates the greatest number of cultural institutions, and the regional centres of foreign cultural institutions in Hungary. The dozens of festivals (e.g. Spring and Autumn Festival, Budapest Parade, International Circus Festival) the open-air mega programs (e.g. Island Festival) and thousands other minor cultural events attract foreign and Hungarian visitors alike. According to the statistics, the cultural institutions and the civil organisations together organised 520,000 programs attracting more than 13 million people altogether in 2003.

#### 4.2.6 *Bank sector*

As part of the macro-economic changes the *consolidation and privatisation of the banking system* is to be noted as it supports the conclusions made on the development of housing finance and along with the development of loan portfolios the increasing consumption potential of the population.

As the unavoidable effect of the transition, most state owned banks lost their capital by 1992. In the course of the 1993-94 bank consolidation program the banks were given capital injections from the state. Meanwhile the privatisation of banks continued. After the consolidation period privatisation got a new impetus. The investors were foreign banks. By the end of the 1990s the foreign share in the banking system was as high as 60 percent, while the representation of the Hungarian state shrank to only 21 percent (Hegedüs & Várhegyi, 2000) – the rest (about 19 percent) was in the hands of the Hungarian private investors.

Liberalisation and privatisation conditioned the improving ratios of capital adequacy and profitability. The presence of banks in the everyday life of firms and people became stronger the credit reserves of firms multiplied in the second half of the 1990s and people placed their personal savings in the banks (Hegedüs & Várhegyi, 2000) as a justification of growing trust and expected profit.

#### 4.2.7 *Labour force*

The change in the characteristics and structure of employment reflects a more advanced stage of transformation in the economy of the Budapest Metropolitan Region.

In Budapest between 2001 and 2005 the share of the economically active population (employed and unemployed together) increased to 47 percent, which meant a 2.2 percent increase to 2001. This value was 4.7 percent higher than the national average. The active-inactive rate was 100/119 in Budapest and 100/150 in the country in 2005. The rate of unemployment in 4 years (2001-2005) reduced from 2.8 percent to 2.5 percent among the economically active population.

The number the employed in Budapest was 755 000 in 2005, 15 percent higher than in 2001. Within the employed the share of people under 30 decreased due to the fact that the age

for starting a career is generally growing. The age structure of people in Budapest is older on average than in the country, the rate of employed over 49 exceeds the national average by 5 percent. Regarding the composition of the employed by economic activities the share of industry further decreased compared to 2001 (from 21.3 to 18.9 percent). Employment in services however grew from 78.2 percent to 80.6 percent.

In Budapest commercial activities alone occupy 130,000 people. There has been a 10 percent increase in the number of employees in real estate and economic services between 2001 and 2005, therefore this branch accounts for 120,000 employed. The processing sector reduced its share by 18 percent but still occupies the third place in the structure of employment.

The representation of the employed in manager and other higher rank white-collar jobs was 61.9 percent, which was almost 20 percent higher than the national average (43.4 percent). The share of employed people in industrial blue-collar jobs reduced to 16.9 percent by 2005, while the national average was more than 10 percent higher (29.5 percent). Among the employed the general level of education has also improved: the share of employed with higher educational diploma increased from 29.8 percent to 34.6 percent from 2001 to 2005 – this was 13.8 percent greater than the national average. 40 percent of the employed people had secondary school degree in 2005.

According to recent analyses while the share of people with higher educational diploma is increasing and there is an unusually high representation of young unemployed people with higher educational diploma, there is a shortage in skilled as well as in the unskilled workers in industries such as construction and processing.

#### *4.2.8 Higher education*

After 1990 as the result of the changing demand of the transforming economy the higher education was facing lots of dilemmas especially as their finance was basically dependent on the quota received from the state. The higher educational institutions grew in number as well as the number of majors and students. Economics, law, informatics grew in popularity mainly with the hope of students to find well-paid jobs. Meanwhile courses for teachers, science and arts lost popularity.

The balance between the demand of economy and the supply of workforce by universities and colleges was not harmonised systematically. On some of the majors like law there have been overproduction of labour for years, while by others such as engineering there have been a serious shortage.

The situation was already critical in the late 1990s. Meanwhile in 1999 Hungary joined the Bologna Declaration taking on the responsibility of transforming the higher education according to the agreement in an attempt to join the European Higher Education Zone. The expected and experienced consequence of this transformation is shrinking state financed places, yet growing number of students.

Budapest Metropolitan Region has always had the largest concentration of higher education institutions in the country. This central role remained and even strengthened in the past 15 years. In the academic year of 2004/2005 two-thirds of the Hungarian higher educational institutions ran courses in Budapest, this meant 44 institutions of which only 10 were not based in Budapest. 20 of these institutions were run by the state and the rest belonged to either foundations or the church. 75 percent of the students attended state

universities 17 percent foundation schools and further 6.4 percent institutions run by the church.

From 2001 the total number of students increased by 19 percent in Budapest, it was 168,000 in 2005. However, the ratio of students studying in Budapest is much lower than in the 1980s. Half of the students attended collages (equalling BSc and BA) further 37 percent attended universities (equalling MSc and MA) and 7 percent participated in post-gradual specific education.

In the higher educational institutions of Budapest 25 percent of the students participated in courses of economics and management, 18 percent studied technical sciences and 12 percent studied arts. Relatively low share participated in courses of information science (5.6 percent), similar was the representation in law studies.

### **4.3 Economic profile (specialisation)**

For the definition of the economic profile in the BMR a complex indicator is used, which was derived from various conjuncture indices. According to this complex indicator the sector of the highest importance in the economy of Budapest is real estate – economic services, while the second most significant is processing industry. On the third place commerce is producing such pace of growth that – keeping its dynamism – it soon will catch up with processing and will take its position.

Economic specialisation of the BMR reflects the general trends of specialisation in the metropolitan regions of the East-Central European countries. The intensity of growth in the sectors related to the new economy reflects how huge the gap was between the standard and productivity of commerce, logistics, business services and tourism in the advanced capitalist states and the post-socialist countries.

The metropolitan regions connected mainly to the capital cities in the new capitalist countries such as Hungary have been in competition with one another since the change of system. Before 2004 the competition was targeted at leading the countries into the first round of EU enlargement. Recently the advancement of these economic branches has become a condition of competitiveness to fully integrate the economy into the European Union, which by the privatisation of the bank sector, tourism complexes (large international hotel chains) already started in the 1990s. Even before becoming full-EU members commerce coupled with transportation concentrated on roads largely intensified, which necessitated the establishment of the logistic centres near and in the metropolitan regions, the greatest consumers of all goods. *Logistics* as an economic activity became a predominant target of investment and the Budapest Metropolitan Region was not an exception. The strategic relative location of Hungary and the capital city in the crossroads of traffic and transportation routs even enhanced the significance of this activity.

Openness as well as improving standards of services and coupled with wider publicity caused *tourism* to become one of the most dynamically growing branches of economy in the post-socialist economies. Travelling has become accessible to the middle and lower class people of Europe, which made tourism a rapidly growing industry especially in regions served by airports. The Budapest Metropolitan Region is one of those regions, which managed to profit from the upswing of cheap air companies. Indicative of the rate of growth, when introduced these cheap air companies served international airport Budapest Ferihegy 2.

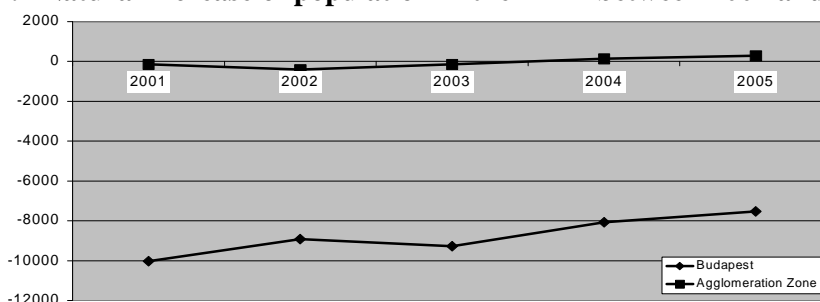
in September 2005. These companies were (had to be) directed to Budapest Ferihegy 1. (the renewed old international airport of Budapest) because of the continuously growing passenger traffic.

#### 4.4 Population composition, recent dynamics and social polarisation

The demographic trends of the 1990s basically proceeded after 2001 with slight micro-level changes. The total population of Budapest Metropolitan Region kept decreasing by further 1 percent between 2001 and 2005. The population of the agglomeration increased by almost 10 percent, while Budapest lost 5 percent of its inhabitants relative to 2001 (Figure 4.4). In the past 25 years it was the year of 2006 when the population of Budapest did not decrease compared to the previous year. The increase was minimal – below 1000 persons – and according to analysts it was not due to real population gain but the increasing number of people officially registered but not living in the Hungarian capital (many of them foreigners).

Within Budapest the loss of population between 2001 and 2005 remained between 5-7 percent by districts but there were some extreme cases and surprising turns according to the statistics. The classic CBD of Budapest decreased by more than 50 percent by 2005, while some inner city districts, which earlier showed massive population loss started to gain population. According to the statistics the 6th, the 7th and the 8th districts experienced over 20 percent increase in the population.

**Figure 4.4 Natural increase of population in the BMR between 2001 and 2005**

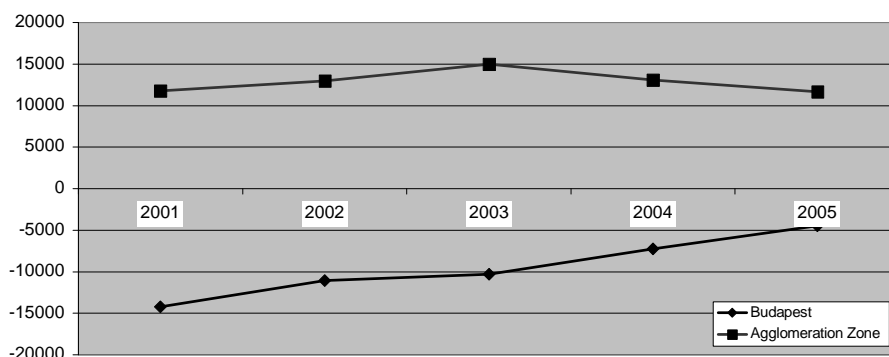


Source: *Statistical yearbooks CSO, Hungary, 2001-2005*

The natural increase of the agglomeration zone turned positive in 2004 and 2005 after a continuous improvement. Even in Budapest the annual loss of people via natural processes went below 8,000 by 2005, which shows an improving demographic trend. The migration balance shows an equalizing process i.e. while the migration gain of the agglomeration has been decreasing since 2003, Budapest started to show a marked trend of decreasing loss. The figure went down from almost 15,000 a year in 2001 below 5,000 people in 2005.

Between 1990 and 2005 Budapest lost 105 000 inhabitants while the agglomeration gained 155,000 by migration. In Budapest the migration loss was the greatest between 1995 and 2000, cca. 60 percent of the loss was realised in these 5 years. After 2000 this became a lot more moderate. The migration gain in the agglomeration zone kept growing year by year. The gain of the period 2000-2004 (65,000 inhabitants) was double the period of 1990-1994 (Figure 4.5).

**Figure 4.5 Balance of migration in the BMR between 2001 and 2005**



Source: Statistical yearbooks CSO, Hungary, 2001-2005

As for the total change of population the agglomeration zone increased by 158 000 in 15 years and half of this increase was produced in the period between 2000 and 2005. Nearly 70 percent of the total increase was realised in the southern and the north-western sectors of the agglomeration zone (33 percent on average), while the northern zone experienced the smallest increase of 16 percent by 2005.

By 2005 in nearly one-third of the settlements (3 towns and 27 villages) the population increase exceeded 40 percent.

The population of the BMR was 2,44 million on the 1st of January 2006. 70 percent lived in Budapest while the rest in 23 towns and 57 villages. 31.6 percent of the inhabitants of the agglomeration zone were the inhabitants of settlements with population over 10,000 but below 20,000 (12 towns and 4 villages). The only town with over 60,000 inhabitants was Érd in the south-western sector of the agglomeration zone.

The *population density* of the BMR showed a great variety depending on the mode of housing construction. The population density of Budapest exceeded 3,200 inhabitants/km<sup>2</sup>, which was 9 times higher than the average of the agglomeration zone. The most densely populated settlements are concentrated in the southern sector of the agglomeration zone. This sector represents one-fourth of the total population and the population density here is 500/km<sup>2</sup>.

The *age composition* did not show considerable changes compared to 2001 while kept the trends taken on by the BMR in the 1990s. Next we compare the values of 2005 to those of 1990. In this period the rate of people below age 15 dropped to 14 percent, which was 4 percent lower than in 1990. Within the BMR population of Budapest is clearly ageing: in 2005 the same age group here represented only 12 percent while it was 17 percent in the agglomeration. In 1990 the rate of people below 15 and over 65 (aging index) was 100/80 in 1990, which increased as high as 100/118 by 2005. In Budapest it reached a more extreme value, 100/146 by 2005. The agglomeration zone however reflected a lot more favourable situation with an ageing index of 100/72 in 2005. Within the agglomeration zone the south-eastern sector seemed to have the worst values of the index.<sup>10</sup>

As for the distribution of population by *gender*, in 2005 there were 1 121 000 male and 1 301 000 female inhabitants in the BMR. Thus, the male-female rate was 1000/1160 in the BMR, which means 36 more than 2001. In Budapest the value was 1195, while in the

<sup>10</sup> Demographic Trends in the Budapest Agglomeration Zone, 2006, CSO

agglomeration zone 1081. In Budapest in certain age groups the gender composition is different. Over-representation of female population appears from the age-group of 25-29, which becomes considerably higher from the group of 50-54 (Brinszkyné, 2006).

*Marital status* and family structure in Budapest differs the national trends: the rate of married people in 2005 was 6.4 percent lower, the representation of single people was 3 percent higher than the national average (CSO, 2005 micro-census). In this respect, the situation in the agglomeration zone is more like the national trend and partly that is an explanation for the higher natural increase.

By 2005 the share of women with no children (+0.6 percent) and with only one child (+4 percent) increased while their share with two (-4.2 percent!) and three +more children decreased.

By 2005 the average level of education in the whole population further improved in Budapest compared to the favourable trends of the 1990s. The share of people with secondary school degree and higher educational diploma increased by 5.3 percent and by 4.2 percent respectively in the relevant age groups compared to 2001. The share in 2005 were 64 percent and 28 percent. The national average for both indicators is much less favourable than in Budapest. Due to the great number of high status migrants the agglomeration zone is nearing very close to the values of Budapest.

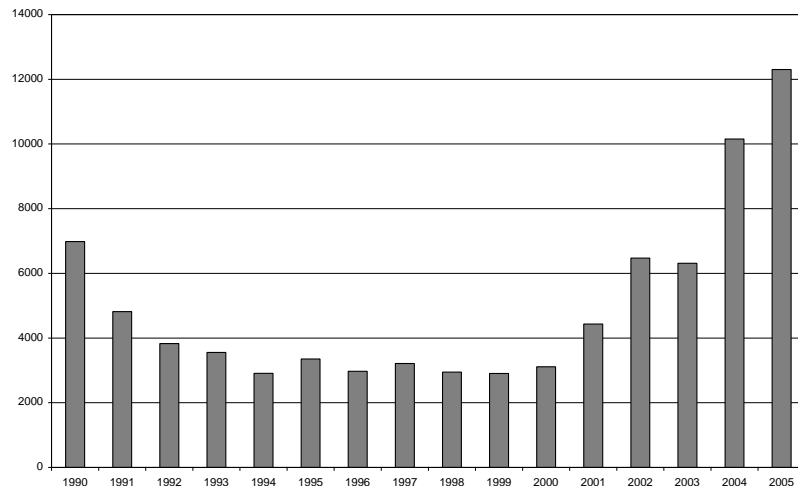
Social polarisation and the consequential spatial segregation sustained and even enhanced compared to the 1990s. Recently it kept the same patterns except for the fact that some of the inner-city neighbourhoods on the Pest side with aging and low status population have been undergoing massive population change due to the local government and /or market driven rehabilitation programs and actions.

The most marked manifestation of polarisation visible for everybody visitors and local inhabitants alike are the homeless. Homelessness appeared in masses after 1990. The number of homeless people can only be estimated. The last unofficial enumeration of homeless people in Budapest happened in 2005 by civil organisations, such as the Menhely Alapítvány (Shelter Foundation). According to this survey there were around 3,000 people living in the streets and further 5,000 staying in temporary shelters and social institutions for homeless people.

#### **4.5 Housing market and infrastructure**

After 1990 the housing market situation in Hungary – besides privatisation – has been most affected by the handicapped housing finance system for about 10 years. As a consequence, the housing market was stagnating for almost 10 years. This was cured by the new institutional and legal background formed in the late 1990s. Bank consolidation and privatisation did not bring immediate improvement in the field of housing finance. The governmental subsidies guaranteed were still missing all the way in the 1990s partly as a consequence of this housing construction in Budapest drastically fell in the 1990s (Figure 4.6).

**Figure 4.6 Housing construction in Budapest 1990-2005**



*Source: Statistical yearbooks CSO, Hungary*

The housing loan subsidy system as part of the Housing Finance Program for private housing, social housing, and the old age pensioners' housing was introduced in 2000-2001. These series of measures caused the upswing of the construction industry and made the access of the middle class to housing easier (Csabai, 2004). The new government after 2002 changed the conditions of the mortgage program in June 2003 limiting the eligibility. All in all the program had undoubted impact on the housing market, but not as big as it was expected. Yet, housing construction in Budapest grew to cca. 4,000 in 2001 and to 7,000 in 2002 and 2003 the peak was 2004 when housing construction exceeded 10,000 units per year. The withdrawal of the state subsidies and the increase of the various taxes related to housing worsened the position of both the supply and the demand sides of the market by 2004-2005. There was no proper governmental tool to give a new impetus to it: the New National Housing Program including the Nest-building Programme (for the young couples under 30) and the Social Rental Programme (for the socially disadvantaged) prepared and modified by the left-wing government failed.

The housing affordability in the Budapest Metropolitan Region has always been worse than in the rest of the country. The average housing prices were 40-50 percent higher than the national average while the household incomes were only 15-20 percent higher. The prices grew by 35 percent between 1992 and 1998, while they doubled between 1999 and 2003 (Hegedüs & Teller, 2005). Wages did not quite follow the same trend, nevertheless affordability improved considerably after the new financing system was launched in 2000 due to increasing state support of loans for housing. This greatly influenced housing mobility in the metropolitan region of Budapest, but left almost untouched the spatial pattern of housing prices.

The housing market of Budapest Metropolitan Region is characterised by serious spatial disparities expressed in the housing prices and no or hardly sign of levelling out could be observed up to 2005. This tendency keeps social segregation growing as the lowest income families cannot break out of their neighbourhood, while the segregation of the well-off is assured by the skyrocketing prices, which act as an invisible wall around them (Tóth, 2005).



The housing stock of the Budapest Metropolitan Region in 2005 was 1,120,077 this meant a 5.3 percent growth compared to 2001. In the agglomeration zone the growth was double as dynamic as in the city, while the growth was 4.1 percent in Budapest, it was 9 percent in the agglomeration zone.

Large housing project found location on the former brownfield areas and under-utilised zones. The waterfront areas became especially popular among developers on both sides of River Danube in both the south and the north of the city (in the 13<sup>th</sup> and 11<sup>th</sup> districts). The great architectural dilemma has been the issue of high-rise buildings in Budapest. So far no licence has been issued for such projects but it is placed high on the agenda by powerful and strong developers.

In the late 1990s but especially after 2000 a massive *rehabilitation* process started on the endangered neighbourhood types of the inner-city old housing and on the housing estates. The inner city especially the neighbourhoods near the city centre started to experience rising interest of investors. Due to the high rent gap developers have become more interested in the building sites than the renewal of the old buildings therefore the privatised old building stock was often sold to developers who demolished and replaced by new constructions. For the improvement of the housing conditions it is a process welcome in the dilapidating inner-city but it causes damage and massive losses in the old and valuable historical physical structures. The most serious damages have been caused in the 6th and the 7th districts in spite of the protests and demonstrations by very active professional civil movements.

More systematic and local government supported PPP renewal proceeded in the 9th district and was launched in the extremely run-down 8th district where on the Corvin-Szigony project area of 300,000 m<sup>2</sup> nearly 1,500 units were demolished and a thousand more were kept for redevelopment (Figure 4.7).

**Figure 4.7 Rehabilitation areas in Budapest**



Source: City Government of Budapest, 2005

The redevelopment of the housing estates of Budapest called “time bombs of socialism” means the burden of the regeneration of about 200 thousands dwelling units in ten years (Csizmady, 2005). The estimated number of dwellings in need of immediate physical renewal was 18,000 at the beginning of the new millennium. Up until 2005, more than 37,000 dwelling units could be supported and renewed by the panel program launched in 2001 (Egedy, 2005).

The *infrastructure* of the Budapest Metropolitan Region has been rapidly developing, however the recent serious economic drawback seem to cause the projects slow down.

The immense road construction projects proceeded and are in progress. The eastern sector of the M0 ring is expected to be completed by the end of 2007. This section connects the main road No4 (leading to the east-south-east of the country and M3 motorway leading to the north-eastern regions. A new motorway (M6 – taking to south of the country) connecting the south west of the agglomeration zone into the national economic blood circulation is also in the process of construction though with a bit of a delay.

Connecting the city with the agglomeration with highly efficient suburban public transport systems has been put high on the agenda of transport policy recently. It does not mean the construction of new railway lines but the transformation of the existing infrastructure into a network prepared for managing the immense number of people commuting from the agglomeration zone every day. The development of the network is based on the cooperation of the Hungarian National Railways (MÁV) and the Budapest Transport Company (BKV) and the relevant local governments. It is especially because the transportation hubs (the inter-modal centres) within Budapest need to be connected to these developments.

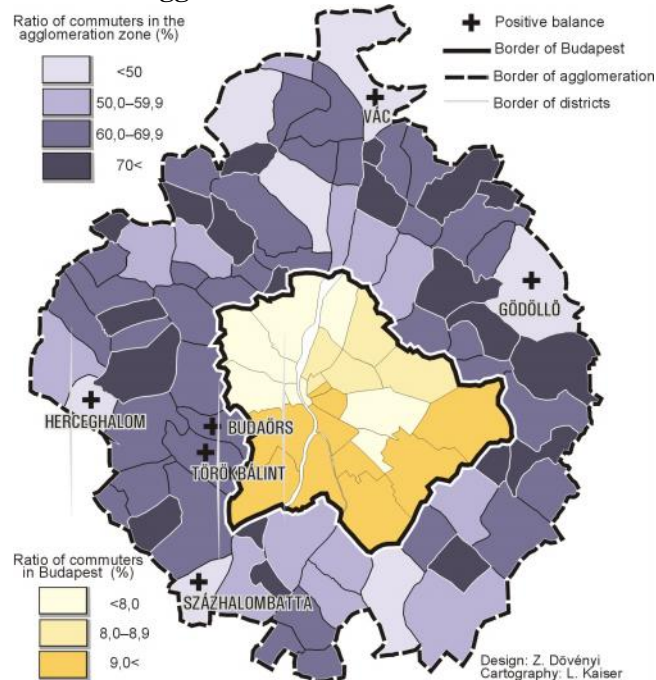
Hungarian National Railways has already carried out development for the higher standards of certain lines by replacing the old engines and separating the suburban services from national services on stations too.

The increasing functional specialisation has caused a marked increase in the rate of people *commuting* (leaving the borders of the administrative area where people live to work or study on a daily basis). The main destination of commuters within the BMR is Budapest itself. Within Budapest there are significant differences among the districts regarding how attractive they are for the commuters and it is dependent on their relative location and the functions. The districts where the daytime gain of people was the greatest (over 20,000 people) from other districts and from settlements were the CBD (1st and 5th districts the second with over 70,000 daily gain of people) the inner-city districts (6th, 8th and 9th districts) with administrative and service functions as well as the former transforming parts of the industrial zone (11th and 13th districts). In the districts of mainly residential function: mainly the outer districts of Pest more people leave the district borders than arrive for the day.

In 2001, 31 percent of the population of the settlements in the agglomeration zone commuted to other settlements to work or study. But they also received people from other places for the same purpose. Nevertheless, there were only four settlements, where more people commuted to than from. Three of them are places with higher educational institutions: Gödöllő, Piliscsaba and Zsámbék, while Budaörs attracts more people than lose by its large number of workplaces (Figure 4.8). The most important sources of commuters were the ones where the greatest population growth could be observed before, which is an indicator of the fact that people taking part in the suburban movements remain closely tied to Budapest (regarding work and education). Eight of the ten settlements where over 40 percent of the

population commuted could be found in the west of the agglomeration zone. From Telki where the largest population growth was experienced between 1990 and 2001 47.6 percent of the population commuted in 2001.

**Figure 4.8 Commuters in the agglomeration zone**



The major sources of commuting mark those directions of public transportation that have been developed recently and should be improved in the future. The largest project of the Budapest *public transportation* system is the construction of No4 Metro line connecting the south-west of Buda with the centre and the east of the Pest side, thus connecting two extremely busy local transportation hubs. The construction works have been delayed but recently the stations started to be built on the first section.

A major tram line – the busiest in Budapest – was renovated the development was coupled with the change of the trams for modern cars.

#### 4.6 Tolerance, openness, diversity

There has been a significant increase in the number of people visiting and also staying temporarily or permanently in the Hungarian capital city. Another survey (by Studio Metropolitana and Capital Research) in 2005 examined the tolerance of the people of Budapest towards these people. The research separated the approach of locals to foreigners living in Budapest and to the tourists visiting the city. According to the findings the inhabitants of Budapest basically do not object to foreigner's settling and living in Budapest. The greatest tolerance was shown towards people coming from economically more advanced countries such as France, Italy, Germany and also the US and Japan. Similarly positive approach was expressed to the people of Hungarian nationality coming from the neighbouring countries. Much less tolerance was shown towards people coming from Serbia, Romania, the

Ukraine, as well as the Chinese and the Arabs. The same applies to the Africans and Afro-Americans, which shows that here it is not the country that counts but race overwrites the place of origin. According to the survey in general the people of Budapest are happy about the foreigners living in Budapest as they make culture more varied and more colourful. Meeting and making friends with these people help to practice foreign languages and learn about other cultures. The outcomes suggest that more than half of the inhabitants of Budapest have foreign friends. The most open segment of the Budapest society is young, educated more often male than female. The ones who refrain from having even contact with foreigners are over 60 and cannot speak languages.

People who have neighbours of foreign origin are in different situation yet, their approach and tolerance to their foreign neighbours also depend on their origin and the way they are able to integrate into the local society. Most people mention the Chinese as a group of people keeping close relation with their own kin exclusively not being able to integrate. Other less frequently mentioned groups are the Arabs, Ukrainians, and the Romanians. Almost half of the people participating in the survey thought that the chance to have quarters with a high concentration of one group of foreigners is high. They referred to the Chinese and the Arabs as people most prone to develop their own “towns”.

As for tourist, the people of Budapest think that it is important to have foreign tourist in the city understanding that this is a major source of income. There is no anti-tourist behaviour in the city, the objection is more to the fact that lots of people feel excluded from places such as restaurants, bars having price levels not affordable for the locals. One quarter of the locals think that the tourists often behave in an intolerable way, that they act as they would never at home. The role of the cheap flight companies is enormous in making the city more accessible to people of the younger generation and of lower income. Even in winter-time the hotels are fully-booked.

National and international research reveal that similarly to other post-communist states in Hungary the attitude of people towards foreigners is rather negative and the level of tolerance is low. In February 2007 TÁRKI Research Institute carried out a questionnaire survey in Hungary focusing on the general opinion of people about foreigners, and their attitude towards the immigration and settling down of different ethnic groups in the country as asylum-seekers. This survey was representative for the adult population of the whole country and the regions, including Central-Hungary.

According to the results of the empirical survey 60 percent of Hungarians can be classified as ‘realist’, 10 percent ‘xenophile’<sup>11</sup> and 27 percent openly ‘xenophobe’ (Table 4.3). Behind the national average marked regional variations can be observed. Most refusing is the population in Central-Transdanubia, which is one of Hungary’s economically most prosperous regions. On the other hand, North-Hungary appears as the most tolerant region. There is no single explanation for that, but North-Hungary was hard-hit by the economic recession after 1990, the rate of unemployment is still higher and the level of income is lower than the national average, moreover it has larger number of Roma population. All these contribute to a greater level of tolerance and more openness with regards foreign people and

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<sup>11</sup> Xenophile: would give asylum to everybody, xenophobe: would reject all asylum seeker, realist: would give asylum for certain people depending on their case

cultures. It is also astonishing that the population of economically better-off regions, including Central-Hungary and Budapest are below average tolerant.

**Table 4.3 The level of xenophobia by regions (%)**

	Xenophile	Xenophobe	Realist	Uncertain	N
<b>Hungary</b>	<b>10</b>	<b>27</b>	<b>60</b>	<b>3</b>	<b>1024</b>
Central Hungary	10	30	58	2	288
<i>Budapest</i>	<i>11</i>	<i>28</i>	<i>61</i>	<i>0</i>	
Central Transdanubia	7	34	54	5	118
Western Transdanubia	7	30	60	3	106
Southern Transdanubia	12	30	55	3	101
Northern Hungary	13	14	72	1	124
Northern Great Plain	6	28	65	1	151
Southern Great Plain	12	25	58	6	136

Source: TÁRKI Omnibus 2007 February

The attitude of people towards the settling down of foreigners highly depends on ethnicity. 58 percent of the population welcome the immigration of ethnic Hungarians living in the neighbouring countries. On the other hand higher proportion refuses the immigration of Romanians and Chinese. In this respect even Arabs are considered more positively. In this respect we can also observe significant regional variations. Central-Hungary and Budapest are below average tolerant for all indicated nationalities (Table 4.4).

**Table 4.4 The proportion of those who would give asylum by ethnicity and regions (%)**

	Ethnic Hungarian across the border	Chinese	Arab	Romanian	Russian	Piréz*
<b>Hungary</b>	<b>58</b>	<b>11</b>	<b>7</b>	<b>13</b>	<b>11</b>	<b>4</b>
Central Hungary	54	9	6	11	7	3
<i>Budapest</i>	<i>58</i>	<i>10</i>	<i>8</i>	<i>12</i>	<i>7</i>	<i>3</i>
Central Transdanubia	57	9	5	8	6	1
Western Transdanubia	61	19	11	20	16	3
Southern Transdanubia	54	12	6	12	15	4
Northern Hungary	70	9	3	15	12	2
Northern Great Plain	62	10	9	19	16	7
Southern Great Plain	50	10	6	7	7	4

Source: TÁRKI Omnibus 2007 February

\* Fictitious ethnicity

To sum up we can conclude that as an opposite to the general expectations the population of BMR is less tolerant towards foreigners than other regions in the country. Another more disappointing trend is that in the last couple of years the openness towards and the acceptance of foreigners among Hungarians has worsened at national level. We must also emphasise that the level of tolerance towards foreigners in Hungary is less attached to cultural values or living standard, but more to historical factors, social (and family) relations and stereotypes generated by politicians and the media.

## 4.7 Summary

After 2001 negative tendencies could be detected in the economic development of Hungary, which resulted in alarming national debt, weakening competitiveness, shrinking savings and shaking investors' trust towards Hungary. The worsening economic situation of the country influenced the further development of the BMR as well. Although a high share of investments went into transportation, logistics, postal, real estate and economic services, the intensity of foreign capital investments in Budapest unambiguously reduced and the share of Pest county grew. Thus, the position of agglomeration zone has been appraised within the urban region, new economic poles with novel functional specialisations and new industrial parks emerged around Budapest.

The traditional branches of economy mainly in agriculture and in industrial production kept declining, while economy has shown a further marked shift towards the services. The most important growing economic sectors are logistics, banking, R&D, tourism in close relation with cultural economy and innovative branches like info-communication technologies and life-sciences.

Demographic trends of the 1990s basically proceeded after 2001 with slight micro-level changes. However, social polarisation and the consequential spatial segregation enhanced compared to the 1990s. Another important feature of recent demographic trends is that the increasing economic prosperity and functional specialisation in the BMR has caused a marked increase in the rate of people commuting.

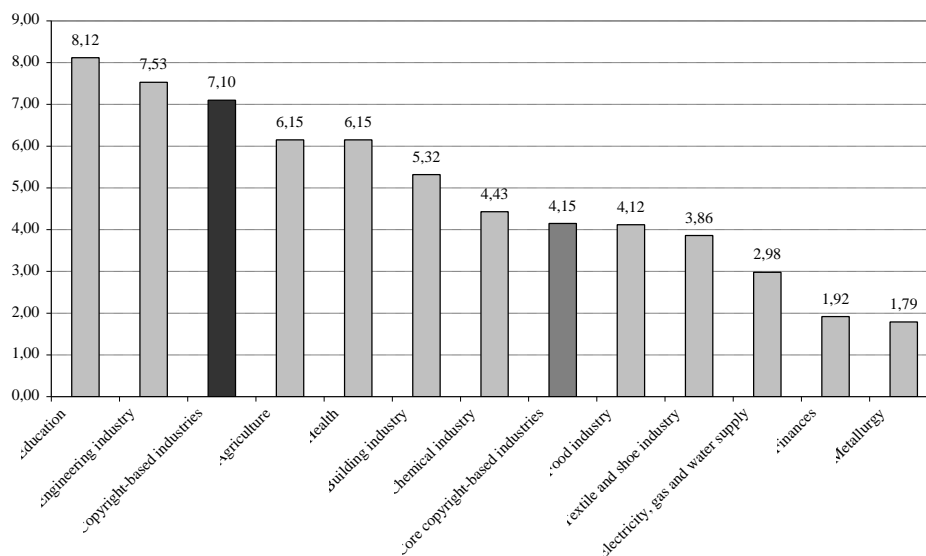
## 5 State of the creative industries and the knowledge economy

### 5.1 The economic contribution of creative (copyright-based) industries in Hungary

Upon the request of the World Intellectual Property Organisation (WIPO), the Hungarian Patent Organisation was among the first in Europe to conduct a survey on the economic contribution of copyright-based industries. The survey interpreted the copyright industry in a broad sense and it took into consideration all the activities relating to the creation, distribution, communication to the public, etc. of works protected under copyright law, or constitute the technical background necessary for the “consumption” of copyrighted creations, as well as serve them in any other manner. The *core of copyright industries* encompasses the cultural sphere (literature, press, music, theatrical productions, motion pictures) and software industry. The *partial copyright industries* include those that are only partially engaged in the production of copyrighted creations (e.g. furniture, architecture). The *interdependent (background) copyright industries* comprise for example the manufacture of TV sets, radios, DVD players and computers, while *non-dedicated support industries*, serving also the copyright sector, include general trade, transportation and telecommunication (e.g. telephone, Internet) (See Annex I).

Hungarian copyright-based industries are of vital importance not only because of their cultural role, but also because of their contribution to national economy that increases employment and added value. The copyright sector can be regarded as a considerable foreign-trade factor, which can produce in certain fields significant surpluses in exports (e.g. audiovisual and connected services). Statistics indicate that the economic weight of the copyright-based sector is equal to that of traditional industries. The 6.67 percent total contribution of copyright-based industries and the 3.96 percent contribution of core copyright industries to the GDP can be compared to the performance of industries such as the engineering industry (7.53%), chemical industry (4.43%) and building industry (5.32%) (Figure 5.1). The number of employees within the core copyright industries was 162,575, i.e. 4.15 percent of total employment. The rate of employment considerably surpassed the 3.1 percent average of the 15 EU Member States. This means that a higher degree of employment is required and indicates that “productivity” is lagging behind that of industrialised countries.

**Figure 5.1 The role of copyright-based industries in the Hungarian economy (ratio of employees compared to other economic branches)**



Source: Hungarian Patent Office, 2005

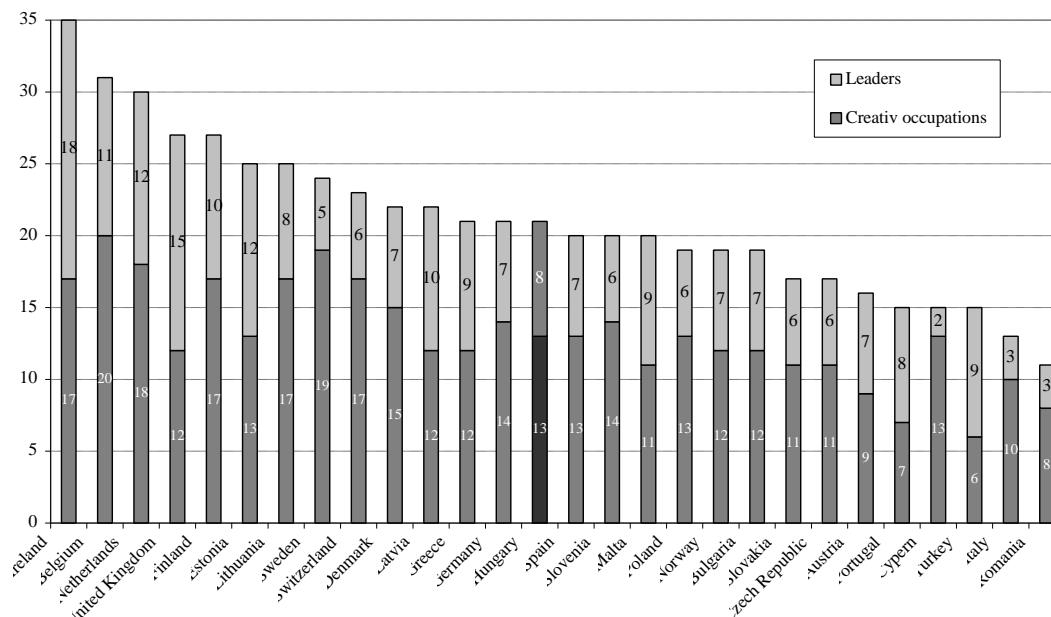
## 5.2 The Hungarian creative industries in international comparison

In 2005 the DEMOS Hungary Foundation carried out a comprehensive survey on the state of creative industry in Hungary compared to other European countries. In the following chapter the most relevant results of the study are summarised (Ságvári & Dessewffy, 2006).

According to Florida's theory the analysis of creativity based on the threefold unity of *talent, technology and tolerance*. In the field of talent among others the ratio of creative occupations and leaders in the workforce has been assessed. This could also be called *creative class index*, which shows the percentage of all employees in a given country who work in the so-called creative occupations. Hungary, with 21 percent of the total workforce in these occupations, is located in the middle of the investigated countries. The percentage of creative occupations amounts to 13 percent, and that of the executives to 8 percent (Figure 5.2). Among the countries that joined the Union in 2004 only the three Baltic States (Estonia, Lithuania and Latvia) are "ahead" of Hungary. Analyzing these data together with the simplest, but most reliable index of economic development, GDP per capita, no unequivocal, linear correspondence can be shown between the percentage of creative occupations and economic achievement in the individual countries. This means that the high percentage of creative occupations is no guarantee of economic prosperity. In this sense, Hungary can be found in the company of most Eastern and Central European countries as well as Greece, Portugal, Cyprus and Malta. Their common feature is a medium-percentage of creative occupations and a relatively lower or even the lowest level of GDP per capita in the European Union.



## 5.2 Ratio of creative occupations and leaders in European countries



Source: ILO Laborsta, 2004 (after Ságvári & Dessewffy, 2006, 13. p.)

Another component of talent is measured by the percentage of people having a degree within the 25–64 age-group of the population. The ratio of people having completed higher education is 17 percent in Hungary in the 26–64 age-groups which are 5 percent lower than the average of the 25 member states. Although this ratio increased by nearly 4 percent in the past 6 years and has also shown a dynamic increase since then Hungary still belongs to the last third of the Union member states. While the ratio of people with higher education in the workforce plays an important role in the measurement of the human resources of the knowledge-based, creative economy, the “official” agents of research and development also have their contributions to shaping the innovative potential of a given country. The proportion of research workers among all employees is Hungary with a rate of 124 is at the end of the middle range.

Using the indexes detailed above one can compute the so-called *Talent-index* summarising the percentages of creative occupations (*creative class*), of higher education (*human capital*) and of the employees in R+D within the workforce (*scientific capital*). This index contains standardized values of each country and the final value of the index is calculated by their averages. In term of Talent index, Hungary is 16th on the list, just after Austria and Slovenia (see Annex IIa).

The presence of technology in economic processes is certainly the fundamental determinant of growth and economic prosperity. One of the best indexes of this achievement is the percentage of GDP spent on research and development. According to international usage this should be divided into two parts: there is a fundamental difference between government spending on R+D (e.g. tenders or budgetary financing of research institutes) and the research and development spending of private companies. R+D spending as a percentage of GDP we find Hungary with a value of 1 percent in its “usual place” (16th), towards the end of the middle range, at the top of the last third. However, in Hungary and the other countries

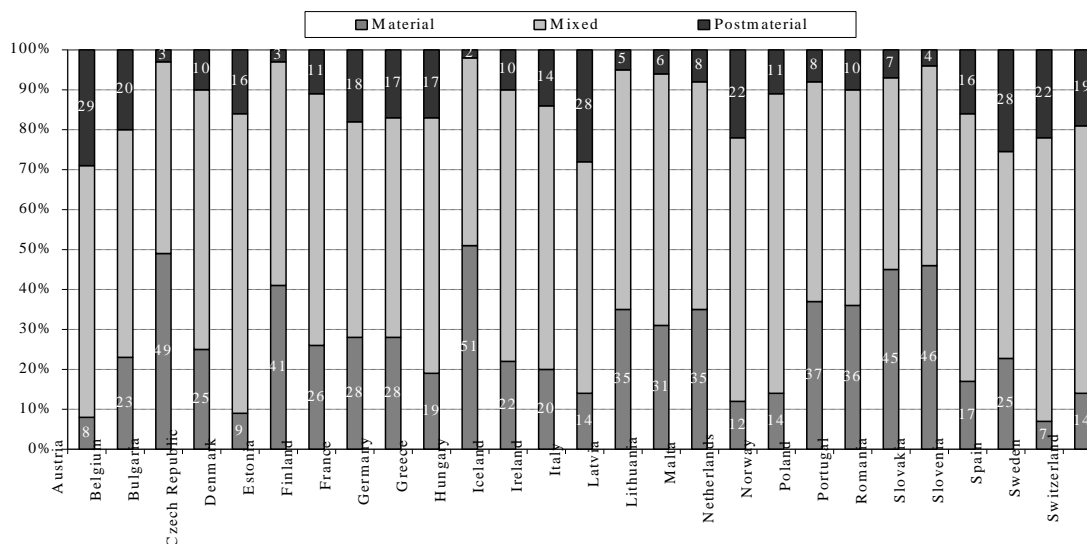
following it, research and development is essentially financed by central resources, i.e. by the state.

To measure innovative achievement a composite index including the different indicators connected to intellectual property can be formed. The determination of the *innovation index* is based on the number of the patents administered by the European Patent Office, the number of high-tech patents (innovations in biotechnology, information technology, the pharmaceutical industry, and the aerospace industry) by the same office (each per 1 million inhabitants), community patents and design patents (also per 1 million inhabitants). To form a condensed, complex innovation index they calculated the standardized averages of each index.

The formation of the *technology index* has been based both on the R+D fund compared to GDP and the index-value of the calculated innovation achievement. The technology index is the average of the standardized values of both indicators. Regarding the technology index Hungary is in 16th place, preceded by Slovenia and the Czech Republic in the region (see Annex IIa).

To define the *tolerance-index* the values of three indicators expressing cultural attitudes and one expressing general satisfaction have been drawn together. The first two indicators have been based on such aggregate scales that express cultural and ideological attitudes, the meaning of which can be briefly summarized in terms of traditional/secular and survival/self-expression values<sup>12</sup>. The dimensions of self-expression and survival are closely connected to the polarisation of materialist and post-materialist values. The percentage of those having rather material values is extremely high in Hungary (51%) (Figure 5.3).

**Figure 5.3 Ratio of people having material and post-material values in European countries**



Source: World Value Survey, 2004 (after Ságvári & Dessewffy, 2006, 31. p.)

<sup>12</sup> Traditional values involve first of all the importance of religion and family life, obedience and the respect for power. At the other end of the scale we find those secular, rational values that express the opposite attitudes unequivocally characterized the most developed countries which play pioneering roles in post-industrial socio-economic transformation. The value-dimension of self-expression is about trust, tolerance, political activity and the effort of self-accomplishment. On the other hand insecurity and the lack of comfort make the pursuit of survival the prevailing attitude.

In determining tolerance the attitudes towards the employment of immigrants in the countries under observation and the degree of satisfaction with one's own life in the countries should also be taken into consideration in terms of the reception of foreigners and of the satisfaction with life Hungary without doubt belongs to the rearguard among European countries and takes the last positions (25th and 23rd) in this respect.

For the creation of the Tolerance-index the values of the traditional/secular, survival/self-expression dimensions, and the values of the indicators for the reception of immigrants, and the satisfaction with life were used. The index is composed of the means of the standardized values of these indicators. Regarding the Tolerance-index Hungary is clearly ranked last among the European countries and Hungarian society is rather characterized by traditional values and the efforts for survival (see Annex IIb).

The values of the above indexes and indicators lead us first of all to the conclusion that the creative economic centre of the continent, which is crucially important in terms of competitiveness, is shifting from the traditional economic powers like France and Germany to the Scandinavian and Northern European countries. Hungary is 21st in the aggregated ranking of the 25 observed countries, partly due to its very low position in the dimension of tolerance (Table 5.1).

**Table 5.1 The ranking of countries based on talent-, technology- and tolerance-indexes**

Nr.	Country	Talent	Technology	Tolerance
		r a n k		
1.	Sweden	5	1	1
2.	Finland	1	2	7
3.	Denmark	4	4	2
4.	Switzerland	9	3	5
5.	Netherlands	7	7	3
6.	Belgium	2	9	9
7.	Germany	10	5	8
8.	Norway	6	10	4
9.	Ireland	3	11	16
10.	Austria	15	6	11
11.	Spain	11	13	6
12.	France	18	8	12
13.	Slovenia	14	14	10
14.	Estonia	8	18	17
15.	Greece	13	20	15
16.	Italy	24	12	13
17.	Czech Republic	21	15	14
18.	Lithuania	12	21	21
19.	Latvia	17	19	20
20.	Portugal	23	17	18
<b>21.</b>	<b>Hungary</b>	<b>16</b>	<b>16</b>	<b>25</b>
22.	Slovakia	22	23	19
23.	Poland	20	22	23
24.	Bulgaria	19	24	24
25.	Romania	25	25	22

Source: SÁGVÁRI & DESSEWFFY 2006, *Demos Hungary*, 36. p.

As we have seen, post-socialist countries do well regarding both creative occupations and the size of the creative class. But the disadvantage of these countries in research and development is far bigger (of course, this is true for some older European member states, as well). Hungary is behind Europe and the most developed countries in the world in the number of researchers, in expenditure, and in results as well. However, our positions are far from being that disadvantageous compared to the countries that are in a similar economic position. Hungarians seem to be rather traditionalist and survival-centered, while a secular/rational and self-expression value-orientation would indicate a more receptive social milieu.

### **5.3 The current situation of creative industries in the BMR**

#### *5.3.1 State of creative industries in the BMR – Comparative analysis of statistical database*

##### ***Data sources***

At the beginning of ACRE project on the basis of the international literature the consortium defined those *economic activities* and *occupations* that can be classified as part of the creative industries. Therefore for the analysis of the current situation of creative industries two sets of data have been used in the participating cities:

##### – Creative industries

For the identification of creative knowledge sectors the international NACE codes were used, which are identical with the TEAOR'03 codes applied by the Central Statistical Office (CSO) of Hungary (see Annex III). Data about the number of enterprises (divided by companies, sole proprietors, government institutions), their number of employees and annual revenues (in 1000 EUR) were supplied by CSO Hungary. This set of data was available in a cleaned and structured form for 2004.

##### – Creative occupations

For the identification of creative occupations the Standard Occupation Classification (SOC) codes were suggested by the English partner. During the discussion with experts of the Statistical Office in Budapest it turned out that the recommended SOC code system differs from the ISCO88 system (in Hungarian FEOR) used by the CSO, therefore the direct adaptation of the SOC *was not possible* in Budapest. For the identification of creative occupations we tried to match the SOC system with the locally used FEOR system. This was done by the local experts manually. However, the international compatibility and comparability of the data set created with this method is rather ambiguous. Latest data on occupation were available from the last census held in Hungary in February 2001.

For the analysis of regional variations of creative industries within Hungary we used data aggregated for the entire country, for regions and counties, and for the Budapest Metropolitan Region (BMR) respectively.

##### ***The state of creative industries in Hungary and in the BMR***

At the end of 2004 there were 264 thousand active economic organisations in Hungary operating in the field of *creative industries* and *knowledge intensive industries* (together the 'creative knowledge sector'), which made up 36.4 percent of the active economic

organisations registered in the country (see Annex IVa). Within the creative knowledge sector the proportion of creative industries was 57 percent with 150.331 organisations, whereas the knowledge intensive industries represented 43 percent. Within the knowledge intensive industries the weight of law and other business services was outstanding with 70.115 active economic organisations (62 percent of the firms within the sector).

A significant part of the organisations in the creative industries and knowledge intensive industries are located in Budapest and the BMR. While the share of Budapest within the total number of economic organisations in Hungary was 26.5 percent in 2004, within the creative knowledge sector it was 33.6 percent. If we take the Budapest Metropolitan Region, 35 percent of all organisations was located here, whereas 42.3 percent of those operating in the creative knowledge sector (Table 5.2). Within the creative knowledge sector the weight of BMR is especially outstanding in the fields of ICT (53.6%), R&D and higher education (52.4%). BMR has a favourable position also with regards the creative industries, concentrating 43,4 percent of these firms. Least dominant the share of BMR within the creative knowledge sector in the field of finances, concentrating only 27.4 percent of these organisations nationally. In all the branches of creative knowledge sector the role of Budapest is predominant within the BMR. If we look at the composition of the creative knowledge sector in the BMR the relative weight of creative industries and law and other business services is extreme, with 65,071 and 29,396 organisations respectively, comprising 84.7 percent of the firms active within this sector.

**Table 5.2 The importance of BMR in the creative knowledge sector in Hungary (%)**

	Enterprises	Employees	Revenues
Creative industries	43.3	44.8	62.3
ICT	53.6	46.7	43.1
Finances	27.4	66.5	91.2
Law and business	41.9	53.0	66.6
R&D, higher education	52.4	48.7	77.5
<i>Creative knowledge sector</i>	42.3	49.0	58.4
Total	35.0	39.1	53.2

Source: CSO Hungary, 2004

It is also important to analyse the relative weight of economic organisations of the creative knowledge sector within the local economy. Firms in the creative knowledge sector make up 44 percent of the active economic organisations registered in the BMR and 46.1 percent in Budapest proper (Table 5.3). Both figures are astonishingly high, especially if we take into account similar figures of the counties, which nowhere exceed 36 percent (Csongrád 36.0%, Baranya 34.6%).

**Table 5.3 Ratio of creative and knowledge intensive enterprises**

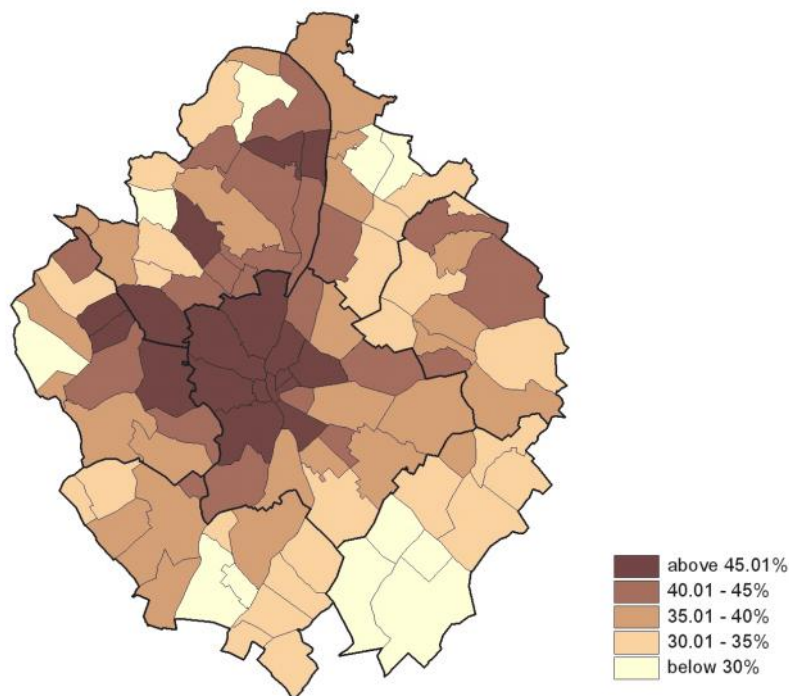
	Budapest	Agglomeration	BMR	Country
Creative industries	26.8	22.1	25.7	20.8
ICT	3.6	3.0	3.4	2.2
Finances	2.4	2.8	2.5	3.1
Law and business	12.4	9.1	11.6	9.7
R&D, higher education	1.0	0.6	0.9	0.6
<i>Creative knowledge sectors</i>	46.1	37.6	44.0	36.4
Total	100.0	100.0	100.0	100.0

Source: CSO Hungary, 2004

Looking at the agglomeration zone we can also discover significant differences as far as the distribution of creative firms is concerned. Within the agglomeration the relative weight of firms operating in the creative knowledge sector is the highest in the north-western sector of Buda (41.8%), and lowest in the south-eastern sector of Pest (30.2%). In this respect we can also observe substantial differences among the settlements (Figure 5.4). Highest proportions of creative firms are registered in the settlements of the north-western sector (Csobánka 52.1%, Nagykovácsi 49.9%, Telki 48.1% and Budakeszi 47.9%), on the other hand lowest figures can be found in the south, south-east (Alsónémedi 23.3%, Ócsa 23.4%).

Equally marked geographical differences can be detected within Budapest. Districts of the Buda side show up higher proportions with regards the relative share of creative firms (12th District 55.3%, 1st District 54.2%, 2nd District 54.0% whereas the number and share of creative knowledge sector is generally lower in the south-eastern districts of the Pest side. This picture very much coincides with the social status of the urban districts and the spatial distribution of intelligentsia within the city and its agglomeration.

**Figure 5.4 The ratio of creative and knowledge intensive enterprises in the BMR**



*Source: CSO Hungary, 2004*

The position of creative knowledge sector can be further refined if we analyse its relative weight in employment and the annual revenues of firms (see Annex IVb and IVc). According to Table 5.2 both with respect employment and revenues BMR and Budapest play outstanding role in Hungary: 39.1 percent of all employees worked here and 53.2 percent of revenues were realised here in 2004. As a general trend it can be stated that the weight of BMR in the creative knowledge sector is even higher. Greatest extreme can be found in finances, only 27.4 percent of firms in this branch are located in the BMR, nevertheless 66.5 percent of employees are working here, and 91 percent (!) of total revenues are realised here.

In terms of revenues the share of BMR is also decisive in the field of R&D and higher education (77.5%) and in law and business services (66.6%). Only revenues realised by companies in the ICT sector (43.1%) are significantly below that average weight of BMR. This shows the growing importance of other university towns and technology centres on the countryside within the ICT sector.

In 2004 in the BMR highest revenues per firm and per employee were registered in the ICT sector, with 971,5 thousand and 149,2 thousand EUR respectively. National figures in the same sector were 448,4 thousand EUR per firm and 76,6 thousand EUR per employee in that year. Lowest figures of revenues per firm and/or employee were registered in the R&D and higher education sector (Table 5.4).

**Table 5.4 Revenues per enterprise and per employee in the BMR (1000 EUR)**

	Revenues/enterprise	Revenues/employee
Creative industries	167,3	56,1
ICT	971,5	149,2
Finances	856,7	98,9
Law and business	106,8	35,0
R&D, higher education	78,6	5,3
<i>Creative knowledge sector</i>	250,9	65,6
Total	448,4	76,6

Source: CSO Hungary, 2004

### ***Composition of the creative knowledge sector in the BMR***

The composition of creative knowledge sector in the BMR can easily be detected on the basis of the number of firms and employees in the different branches of the sector, as well as the absolute and relative amount of revenues realised by these firms.

With regards the number of enterprises, their employees and the quantity of revenues the following branches have leading position in the BMR:

- legal accounting, book-keeping and auditing activities, tax consultancy, market research and public opinion polling, business and management consultancy (NACE:741);
- other retail sale of new goods in specialised stores (NACE:524);
- miscellaneous business activities (NACE:748);
- architectural and engineering activities and related technical consultancy (NACE:742)
- software consultancy and supply (NACE:722).

In addition to these five branches the number of firms is also relatively high in the field of ‘activities auxiliary to financial intermediation’ (NACE:67), ‘investigation and security services’ (NACE:746) and ‘computer related activities’ (NACE: 72).

In terms of the total number of employees this circle can be further widened by ‘higher education’ (NACE:803), ‘financial intermediation’ (NACE:65) and ‘telecommunications’ (NACE:642). Later ones also provide the greatest amount of revenues within the creative knowledge sector. In term of revenues ‘insurance and pension funding’ (NACE:66), ‘advertising’ (NACE:744), ‘manufacture of television and radio receivers, sound or video recording or reproducing apparatus’ (NACE:323) and ‘computer related activities’ (NACE:72) are also among the frontrunners.

At national level, 81.8 percent of the enterprises in ‘motion pictures and video activities’ and 71.9 percent of ‘publishing’ are located in the territory of BMR. However, the ratio of economic organisations operating in the field of ‘reproduction of recorded media’, ‘software consultancy and supply’, ‘research & development’ and ‘insurance & pension funding’ is also above 60 percent. Within the BMR the zone of agglomeration stands out with high shares in the following branches: ‘manufacture of electronic valves and tubes’, ‘manufacture of television and radio transmitters, telephony and telegraphy’ and ‘manufacture of office machinery and computers’.

With regards productivity the ‘insurance and pension funding’ branch has a leading role with 40,27 million EUR revenues per organisation. Within the BMR the value of Budapest (47,5 million EUR) is significantly higher in this respect, and nearly double the national figure. Second in the row with regards productivity the ‘telecommunications’ branch, where the annual amount of revenues per firm reached 12,34 million EUR in 2004 (Table 5.5). This was 2,5 times higher the national average. Interestingly, in the field of ‘telecommunications’ the difference between Budapest and the agglomeration zone is negligible. ‘Financial intermediation’ takes the third place according to the average revenues per firm (10,9 million EUR). The only branch where the productivity of firms located in the agglomeration zone is higher than that operating in Budapest is ‘manufacture of office machinery and computers’.

**Table 5.5 Creative knowledge branches with highest revenues per enterprise (1000 EUR)**

	Budapest	Agglomeration	BMR	Country
Insurance and pension funding	47493,7	23,7	40270,0	24722,7
Telecommunications	12597,5	11512,0	12339,2	5069,5
Financial intermediation	10959,7	956,2	9605,4	5063,3
Manufacture of television and radio receivers etc.	6838,6	5084,9	6474,4	18329,6
Manufacture of electronic valves and tubes etc.	2988,8	4827,3	3657,4	4693,9
Manufacture of office machinery and computers	690,7	13255,3	3615,8	6623,6

*Source: CSO Hungary, 2004*

With respect the average income per employee highest figures are recorded in the fields of ‘telecommunications’ and ‘insurance and pension funding’, with 239 thousand and 177 thousand EUR respectively. There is a significant difference between Budapest and its agglomeration zone. In the branch of telecommunications firms located in the agglomeration have significantly higher income per employee (346 thousand EUR) than the firms with similar profile in Budapest (211 thousand EUR). Similar situation can be observed in the field of ‘manufacture of office machinery and computers’. On the other hand, economic organisations located in Budapest have significantly higher per employee income compared to the firms located in the agglomeration in the fields of ‘manufacture of television and radio receivers, sound or video recording or reproducing apparatus’ (287 thousand EUR) and ‘motion pictures and video activities’ (186 thousand EUR).

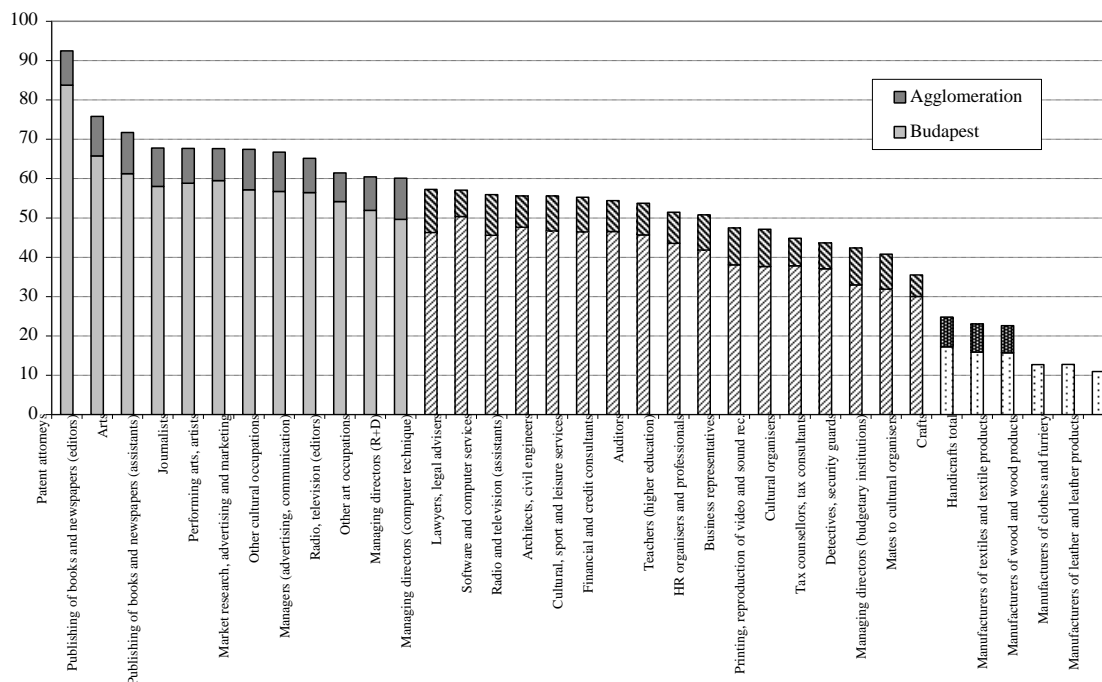


## BMR as a living space for creative employees

Data of the 2001 national census reveal the main features of spatial distribution of labour force in the creative knowledge sector in Hungary and in the Budapest Metropolitan Region<sup>13</sup>. First we investigate in which segments of occupation has the BMR an outstanding role within the country. Taking into account the weight of BMR measured by its averaged economic performance we categorised the occupations into three groups: 1 group: outstanding role (with 60-100% of employees); 2. group: average role, corresponding the average weight of BMR (with 30-60% of employees); 3. group: negligible role, below the national weight of BMR (with 0-30% of employees). In the analysis we also took into consideration the size of the different occupation sectors. E.g. according to Figure 5.x the weight of BMR is most outstanding among patent attorneys, 90 percent of them live in the BMR (where the Hungarian Patent Office is located), however, their total number is only 160 persons.

To the first major group of occupations, where the role of BMR is outstanding belongs ‘market research, advertising and marketing’. Two-thirds of the 14 thousand employees working in this field in Hungary live in the BMR and 73 percent of them work here (Figure 5.5).

**Figure 5.5 Ratio of creative employees living in the BMR**



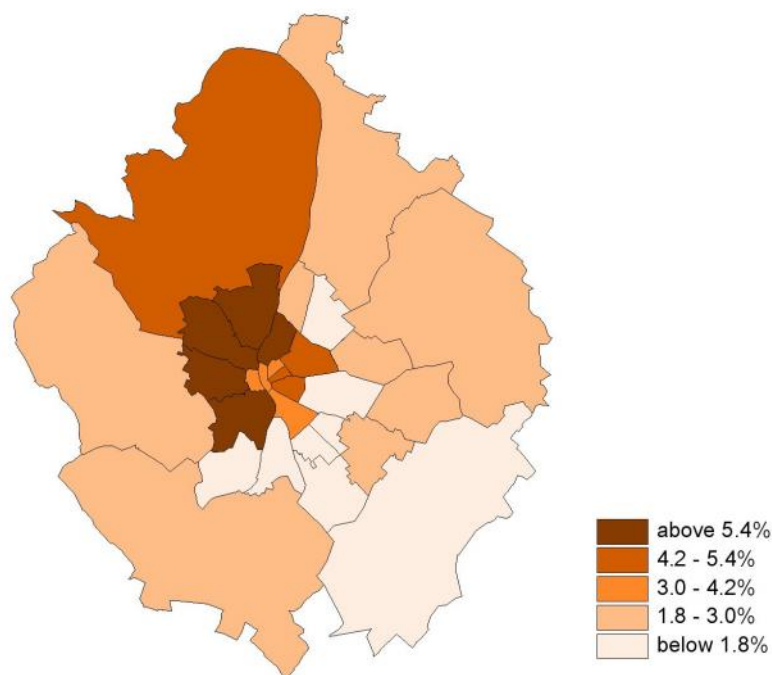
Source: CSO Hungary, Census 2001

BMR has equally high shares in art (9,000 employees) and performing arts (6,000 employees), 72 percent and 68 percent of people working in these sectors in Hungary live and work in the BMR (Figure 5.6). There were 3,000 journalists and editors in the publishing

<sup>13</sup> Though there has been a massive growth in the employment of the creative knowledge sector since 2001, we assume that the main geographic and sectoral dimensions have not changed significantly.

sector in Hungary in 2001, 74 percent of them lived in the BMR. In addition to these occupations the share of BMR is also high in the electronic media (Radio and TV). We should also note that in all sectors of the creative industries a major part (from 57% to 68%) of the high rank managers and professionals live and work in the BMR.

**Figure 5.6 The ratio of arts in the BMR**



*Source: CSO Hungary, 2004*

In the second category (where BMR concentrates 30-60% of total employees) the ‘IT sector’ is the most prominent. In 2001 more than 50 percent of the 42,000 employees working in the IT sector in Hungary lived in the BMR, predominantly in Budapest. To this category belong also occupations in ‘law and other business services’, ‘R&D and higher education’, and ‘architecture and town planning’.

In the third category (where BMR is underrepresented) those occupations can be found, which play traditionally more important role in the countryside, among them folk-art and handicrafts (e.g. pottery, textile, leather, woodworking etc.).

The national census of 2001 contains also data on the demographic profile and educational attainment of employees working in then different creative occupations. In the analysis we concentrate on the proportion of young age groups and people with higher education. The proportion of employees with university and college degree is extremely high (above 75%) in the fields of ‘R&D and higher education’, ‘finances’ (accounting, book-keeping and auditing activities) and ‘law’ (legal services). The ratio of people with higher education is also relatively high in occupations of the IT sector (software consultancy, analysts etc.). To sum up it can be stated that in occupations within the ‘knowledge intensive industries’ (ICT, Finances, Law, R&D and higher education) the share of highly educated employees tend to be generally high. Within the ‘creative industries’ the proportion of

employees with higher education is somewhat lower, highest ratios can be found in the field of 'architecture', 'electronic media' (Radio and TV), and 'performing art'.

Creative occupations where the young age group (18-29 years) is overrepresented can be easily separated from the rest. The ratio of young age group is above 25 percent in the IT sector. This age group is especially dominant among IT professionals, software managers, computer network managers. Young people are also overrepresented in the field of 'market research, advertising and marketing'. The proportion of young professionals has increased in 'finances' and 'law' (accounting, book-keeping, auditing activities, legal services). Older age groups have higher shares in occupations related to higher education, R&D and other government institutions, and also in the field of 'architecture'.

### *5.3.2 Cultural development trends and cultural industries in Budapest*

*Music* is one of the major strengths of Budapest's cultural performance. Referring to the city's strong traditions, the further reinforcing of musical offer is also stressed by the Budapest Urban Development Strategy, in its chapter dealing with cultural development. Contemporary music performance of Budapest is of course based on the Bartók-heritage, but also on several world-famous composers and musicians, as György Kurtág, György Ligeti or Zoltán Kocsis, and on some highly acknowledged philharmonic orchestras such as the Budapest Festival Orchestra or the National Philharmonics. More than 30 venues are available in the city for classic music events: among others, the Budapest Congress Centre, the Music Academy, the Opera house, and from March 2005, the new Palace of Arts. In 2003 18 premiers of opera and ballet took place, altogether 84 pieces were on stage, and 492 performances were organised. During the same year, 132 concerts were listened by 76,827 spectators.

Contemporary music in Hungary is also highly acknowledged for its jazz performances. Besides classical music, Hungarian jazz is the musical genre that is the most represented on the international scene. During the last decades ethno-music has also come up as a new and popular genre in Budapest. Since the 1990s, number of venues hosting musical performances has considerably increased, multiplying the musical offer within the city. Between newly founded cultural centres, Fonó is the more and more acknowledged for its ethno- and jazz evenings. Fonó is an independent cultural institution created in 1998 by civil initiative. Besides concerts and other events Fonó runs a small editing company for jazz and ethno-music. Another highly appreciated venue is the A38 boat, created as the reincarnation of a Ukrainian stone-carrier ship. With its large hall of 600 standing capacity, A38 has rapidly filled a gap in the musical life of Budapest, caused by the small capacities of the city to host in good technical conditions, Hungarian and international alternative, jazz, ethno and other concerts. A38 also gives place to conferences and other special events (as Roma Christmas), it runs a restaurant, and takes part in TransEuropeHalles, the international network of independent cultural centres. Millenaris, a polyvalent cultural centre and theme park, created in 2001 has also become, among others, one of the main venues for concerts of jazz and other contemporary genres. These new institutions have somehow hid the first and for long time unique music hall of Budapest, hosting rock and jazz concerts: the Pet fi Hall. Created during the 1980s, this venue will hopefully get back its prestige after being renovated.

Budapest became appreciated and attractive between young people all over in Europe thanks to the Sziget festival. Launched in 1993 following the conception of Woodstock, and attracting 43,000 spectators in the first year, the event became one of the largest European music festivals with around 400,000 visitors in 2005 and 2006. Besides music, Sziget offers

place for theatre, dance, film events as well as for the presentation of civil associations, expositions, arts and crafts and other activities.

*Contemporary dance and performance* is a genre that obtains an increasing popularity in Budapest. Besides several dance companies (Honvéd Folkdance group, National Folkdance group, Budapest Folkdance group), the National Dance Theatre has been inaugurated 3 years ago in the Buda Castle, as an open house for contemporary dance companies. Contemporary dance owes for its new popularity first of all to another new cultural centre, Trafó, House for Contemporary Arts. Created in 1998 as the successor of the Centre of Young Artists (FMK, alternative and progressive cultural centre during the 1970s and 1980s) Trafó has been following the conception of multifunction art centres created in Europe since the 1960s. Besides hosting contemporary arts and all experimental genres, theatre, concerts, exhibitions, Trafó puts a slight accent in his programmes on contemporary dance performances.

Tradition of *theatres* in Budapest dates back to the Roman period denoted by two amphitheatres in Óbuda ('Ancient' Buda). The first theatre in Pest was open in 1719, and the first official theatre company played its first spectacle in 1790. Theatre in Budapest has an international reputation, two festivals of the European Theatre Union have been organised here in 1993 and 2000, followed by two events of the Informal European Theatre Meeting in 1994 and 2000. Several independent studio theatres (Studio K, MU Theatre), independent companies (Krétakör, ARTUS) known on the international scene have been created during the past decades. One of the core elements of international cultural life in Budapest is actually the Merlin-International Theatre that not only invites foreigner, well known companies as the Royal Shakespeare Company, but also puts on scene Hungarian pieces translated in English or in other languages. In that sense, Merlin plays an important role as mediator of the Hungarian culture for expatriates living in Budapest. Although during the first ten years of its existence Merlin had been considered to be first of all an English theatre, during the last years, its repertoire has been enlarged towards other languages, especially, German and French.

The core of theatre life in Budapest is composed by 23 theatres with permanent companies and repertoires. This is a heavy heritage of the socialist period, as the functioning and maintenance costs of these theatres cover almost the whole cultural budget of the Budapest Municipality. In 2004 the 23 theatres played 6472 performances, for 2,416 million spectators. Although the number of visitors is permanently increasing, still only 60 percent of the total capacity is used by the 23 theatres (Table 5.6).

In Budapest the average of expenditures for culture and leisure activities per capita is 23,500 HUF (94 EUR) per year, that covers appr. 15 percent of the average salary per month of the capital's inhabitants. One may conclude that both theatre and dance performances are flourishing in Budapest, since both the number of shows, as well as the number of visitors and theatres have continuously grown since 2000.

**Table 5.6 Capacity of cultural institutions**

	2000	2001	2002	2003	2004
<b>Theatres in Budapest</b>					
Number of theatres	22	22	23	23	23
Maximum seats	13400	14000	15000	14800	15100
Permanent job workers	2461	2476	2609	2749	3045
Number of performances	6189	6072	6224	6424	6472
Attendance	2087000	2138000	2266000	2345000	2416000
<b>Cinemas, Videocinemas in Budapest*</b>					
Seats	22651	22702	24551	24487	no data
Number of Rooms	125	124	133	134	132
Number of performances	192829	209713	226580	222248	222390
Attendance (thousand)	9123000	8459000	8382000	7821000	7793000
<b>Museums in Budapest</b>					
Number of museums	96	98	99	100	100
Number of exhibitions	604	569	586	658	557
Number of attendance	2604000	2342000	2737000	4042000	4033000

Source: City Government Budapest, \* Data on Art-movie network is quite defecting. In Budapest 27 art-movie operates and they realised 720,000 paying attendance in 2004.

*Fine arts* and especially, *contemporary and modern arts* obtain a growing importance in Budapest. The most important international institution is Ludwig Museum that has been inaugurated in 1990, as part of the Ludwig Museums network. The museum's permanent collection is partly based on American and European pop-art pieces acquired by its founders Mr and Mrs Ludwig, partly on works of Central and Eastern European countries. Ludwig Museum has recently been relocated from the Castle to the newly open Palace of Arts on the Southern bank of the Danube. Strengthening of contemporary fine arts in Budapest and the growing importance of art market is visible through the appearance of the first private cultural institutions: MEO, the first private museum of contemporary arts in Budapest created in 2001, APA – Atelier Pro Arts, a gallery with 6 small studios for artists and KoGart (2001), a private museum for modern and contemporary arts (2004).

*Arts and crafts and industrial design* began to develop in Hungary following World War II. In 1949, the Association of Hungarian Artists of Fine and Applied Arts has been created on order to enhance the cooperation, the representation and the support of artists, industrial designers, restaurateurs, art historians and art writers. Since 1963 a section of Fine and Applied Arts of the Cultural Ministry functions in Budapest, aiming to register and evaluate artists' works, to prepare and organise call for tenders for designers. The Association of Young Designers' Studio has been created in 1982 aiming to help the cooperation and the representation of young designers at the beginning of their carrier. As an important step of the development of handicrafts, the Association of Hungarian Folk Artists has been founded in 1984. Since 1987, the Festival of Folk Arts organised in the Buda Castle every year by the association became one of the major arts and crafts events in Hungary. During the last 10 years, industrial design has been considerably transforming as a result of international investments. 4 or 5 leading studios such as Digitart, Gepetto, Mobilita Artica are focusing on the creation and the exportation of furniture with high quality and modern design. The Museum of Applied Arts in Budapest is the venue of several design exhibitions, such as the gallery of the Young Designers' Studio in the centre of Budapest.

The most outstanding events of *fashion life* in Budapest are the Fashion Seminar (dealing with fashion, make-up, hair-dressing, cinema and fashion sociology), the Crossroads International Fashion Gala, and the Budapest Fashion Night. The Fashion Award Hungary was bestowed for the first time in 2004 and many of the acknowledged personalities of Hungarian fashion life have been honoured by this award in several categories. The fashion life of Budapest is marked by three outstanding designers: Lucia S. Hegyi, Kati Zoób and Tamás Náray. Despite the performances of these three artists, the main localities of fashion-shows are the Congress Hall of Budapest (Budapesti Kongresszusi Központ), the “Whole” (Gödör) Club and the Gerbeaud patisserie. Some young textile-designers are establishing workshops, like the Barack, the Monarchia, the Kaláka or the groupings of ARTista, which grant new colours for the Budapest fashion life.

The situation of *cinematography* can be well demonstrated by the fact that several world-famous artists work in Budapest in the genres of art-movie, documentary film and animated cartoon. Moreover the new generation of movie makers also met great success at international film festivals, which promises the regeneration of Hungarian film-art. In Budapest, 29 movie theatres, containing 134 halls are opened for the public - of which 14 are multiplex cinemas with 109 halls such as the WestEnd City Centre which is the biggest shopping and entertainment centre in East Central Europe. The Budapest Film Rt. Company, owned by the City of Budapest, deals with the operation of the movie and video network, as well as with the production and distribution of films. Besides Budapest Film the biggest companies dealing with film production are the Motion Picture Public Foundation of Hungary (Magyar Mozgóképek Alapítvány) and Pannóniafilm, the latter being specialized in production of animated cartoons. The Budapest local government maintains a network of art-movies including 14 cinemas. Thanks to this financial support, unique in East-Central European countries, cinemas releasing art-movies have been saved from disappearance despite of the quickly growing number of commercial cinemas. The biggest event of the Hungarian film-makers is the Film Parade (Magyar Filmszemle) organized in Budapest every year, in February. The other, almost traditional event is the Cinema Festival (Moziünnep), when all cinemas in the country can be visited for a reduced price (Table 5.7).

**Table 5.7 Annual percentage of visitors of different types of institutes\***

	<b>Ratio (N=1000)</b>	<b>Person (thousands)</b>
Theatres	62	820
Museums/exhibitions	61	810
Cinemas	60	790
Places of amusement with live music	43	570
Libraries	42	560
Cultural centres	42	560
Concerts, Pop music	34	450
Concerts, classical music	21	280

Source: City Government of Budapest, \*at least one visit per year among the citizens of Budapest (1,324 thousand persons) and their estimated number

In Budapest there are almost 150 *museums, galleries and exhibition* halls opened to the public, which, in 2003 were visited by more than 4 million persons. The citizens of the capital are the mostly interested in exhibitions of classical fine art, history, photography,

applied art and natural sciences. The most significant event is the Night of Museums (Múzeumok éjszakája), during which most of the museums can be visited with one single ticket. In 2003, 1270 exhibitions were organized in the capital, of which 861 were fine art exhibitions. In Budapest there are about 4-5 important contemporary fine art galleries (acting as sales agencies for artists); their turnover is rising by about 10 percent every year. Mostly oil paintings and mixed materials are popular, but video and new media art is gaining ground too. A well running gallery can manage 10-12 contemporary artists. The centre of art objects' and antiquities' trade of Budapest is located since several decades in the neighbourhood of Falk Miksa street in the city centre (5th district). Today about thirty small antique shops are open in the area, with the two major, market leader open sale houses: the M -Terem Gallery and the Kieselbach Gallery. In Budapest approximately thirty different kinds of auctions are held every month.

Nowadays, cultural consumption is released mostly between Buda Castle and Heroes' Square. Visitors can follow a path called 'Cultural Avenue', which is an almost straight line linking the most interesting museums, cafés, restaurants, theatres, churches and parks.

Budapest is also a venue for alternative cultures – the tradition of underground art events and clubs dates back to the 1970s and 1980s. Since the beginning of the 2000s, several venues created fed upon the spirit of former places having been representing alternative values and political resistance. However, number of the successors is not as significant as it could be taking into consideration the above mentioned traditions. The first real cultural squat, T zraktár ('Fire Depot') has been created as late as in 2005. It was the first bottom-up cultural centre in a former industrial building to bring together civil, social, educational, art and urban functions in one site, planned to become a permanent alternative cultural venue, taking part of the international networks of independent cultural centres such as TransEuropeHalles.

Since the first years of 2000, as a unique feature in Budapest, cafés in empty courtyards were opened in the historical Jewish Quarter. These cafés, bars or pubs were realised as profit-oriented places with a temporary existence: their opening was limited to summer time and with a duration defined severely in the contract written by the local council. The ruin-bars represented in some ways the idea of multifunctional independent cultural centres in Budapest: partly as a result of their temporary existence, and partly by their message related to the resistance against the destruction of urban values. Especially at the beginning, they attracted a narrow public, mostly based on intellectuals, students, and artists.

One of the most significant changes of the last years, within the cultural scene, was the discovering of some outstanding personalities of the Hungarian *contemporary literature*, as György Konrád, Péter Nádas, Péter Esterházy and Imre Kertész, - the latter has received the Nobel Prize in the year of 2003. Thanks to these persons an intensifying curiosity can be detected during the last years towards Budapest's cultural life all over in Europe. The stability of the publishing activity in the capital is partly due to their work as well. Concerning editing: previously hobby-books, belle-lettres, and historical writings were on the top of the publishers' lists, nowadays professional books have become the leaders of the market (Table 5.8). The most important events related to the publishing activity are the International Book Festival of Budapest (Budapesti Nemzetközi Könyvfesztivál), and the Week of Book Festival (Ünnepi Könyvhét), which was organized for the 78th time in July, 2006.

**Table 5.8 Publications in Budapest 2001-2003**

	2001	2002	2003
<b>Publications (piece)</b>			
Number of published books	8837	9990	9205
Number of issues (million)	11841	16558	11841
<b>Topics of published books (piece)</b>			
Scientific	93	61	102
Teaching books	1818	1607	1266
Professional	2740	3139	2922
Belle-lettres and books for the youth	2761	2702	2622
School-books	1095	2230	1980
Others	330	251	313

Source: Budapest, Portal – Statistic for general education, 2003)

In the capital there are 91 libraries containing more than 18 million covered books and publications, available for 430,000 registered readers.

As for the *electronic media*, radio listeners can choose between several emissions such as one local commercial radio, one local official radio, two local non-profit radio stations, eight regional commercial stations, two regional official radios, three regional non-profit stations, ten web-radios, two national commercial radio stations and three official national radio stations. In 2003, 84 percent of the households in Budapest owned radios, 25 percent possessed CD players, 17 percent had record-players, 68 percent owned tape players and 43 percent had hi-fi equipments. Besides the most important radio stations, the official Hungarian television stations' programs are emitted from Budapest, namely those of the Hungarian Television 1 (MTV1), Hungarian Television 2 (M2) and the Danube Television (DunaTV), as well as the two biggest Hungarian commercial television stations (RTL KLUB and TV2).

In Budapest, the total expenditures on advertisements and publicity have been 300 billion HUF (1,2 billion EUR) in 2003 that represents an evaluated monetary movement of 110 billion HUF (440 million EUR). Television and press share approximately equal parts of advertising activities. The third most popular way of advertising is publicity realised on posters in public places. One of the real success stories of post-transitional Budapest is that of the EST Media 'empire' that has been founded by two creative young persons in the beginning of the 1990s. The core of EST Media is a weekly based free cultural program magazine covering the whole country, additional creations have been an internet site, several thematic magazines, and some less successful initiatives such as a café and a taxi company. EST Media Group realises 5 billion HUF (20 million EUR) of income per year that covers more than 10 percent of the total amount of press incomes resulted by advertisements. The number of issues, published by the EST-Media group goes much beyond 20 million. The weekly average of issues is over 400 thousand copies.

The range of Hungarian companies dealing with *computer programming* is extended from the smallest and the medium-sized enterprises (Kirowski) to the largest ones, like Siemens. The biggest success story was that of the Graphisoft, a private enterprise founded in 1982. Since then it became one of the most important companies in the world dealing with software development for architecture and building industries (invention of the software ArchiCAD). The enterprise created the Graphisoft Industrial Park in Óbuda which has become a determining element of the urban landscape of Budapest.



As for *architecture* it is worth to mention first of all the cultural heritage of Budapest. The core of this heritage is based in the Buda Castle and the Castle quarter that have become parts of the UNESCO World Heritage in 1987. In 2000 Andrásy Avenue and the Millennium underground railway have joined the world heritage too. Thanks to urban renewal, these parts represent with dignity the precious architectural traditions of the 19th century Budapest.

The network of baths is also part of the cultural heritage of the capital; nowadays 10 of the 24 baths of Budapest have the title of stream-bath (Turkish bath). The industrial heritage of the city (Public Ware-Houses, Public Abattoir (Közvágóhíd); the area of Csepel Works (Csepel Művek), Óbuda shipyard (Óbudai hajógyár) and Óbuda gasworks (Óbudai Gázgyár) guarantees the best opportunities for architectural and functional reuse. Nevertheless the rehabilitation of these buildings and areas can only be realised by efficient urban development programs. The creation of Millenaris is a good and outstanding example in the whole region of Central Europe for the conscious and well-organized programs. Millenaris functions as an educational, scientific, cultural and entertaining theme park (see above).

During the last years integrated cultural centres obtained an increased role in the cultural life of Budapest. The most relevant example for this is the Palace of Arts, inaugurated in 2005, hosting the Ludwig Museum of Contemporary Arts, the National Dance Theatre (Nemzeti Táncszínház), and the hall of the National Philharmonics (Nemzeti Filharmónia).

Budapest hosts some internationally recognized urban development programs such as the rehabilitation of buildings by ING Bank, the creation of the “Whole” (“Gödör”) Club and the restructuring of its neighbourhood on Erzsébet square in the very centre of the city, the construction of the National Theatre, of the House of Traditions, of the West end City Center and of Infopark, a technological and scientific park. The notable results of urban rehabilitation programs are the new building of the Budapest Archives (Fvárosi Levéltár), the Szabó Ervin Library, the latter rewarded by the Europa Nostra prize, and the reconstruction of Café Central. The renovated Gresham Palace, open for visitors since 2004, has become one of the most elegant luxury hotels of the capital, as part of the Four Seasons hotel chain. The rehabilitation program in Middle-Frencváros, Middle-Józsefváros and Inner-Erzsébetváros are the most significant urban renewal projects of Budapest.

### 5.3.3 *The financing of cultural industries*

*Public (state, city and local government) funds* play the most important role in the financing of cultural industries. In the beginning of the 2000s, 85 percent of Budapest City Council’s cultural budget was allocated for the maintenance of the big theatres of the city, in the form of normative subsidies. In 2002, this ‘regular’ part of the cultural budget was 6 million euros. Cultural expenditures of the City Council also included the financing of small theatres, events and companies often representing alternative, off-beat culture, being outside the circle of big institutions of national importance. In the same year of 2002, funds created for their financing<sup>14</sup> altogether represented about 1 million euros within the cultural budget.

Between 2000 and 2003 the City has spent almost 1 billion HUF (4 million EUR) on the financial support of the major regular cultural events, and 400 million HUF (1,6 million EUR) on the marketing and the organisation of tourist and cultural events, as well as on the

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<sup>14</sup> Fund for Fine Arts (260,000 EUR in 2002), Fund for Theaters (600,000 EUR) and Fund for Sustaining Alternative Cultural Facilities (100,000 EUR). By the way, big theaters of national interest obtaining the regular normative state subsidies also have the right to appeal for the theater fund.

publications of flyers and brochures presenting the cultural and tourist attractions of the capital. In 2004 the estimate development expenditures of the City's cultural sector was 3,4 billion HUF (13,6 million EUR). Obviously the whole budget of the cultural sector exceeds this amount nevertheless it demonstrates well the extent of financial support.

*Private capital* in forms of sponsorship or of public-private partnerships obtains a growing part in cultural financing in Hungary as well. Huge international foundations, such as the Soros Foundation, Ford, C.S. Mott or Rockefeller Brothers, having played a determinant role after political transition in the financing of the cultural sector have begun to withdraw from Hungary and from other countries of the region immediately after their join to the EU. At the same time new foundations appeared, based on private money supporting culture, however, their interests and activities are usually limited to some concrete fields of culture. One of those is the KOGart House, a private gallery based on a permanent collection and running an exhibition room of fine artworks, or the Prima Primiissima and the Palládium Foundations, granting awards for artists and creative people. Two of the banks in Hungary, Budapest Bank and Raiffeisen Bank are expending a notable amount on cultural support. Cultural sponsoring is concentrated in the capital, concerning events taking place exclusively in Budapest, and serves first of all marketing and communicational purposes of enterprises. As a result, in 2003, the financial supports coming from different foundations covered only 4 or 5 percent of the total income of the 130 cultural centres running in the capital city.

The most significant sponsors are Siemens, OTP Bank (National Saving Bank) and Raiffeisen Bank. During the last few years number of institutions created by private funds has been considerably increasing, first of all in the field of contemporary arts. Some of these new creations are: Fonó, A-38 ship, KOGart Gallery, MEO-Contemporary Art Collection (see above) and many other well-known art galleries.

The most striking example for investments realised through *Public-Private-Partnership* (the linkage of private and state financing) was the construction of the Palace of Arts in Ferencváros. The cost of this investment was altogether 52 billion HUF (208 million EUR), a sum that has to be redeemed to the investors within 10 years by the Ministry of National Cultural Heritage.

#### 5.3.4 Cultural industries in the region of Budapest

Despite the concentration of the majority of cultural institutions of international importance in the capital, some significant organisations can be found in the agglomeration as well: in Szentendre, Esztergom and Gödöll (Table 5.5). Besides the almost 40 cultural festivals and events of the capital, number of cultural events with high importance is also increasing in the agglomeration. The most outstanding of these events are the different yearly festivals in Szentendre, such as the Summer of Szentendre, the Serbian Saint's-day and the Söndörg Festival; and the Summerfest of Százhalombatta, the "Worldly Gaieties" (Világi Vigadalmom) in Vác and the "Palace Games" (Palotajátékok) in Visegrád.

Nevertheless, besides the relatively importance of regular cultural events, the permanent cultural equipment of the agglomeration around Budapest remains poor (Table 5.9). This fact is the result of the strong concentration of cultural and other economic activities in the capital. The difference in the level of cultural services between Budapest and the surrounding settlements seems to be even higher than the gap between the capital city and the remaining parts of Hungary.

**Table 5.9 Theatres in the Central Hungarian region, 2001**

	Theatre halls	Spectacles	Visits (thousands)	Visits for thousand inhabitants
Budapest	44	6072	2138	1228
Pest County	0	64	25	22
Central Hungarian Region (Budapest and Pest county)	44	6136	2163	764
Hungary	101	12304	3898	383

*Source: CSO, Hungary, 2001*

## 5.4 Summary

The total contribution of copyright-based industries and core copyright industries to the GDP can be compared to the performance of traditional industrial branches. Thus, copyright-based industries are of vital importance because of their contribution to national economy.

Regarding the aggregated ranking by talent, technology and tolerance Hungary has an unfavourable position among European countries. This can be partly traced back to its very low position in the dimension of tolerance. In this sense, in the last couple of years the openness towards and the acceptance of foreigners among Hungarians has worsened at national level.

The BMR has an outstanding role in the creative knowledge sector of Hungary and in all the branches of the sector the role of Budapest is predominant. Within the creative knowledge sector the weight of BMR is especially outstanding in the fields of ICT, R&D and higher education, while it is least dominant in the field of finances. Concerning the spatial disparities within Budapest the districts of the Buda side show up higher proportions with regards the relative share of creative firms.

Major groups of occupations, where the role of BMR is outstanding are 'market research, advertising and marketing', art, performing arts, journalist and editors. Occupations within the 'knowledge intensive industries' the share of highly educated employees tend to be generally high. The young age group is especially dominant among IT professionals, software managers, computer network managers, while older age groups have higher shares in occupations related to higher education, R&D, architecture and other government institutions.

## 6 Development policies, strategies and priorities regarding creative industries in Hungary and Budapest

In the policy making of the creative industries the most powerful player has been the state itself, treating creative industry separately as subject of development policies of economy, education and culture.

Lower administrative levels (county, local level) have had the right to work out their specific programmes for specific themes such as the creative economy but they only have had limited resources to implement them. The local and sub-national administrative units have been more busy with keeping the financial (budgetary) balance than financing creative industries systematically on their own accord from their limited resources. These developments were mostly financed from state funds and very exceptionally the presently markedly withdrawing county level funds (also provided by the state but spent on the county level based on local decisions). The programming period of 2007-2013 has brought a new situation forth. Regions (NUTS II.) by working out their own Operational Programmes – based on the National Development Plan – have the chance to direct financing into the creative industries they judge as of strategic importance, besides regions other than Central Hungary are also eligible to use funds supported by thematic operational programmes (see Annex V).

### 6.1 The National level

On the national level the making of national policy for the creative industries was never properly defined. R+D and the innovation policies could hardly find their place among the administrative units. The administrative unit in charge kept changing (according to Table 6.1) and so did the source of financing.

**Table 6.1 The situation of R+D and Innovation\***

Period	Institution	Administrative unit in charge	Source of financing
– June 1990	OMFB – National Technological Development Board	Government	Until December 1993 Central Technological Development Fund
June 1990– June 1994	OMFB	Government	Central Technological Development Sub-programmes
June 1994 – June 1998	OMFB	Minister of Industry and Commerce	
June 1998 – Dec 1999	OMFB	Minister of Economy	
Jan. 2000 – Dec. 2003	OM KFHÁT	Ministry of Education	Central Technological Development Sub-programmes and Széchenyi Program
Jan 2004 –	NKTH National Office for Research and Technology	Ministry of Education	Research and Technological Innovation Fund

Source: Edited by the contributors, \* The institution responsible for, the administrative unit in charge with and the financing source of R+ D and innovation since 1990

In 2004 Acts on the research and technological innovation fund, on research and development and on technological innovation were passed and a new office called the National Office for Research and Technology charged with the execution of law was established.

Science and Technology Policy Counselling Body in 2004 assessed the situation of the innovative sector in the country and made strategic proposals to improve it. The title of the document was Science and Technology Policy in Hungary: situation analyses and the potential points of breaking-out.

Some of the conclusions and the proposals were integrated into the most recent policy documents:

- The document called the attention to the lack consistent science and technology policy and the related strategy overarching administrations, which would replace the fragmented hardly coherent programmes.
- It highlighted the necessity of increasing R+D expenditure and also the significant importance of harmonising education, science and technological policies. This was judged as crucial as only this way can the co-operation of the key institutions be placed on a mutual interest base replacing the presently so typical isolation as well as open and hidden clashes of interests.
- Strengthening the demand side of R+D and therefore the diffusion of knowledge.
- SME-s are to be made a distinguished subjects of development, in order that by strengthening their position they could take over some part of the risk taking so immense in R+D innovation from the state.
- The document places a great stress on working out and building the proper innovation networks. It claims that the state should promote the evolution and development of regional networks strengthening the efficiency of innovation diffusion and also incubation complexes housing innovative SME-s. The ultimate objective is the utilisation of base research in innovation and ultimately in the production and service sectors of economy.
- Eliminating the financial and legal obstacles and establishing a clear supporting policy with funds accessible via less complicated bureaucratic processes.

#### *6.1.1 National policies and the role of Budapest*

##### ***New Hungary Development Plan***

The New Hungarian Development Plan defines the strategy for sustainable growth and competitiveness in Hungary for the period between 2007 and 2013. Comprehensive and specific development objectives have been defined in the Programme as well as the thematic and regional priorities with the related Operational Programmes to implement them.

Among the thematic priorities creative economy appears with great emphasis. It is presented in the first priority: Economic Development as the subject of the first intervention group: Establishment of the innovative knowledge based economy. It comes back in the third priority: Social Renewal, in the intervention group called: Development of human resources required for research/development and innovation. The topic of innovation is dealt with in the regional priorities too.

In the first priority besides accepting that growth can only be achieved by strengthening research-development and innovation activities (building on an advanced knowledge base, material and energy economic production and innovation services, and the improvement of the condition for knowledge transfer) the document also declares that the development of an innovative and knowledge based economy is made possible with the support of business oriented technology developments of enterprises and with the promotion of research co-operation between universities, research institutes and enterprises.

The Plan names those concentrated development poles where these conditions of development are sufficient to avoid high risk of such developments, The development poles are Budapest, Győr, Pécs, Szeged, Debrecen Miskolc and the Székesfehérvár-Veszprém axis. The major tasks to perform the objectives of the first priority:

- Sector and regional (listed development poles) concentration and specialisation of research and capacities in areas that have a large potential and perspective for the country (e.g. info-communication, bio-technology, life sciences, nano-technology, material sciences, environmental sciences, and renewable energy resources)
- Development of research and ICT infrastructure needed for the above
- Establishment and efficient operation of research infrastructures of international standard
- Joining existing international R+D networks and their infrastructures.

In mind with the to-be-promoted activities the following applied R+D activities are supported in the Economic Development Operational Programme related to the first priority in the New Hungary Development Plan:

- Applied R+D activities, applied research and experimental developments conducted in co-operation with enterprises
- Innovation activities of enterprises:
  - Promotion of technological developments
  - Training of company researchers
  - Establishment of R+D units
  - Purchasing and adapting competitive technologies
- R+D and innovation co-operations between universities research institutes and enterprises
- Establishment and strengthening research and innovation institutes in areas expected to have a high growth potential
- International co-operation of Hungarian enterprises

The third priority of the New Hungary Development Plan: Social Renewal, and within, the intervention group called: Development of human resources required for research/development and innovation deals with the universities. This intervention group supports the objectives of the first priority (economic development) and means the development of such institutions (universities) that are part of the creative industries themselves.

This particular intervention group defines the task that the regional knowledge centres, and higher educational institutions have to play a leading role in creating a human resource base for research and development innovation and local economy in order to strengthen

knowledge-based economy, technology and knowledge transfer.

However, the standpoint is that on the national level the knowledge centres other than Budapest need to be paid more attention to launch the process of regional equalisation.

From the funds of 674 billion HUF provided by the ***Economic Development Operational Programme*** 34 percent allocated for the R+D and innovation for competitiveness priority. It is important to highlight that the programme supported by the ERDF and domestic state budget resources does not cover the Central Hungarian Region including Budapest Metropolitan Region! These aims are mainly supported by the ***Central-Hungarian Region Operational Programme***.

Regarding culture as part of the creative industries the New National Development Plan claims, that despite the highly recognised values of the Hungarian music, fine arts, theatre culture, folk art, the new methods and solutions for the cultural activities and innovation are weak in Hungary. It adds that the cultural institutions partly reproduce passivity and new initiatives remain isolated.

The Development Plan calls the attention to the inequalities between villages and urban areas regarding the accessibility of cultural events. While the institutional coverage is judged as sufficient their efficiency in motivating social inclusion to provide a basis for creativity and to activate the social medium is assessed as weak. On the level of policy these challenges are to be met as the result of the execution of the Social Infrastructure Operational Programme.

The same applies to the eligibility of the ***Social Infrastructure Operational Programme***, which have four priority axes. Creative industry is marginally related to all but the first and the last of the priority axes are closely related to it.

*Priority 1* is targeted at the Development of infrastructure of education including the development of the infrastructure of higher education institutions providing modern services and research activities.

The objective is to support infrastructural development activities capable of flexibly adapting to the rapidly changing needs of knowledge based society, which are necessary to make higher education effective and efficient.

- Development of infrastructure Required for Raising the level of Performance of Higher Education Activities
- Infrastructural and Technological Development Activities Required for Increasing the Number of Science and Engineering graduates
- Implementation of the Information background of Modern Institutional and Inter-institutional Administration, Information flow and management

*Priority 4* aims at the development of cultural infrastructure promoting community building. The development of cultural infrastructure is aimed at the improvement of the quality of human resources, to which the cultural area contributes through ensuring the opportunities of community development, socio-cultural services and social participation, and through improving access to values.

#### *6.1.2 Preliminaries of cultural policy integrated in the National Plan and the relevant Operational Programmes – Hungarian Cultural Strategy*

##### *General priorities of the cultural policy*

The new Hungarian cultural strategy defines four fields of development as significant pillars of the cultural policy until 2020: reaching out for new communities, protection of cultural

heritage, promotion of representatives of contemporary culture, openness of culture. The programme also treats culture as means of stimulating economy and competition.

The main task of the governmental cultural policy is to stimulate community participation and the establishment of the preconditions of co-operation. The strategy treated the cultural-development-based regional development, the stimulation of the traditional and new forms of community participation, and the improvement of accessibility of cultural supply.

The second most significant field of development is the maintenance and management of the national cultural heritage both material and immaterial. It includes the scientific assessment of heritage and ensuring real or virtual accessibility. According to the strategy, acquiring and continuously practising the ability to enjoy cultural heritage is to be supported.

The third highlighted field of cultural policy is updating the preconditions of contemporary art and the integration of its products into everyday practice. Contemporary art is supposed to have a marked importance in improving the quality of life, in developing human capital and in the process of community making. Cultural policy is to pay more attention to giving chance to the young artists and artists experimenting with alternative object-creation and with new communication forms.

The fourth strategic objective is to create a more open national culture. Openness of culture means on the one hand the adaptability to the new and the ability to understand the unusual solutions as well as comprehending the impacts coming from the outside world and lastly that the cultural values are to be made equally accessible and freely usable. To achieve the objective the application of new communication forms and the establishment of national knowledge-storage- type collections are to be supported.

#### *Priorities and direction of the cultural strategy*

In the Cultural Strategy there are four strategies and 8 strategic directions (Table 6.2). The major tasks for the following few years are defined as establishing equal chances, value and tradition creation, creating new values.

**Table 6.2 Priorities and strategic directions of the Hungarian Cultural Strategy**

<b>Priorities</b>	<b>Strategic directions</b>
Creating equal chances	The program of rural cultural development More culture in the childhood Reaching new communities
Value and tradition preservation	Action plans of heritage protection Making cultural heritage more down-to-earth
Creating new values	Promotion of Hungarian talents at home and abroad Contemporary novelties for the classics of the future
Stimulating other economic branches	Culture as an incentive for economy

*Source: Hungarian Cultural Strategy, 2004*

Within the Creating equal chances priority the objective is to stop the deterioration of institutions transferring culture, and to promote the locally initiated institutional integration and coordination intentions. It is also part of the related objectives to create high standard artistic products for children and the youth and to improve the situation of the schools of art.



Creating new values priority focuses on the two extremes of value creation: on the top representatives of the art education, the management of the top talents and on the individual development of talent. A distinguished role is given to the promotion workshops, trends, genres and products regarded as international emblems of Hungarian culture. Contemporary art in search of its way is to be supported and it is of high importance to promote the value-laden initiatives of the young generations first appearing in the form of sub-cultures. It should not be forgotten that population and the institutions are to be prepared for receiving the new artistic trends.

Cultural branches are judged as means of stimulating other economic branches. That is why it is to be made clear that creativity and creation have a gradually increasing role in the production and growth of national incomes. This makes it indispensable to stimulate culture-oriented investments to liven up economy and also their monitoring. Besides, domestic tourism and the increasingly deterministic cultural tourism are to be strengthened most of all festival tourism. More attention than has been given to so far is to be paid to the labour law, taxation and other regulatory aspects of art and pieces of art.

The success of the national cultural strategy is a greatly dependent on the extent the national objectives, regional and local cultural strategies can be harmonised and the division of labour (role) achieved by these levels. Regarding the issue of financing it can be stated that the resources provided by the EU only marginally contribute to the fulfilling the needs shown by the Hungarian culture, therefore national financing would have to play a crucial role in the future. In the allocation of resources the item to be reduced radically is indirect financing of institutions. As compensation the normative or public service-contract-based support of various maintainers (local governments, foundations, market actors) are to be strengthened.

Regarding the media policy affecting culture on all fields of commercials it is desirable to see culture as object more often targeted. In the field of promotion of domestic culture the institutional support of national literature abroad is to enjoy priority.

## **6.2 The Regional level – Central Hungary (Pest county and Budapest)**

On the regional level the Strategic intentions and the political and philosophical vision are the same as on the national level. R+D and creative industries also enjoy priority in the support scheme of the Operational Programme.

### *6.2.1 Central Hungary Operational Programme*

The overall objective of the Operational Programme is to increase the international competitiveness of the region while effectuating the principle of sustainable development. The overall objective includes two specific objectives: firstly the development of factors affecting the competitiveness of the region and secondly the development of the internal cohesion and the establishment of harmonious spatial structure.

In order to realise the specific objectives based on research and development and innovation potential of the capital city and its region the knowledge –based economy is to be strengthened. The most significant task is the stimulation of co-operation between the players of knowledge based economy as well as the integration of the institutional background of R+D activity and the strongholds of economy. The emphasis is on the quality-oriented development of the already existing institutions which goes hand in hand with the structural

transformation of economy and the creation of new innovative jobs. The development of the economic sectors (creative and cultural economy) of the region producing high added value contributes to the competitiveness of the region.

The operational programme names five priorities around which the actual measures and tasks are centred:

1. Innovative and Enterprise-oriented development of the knowledge based economy;
2. Improvement of the Preconditions of Competitiveness;
3. Development of the Region's attractiveness;
4. Development of the System of Human Service Institutions;
5. Renewal of Settlement Areas

The first priority is centred on the development of R+D and innovation, the transfer of the outcomes, as well as the development of SME-s and the stimulation of their technological modernisation. The total of funding is 116 billion HUF.

Critical challenges in the Central Hungarian region: Regarding Research and Development and Innovative sector the Central Hungary Operational Programme defines the challenges in

- reducing the scattered nature of research projects,
- increasing the utilisation (including market utilisation) of research outcomes and
- enhancing the innovative approach and activities of enterprises (with special respect to small and medium-sized enterprises.

Within the Operational Programme the role of Budapest is highlighted as that of a Development Pole. The *Budapest Development Pole Programme* encourages creative cooperation between local enterprises and professional organisations research and development bases and educational and training institutes in a model that increases the national and international competitiveness of the economy.

On the regional level the document that set the vision of creative industries – most of all innovation – was *The Regional Innovation Strategy of the Central Hungarian Region (2004)*, which was prepared with the support of the EU 5th Research and Development Programme.

According to the vision of the strategy the Central Hungarian Region as the integrator of the R+D and innovation activities in Hungary, is a determinant and continuously developing region of the European Union.

The priorities and the measures set by the strategy to achieve the vision were:

1. Developing the working conditions of the SME-s in the region
2. Product and technology development
  - Presenting and spreading up-to-date product development methods
  - Establishment of modern technological centres
  - Elaboration of technological information systems to improve the productivity of SME-s
3. Spreading of innovation culture
  - Synthesis of existing experience and the dissemination of conclusions among SME-s
  - Counselling and training projects
  - Application of the benchmarking method

- Spreading quality oriented modern management methods
- Supporting study tours of innovation managers
- Communicating innovation in higher education
- Communicating innovation among entrepreneurs and the wider society

## 6.3 The local level – Budapest

### 6.3.1 *The role of creative industries in the Budapest’s medium-term development programme*

During the 1990s cultural policies of Budapest City Council were characterized by a very limited number of projects, as well as a very poor strategy-making process. The latter was practically concentrated on a program called “Budapest, city of festivals”, a strategy that was based on an already existing series of cultural festivals from spring to autumn. After 2000, the traditional approach of cultural policies began to change in Hungary. Public policies slowly accepted the wide use of cultural investment especially for urban development, for real estate development and for the positive economic performance of cities. State-led interventions through large cultural flagship projects appeared at the very beginning of the new Millennium. Some years after, the European Capital of Culture 2010 (ECC2010) program became a new opportunity to change the role of culture in urban development.

The *Podmaniczky Programme* – the Medium-term Urban Development Programme for Budapest – contains the capital’s urban planning developments for the coming decade. It is closely related to the Urban Development Concept of March 2003. The formulation and acceptance of the programme come at a time when Budapest is facing growing challenges both nationally and internationally. From an international perspective, Budapest – together with its surrounding region – now has the opportunity to gain a favourable position amongst the competing metropolitan regions of Europe. Budapest possesses splendid geographical assets and marvellous natural and architectural treasures, and therefore has the outstanding potential to become Central Europe’s cultural, economic, financial and tourist centre – or its model city in ecological terms.

The Podmaniczky Programme gives clear orientation and priorities for the city’s development, it defines the goals of development planning, as well as goals for local authority sector-based planning. The Programme is not merely a guide for the institutions of the Municipality of Budapest, but it provides a solid foundation for planning and implementation activities at national and regional level which are related to the capital and its metropolitan area. The Plan’s designers scheduled implementation of the Programme for nine years from 2005 to 2013. Perhaps this is an unusually long period to be called medium-term, but it coincides with the EU’s 2007-2013 budget period, which will significantly influence the degree of freedom of the Municipality of Budapest, governmental and non-governmental organisations. Over the course of nine years, the programme outlines 130 development plans worth 2100 billion HUF – 600 billion HUF of which will come from the Municipality of Budapest.

### 6.3.2 *The Core Programme*

The so-called *Core Programme* of the Podmaniczky Programme contains those galvanising elements which serve the interests of the whole city and which do not exceed the limits defining the capital’s foreseeable development budget figures including EU, state and private

sector funds. The Core Programme describes projects within a very clearly defined development philosophy, which comprises the promotion of public transport, the reinforcement of 'technopolis' functions, collaboration between individual interest groups, and environmental awareness within the full spectrum of sustainable urban development.

There are many theoretical and practical considerations on the future development of creative and innovative industries in the metropolitan area of Budapest outlined in the Core Programme (see Annex VI). One of the most important aims of the concept is to *renew, decentralise and democratise the cultural life in Budapest*. Democratising access to cultural goods is a high profile aim in Budapest, involving the encouragement of members of various social strata and age-groups to participate in programmes and events. In Central Europe the developmental directions of metropolis-dominated regions are becoming clearer. In this context Budapest has to utilise – through its geopolitical position – its existing advantages. In advance, another important object in the development of the city is to *strengthen the innovation and to establish a 'technopolis' area* in the Northern and Southern part of Budapest. Within the context of strengthening 'technopolis' functions, it is necessary to build links between university, governmental and commercial bodies, to agree on the establishment of the technology clusters which can power regional growth, and to support the development of science parks and urban 'technopolis' quarters.

Within the framework of the EU's Lisbon Agenda, one of the most important aims in the Metropolitan region of Budapest is the development of a *knowledge-based economy* which can bring the highest added value to the long-term development of the capital. In this term the programme concentrates on the key organisations of a knowledge-based society. Regarding the knowledge-based society in the Budapest metropolitan area the transformation of vocational education structure and adjustment to the demands of the knowledge based economy, extending outwards to Budapest's agglomeration have to be carried out. With this in mind, the Municipality of Budapest must provide co-ordination at regional, area and district levels of training opportunities and institutions' capacities, in accordance with the needs of the market.

Important task is to *develop the IT environment* of public administration, education and the library network. There are still many issues to cope with: on the one hand, the state of supply of computers and internet-connection to residents, and on the other hand vitally important knowledge of basic computer technology and of foreign languages.

## **6.4 Summary**

On the national level, the making of national policy for the creative industries was never properly defined, however, after 2004 first administrative institutions were established in Hungary for planning and coordinating the development of creative knowledge sector. In the policy making of the creative industries the most powerful player are the state and local governments, but their resources to finance creative industries systematically on their own accord are very limited.

The New Hungary Development Plan (2007-2013) contains directions for development of creative knowledge sector (e.g. establishment of the innovative knowledge based economy, development of human resources required for research/development and

innovation). The new Hungarian Cultural Strategy treats the cultural-development-based regional development, the stimulation of the traditional and new forms of community participation, and the improvement of accessibility of cultural supply.

On regional level, the Central Hungary Operational Programme aims to increase the international competitiveness and to strengthen the knowledge-based economy of the region. In this sense, the most significant task is the stimulation of co-operation between the players of knowledge based economy. Within the Operational Programme the role of Budapest is highlighted as that of a development pole, integrating R+D and innovation activities in Hungary.

On local level, the Medium-term Urban Development Programme for Budapest (Podmaniczky Programme) outlines projects within the full spectrum of sustainable urban development that contribute to the development of creative and innovative industries (cultural life, knowledge-based economy, IT sector) in the metropolitan area of Budapest.

## 7 Conclusions

During its modern history Hungary shared a relevant part in the development of the European continent in the last third of the 19th century and first decade of the 20th century. This rapid progress had raised the state capital Budapest to the rank of the European metropolises not only in economic terms, but also in social and cultural respects. At that time urbanisation of the metropolitan region started establishing the position of Budapest among the metropolises of East Central Europe and it was the period of the massive emergence of urban middle class and intelligentsia as well. Already then a major part of investment (and foreign investment) was concentrated into Budapest within Hungary, and this trend remained unchanged in the following decades too.

Following World War I an overwhelming part of the area of historical Hungary became ceded to the neighbouring countries leading to the overweight of Budapest within the settlement and transport network of the country and its economic and cultural life. Between the world wars the development process of the country and Budapest Metropolitan Region (BMR) slowed down and social modernisation had been lagging behind the economic progress. Social openness and tolerance toward minorities and ethnicities declined considerably; as a result prominent representatives of science and creative art left the country in an increased number. This undermined positions of the domestic intelligentsia, nevertheless the international impact of Hungarian culture and knowledge strengthened and is still palpable in western Europe and overseas. After World War II Hungary became part of the Soviet zone of influence and took the state-socialist course of socio-economic development. During four decades of Communist regime the country and Budapest followed the path of the progress characteristic for the East European countries with features of command economy, well known from the literary sources. As a consequence Hungary got into a disadvantageous social-economic position in comparison with the states of western Europe.

One and a half decades following World War II experiencing migration of provincial labour force into the capital and its agglomeration (also with the creation of Greater Budapest in 1950) gave an impetus to the development of BMR. In the 1960s, however, the part of Budapest played in national economy diminished considerably. During the following twenty years the development of BMR gained a new momentum, but owing to an aggravating financial indebtedness of the Hungarian state and escalating problems of the Communist regime it was not able to compete with other metropolitan regions in the West. Although social-economic oppression by the regime here was indisputably 'softer' relative to the rest of East European countries, the creative and innovative social strata in a present-day sense had to be considered as loser within the political system, save some prominent representatives of the intelligentsia.

Laying foundations of and transition to market economy, the change of regime (1990) was quite a shock for the Hungarian society and economy. Transformation of the former state enterprises (privatisation, breaking up firms), creation of new institutional frameworks for the economy, establishment of the banking sector, privatisation of the public housing stock had hampered economic take-off for long years. The system of state administration had to be reorganized (both on the central and local governmental level) and their financing and operating proved to be also a hindrance to transformation in the beginning. As a consequence,

Hungarian society had to face a dramatic drop in the number of jobs and an emerging unemployment, which had affected a significant part of the households. Sharpening social polarisation, pauperisation and decline of different strata having formerly belonged to middle classes led to increasing social tensions. Social-economic transformation eventually created major spatial disparities between regions of the country and within BMR as well.

Following this period of decline the national economy recovered rapidly from the mid-1990s, chiefly due to the influx of foreign capital and direct investments and the appearance of transnational corporations. Concurrently a profound economic restructuring had been taking place. Traditional branches of heavy industry (e.g. mining, metallurgy) vanished and their place was taken over by sophisticated branches of manufacturing (e.g. engine and machinery industry, chemicals and pharmaceuticals, pulp and printing, light industries). Agriculture had lost its former positions within the national economy, whereas the service sector (e.g. logistics, financial and legal services) came to the fore, compared with the industry and agriculture.

The economic restructuring has made it obvious that Hungary – based on its skilled workforce – could be competitive in the knowledge based industries within the European economic area. Accordingly, the national, regional and local strategies in Hungary have focused on the development of creative and knowledge intensive branches since 2000. The weight of BMR is significant and favours the progress of these industries; up to now the Central Hungary Region (and within that BMR and Budapest) attracts most of foreign and domestic investments and innovations, and BMR plays a prominent part in financial, legal, commercial and logistic services. As a result, BMR is over-represented in terms of the number and ratio of these firms, as well as the employees in firms of creative and knowledge intensive industries and the revenues generated by this sector. With regard to the individual branches it is the creative industries, legal and business services, ICT, R&D and higher education where BMR is an indisputable leader. Culture and cultural industries are also worth mentioning as Budapest is the prominent cultural hub of Hungary, and South Eastern Europe in many respect. The development of creative and knowledge intensive industries in provincial cities now is somewhat lagging behind that of the capital but their gradual close up – especially in financial services – is indicative of positive shifts and promising for the future.

Due to the economic development of the past fifteen years BMR has been integrated successfully into the European metropolitan network, even if there occurred economic difficulties in the years after 2002. Although at present the emergence of the creative knowledge sector is in an incipient stage, the position of Hungary, including BMR is advantageous and competitive. If BMR is able to use its options stemming from geographical setting and economic endowments, it could be effective in playing gateway position in the development of creative and knowledge intensive industries in this part of Europe. Actors decisive in Hungarian politics and economy have unambiguously recognised the opportunities relating to the creative knowledge sector for the social-economic progress of the country and BMR. A task for the forthcoming years will certainly be making steps and taking measures in the definition of creative knowledge branches to be developed, and with their advancement granting the sustainable development for BMR and Budapest and, at the same time, a growing activity of both in the international competition.

## Annex I.

- I. *Core copyright industries* encompass the cultural sphere and software industry. Those industrial and service activities belong to here which perform the creation, production, broadcasting, exhibition, distribution, communication of works protected under copyright law to the public (e.g. literature, publishing, press, fine arts, applied arts, architecture, performing arts, music, photo, theatrical productions, motion pictures, radio and TV, advertising, software and data-base production etc.).
- II. *Partial copyright industries* include those that are only partially engaged in the production of copyrighted creations. Those industrial and service activities are included here which perform the creation, production and distribution of equipments which enable or support the production (partly or totally) of works protected under copyright law (e.g. furniture, architecture, antiques, TV-, radio-sets, CD, DVD players, personal computers etc.).
- III. *The interdependent (background) copyright industries* comprise for example the manufacture of TV sets, radios, DVD players and computers, while non-dedicated support industries, serving also the copyright sector, include general trade, transportation and telecommunication (textile and leather industry, building services, telephone, Internet).
- IV. *Non-dedicated support industries*: those activities which partially support the broadcasting, communication, distribution and marketing of works protected under copyright law, but these activities can not be classified among the core copyright industries.



## Annex IIa

The ranking of the investigated countries by Talent-index values

No.	Country	Creative class	Human capital	Scientific capital
1.	Finland	4	1	1
2.	Belgium	2	5	6
3.	Ireland	1	8	11
4.	Denmark	9	2	3
5.	Sweden	7	7	2
6.	Norway	17	3	4
7.	Netherlands	3	9	14
8.	Estonia	5	4	15
9.	Switzerland	8	6	8
10.	Germany	12	12	5
11.	Spain	14	10	10
12.	Lithuania	6	11	19
13.	Greece	11	15	13
14.	Slovenia	15	17	12
15.	Austria	21	18	7
<b>16.</b>	<b>Hungary</b>	<b>13</b>	<b>19</b>	<b>16</b>
17.	Latvia	10	16	23
18.	France	25	13	9
19.	Bulgaria	18	14	24
20.	Poland	16	20	21
21.	Czech Republic	20	23	17
22.	Slovakia	19	21	20
23.	Portugal	22	22	22
24.	Italy	23	24	18
25.	Romania	24	25	25

Source: Ságvári & Dessewffy 2006, Demos Hungary, 21. p.

The ranking of investigated countries by Technology-index values

No.	Country	R&D funds	Innovation index
1.	Sweden	1	6
2.	Finland	2	2
3.	Switzerland	4	1
4.	Denmark	3	3
5.	Germany	5	5
6.	Austria	7	7
7.	Netherlands	10	4
8.	France	6	10
9.	Belgium	9	9
10.	Norway	8	13
11.	Ireland	13	8
12.	Italy	14	11
13.	Spain	15	12
14.	Slovenia	11	15
15.	Czech Republic	12	17
<b>16.</b>	<b>Hungary</b>	<b>16</b>	<b>20</b>
17.	Portugal	18	16
18.	Estonia	17	18
19.	Latvia	25	14
20.	Greece	20	19
21.	Lithuania	19	22
22.	Poland	21	21
23.	Slovakia	22	23
24.	Bulgaria	23	24
25.	Romania	24	25

Source: Ságvári & Dessewffy 2006, Demos Hungary, 27. p.

## Annex IIb

### The ranking of the countries by Tolerance-index values

No.	Country	Traditional/secular values	Survival/self-expression values	Attitudes towards immigrants	Satisfaction
1.	Sweden	1	1	1	7
2.	Denmark	4	2	5	2
3.	Netherlands	9	3	4	1
4.	Norway	6	4	7	4
5.	Switzerland	10	6	8	5
6.	Spain	20	13	2	6
7.	Finland	13	8	17	3
8.	Germany	3	14	18	10
9.	Belgium	16	9	14	8
10.	Slovenia	7	16	13	11
11.	Austria	18	5	12	15
12.	France	14	10	16	12
13.	Italy	21	11	9	13
14.	Czech Republic	2	15	22	16
15.	Greece	17	12	15	14
16.	Ireland	25	7	11	9
17.	Estonia	5	21	6	21
18.	Portugal	24	17	3	18
19.	Slovakia	12	18	23	19
20.	Latvia	15	22	19	20
21.	Lithuania	11	20	21	24
22.	Romania	22	25	10	22
23.	Poland	23	19	24	17
24.	Bulgaria	8	24	20	25
25.	Hungary	19	23	25	23

Source: Ságvári & Dessewffy 2006, *Demos Hungary*, 34. p

### Annex III.

	NACE	Name
<b>Creative industries</b>	17	Manufacture of textiles
	171	Preparation and spinning of textile fibres
	172	Textile weaving
	173	Finishing of textiles
	174	Manufacture of made-up textile articles, except apparel
	175	Manufacture of other textiles
	176	Manufacture of knitted and crocheted fabrics
	177	Manufacture of knitted and crocheted articles
	18	Manufacture of wearing apparel; dressing and dyeing of fur
	181	Manufacture of leather clothes
	182	Manufacture of other wearing apparel and accessories
	183	Dressing and dyeing of fur; manufacture of articles of fur
	19	Tanning and dressing of leather; manufacture of luggage, handbags etc.
	191	Tanning and dressing of leather
	192	Manufacture of luggage, handbags, saddlery and harness
	193	Manufacture of footwear
	221	Publishing
	223	Reproduction of recorded media
	524	Other retail sale of new goods in specialized stores
	525	Retail sales of second-hand goods in store
	722	Software consultancy and supply
	742	Architectural and engineering activities and related technical consultancy
	744	Advertising
	748	Miscellaneous business activities
	921	Motion pictures and video activities
	922	Radio and television activities
	923	Other entertainment activities
	924	News agency activities
	927	Other recreational activities

<b>ICT</b>	300	Manufacture of office machinery and computers	
	313	Manufacture of insulated wire and cable	
	321	Manufacture of electronic valves and tubes and other electronic components	
	322	Manufacture of television and radio, telephony and line telegraphy	
	323	Manufacture of television and radio receivers, sound, video recording or reproducing	
	332	Manufacture of instruments and appliances for measuring, checking, testing etc.	
	333	Manufacture of industrial process equipment	
	642	Telecommunications	
	72	Computer related activities (minus 722 Software)	
	721	Hardware consultancy;	
	723	Data processing;	
	724	Database activities;	
	725	Maintenance and repair of office, accounting and computing machinery;	
	726	Other computer related activities;	
	<b>Finances</b>	65	Financial intermediation, except insurance and pension funding
		66	Insurance and pension funding except compulsory social security
67		Activities auxiliary to financial intermediation	
<b>Law, business</b>	741	Legal, accounting, book-keeping and auditing activities; market research etc.	
	743	Technical testing and analysis	
	745	Labour recruitment and provision of personnel	
	746	Investigation and security activities	
<b>R&amp;D</b>	73	Research and development	
	731	Research and experimental development on natural sciences and engineering	
	732	Research and experimental development on social sciences and humanities	
	803	Higher education	

## Annex IVa

### Number of companies in the creative knowledge sector

	Budapest	Agglomeration	BMR	Country
Creative industries	51500,0	13571,0	65071,0	150331,0
ICT	6856,0	1861,0	8717,0	16275,0
Finances	4536,0	1687,0	6223,0	22685,0
Law and business	23814,0	5582,0	29396,0	70115,0
R&D, higher education	1842,0	339,0	2181,0	4164,0
<i>Creative knowledge sector</i>	<i>88548,0</i>	<i>23040,0</i>	<i>111588,0</i>	<i>263570,0</i>
Total number of companies	192215,0	61283,0	253498,0	724254,0

### Distribution of companies by creative knowledge branches (%)

	Budapest	Agglomeration	BMR	Country
Creative industries	26,8	22,1	25,7	20,8
ICT	3,6	3,0	3,4	2,2
Finances	2,4	2,8	2,5	3,1
Law and business	12,4	9,1	11,6	9,7
R&D, higher education	1,0	0,6	0,9	0,6
<i>Creative knowledge sectors</i>	<i>46,1</i>	<i>37,6</i>	<i>44,0</i>	<i>36,4</i>
Total	100,0	100,0	100,0	100,0

### Distribution of companies within the creative knowledge sector (%)

	Budapest	Agglomeration	BMR	Country
Creative industries	58,2	58,9	58,3	57,0
ICT	7,7	8,1	7,8	6,2
Finances	5,1	7,3	5,6	8,6
Law and business	26,9	24,2	26,3	26,6
R&D, higher education	2,1	1,5	2,0	1,6
<i>Creative knowledge sector</i>	<i>100,0</i>	<i>100,0</i>	<i>100,0</i>	<i>100,0</i>

### Proportion of companies in the BMR in the creative knowledge sector (%)

	Budapest	Agglomeration	BMR	Country
Creative industries	34,3	9,0	43,3	100,0
ICT	42,1	11,4	53,6	100,0
Finances	20,0	7,4	27,4	100,0
Law and business	34,0	8,0	41,9	100,0
R&D, higher education	44,2	8,1	52,4	100,0
<i>Creative knowledge sector</i>	<i>33,6</i>	<i>8,7</i>	<i>42,3</i>	<i>100,0</i>
Total	26,5	8,5	35,0	100,0

Source: CSO Hungary, 2004

## Annex IVb

### Number of employees in the creative knowledge sector

	Budapest	Agglomeration	BMR	Country
Creative industries	165939	28070	194009	432729
ICT	43250	13517	56767	121657
Finances	51206	2724	53930	81135
Law and business	78603	11099	89702	169389
R&D, higher education	29709	2940	32649	67017
<i>Creative knowledge sector</i>	<i>368707</i>	<i>58350</i>	<i>427057</i>	<i>871927</i>
Total number of employees	1217259	265570	1482829	3788859

### Distribution of employees by creative knowledge branches (%)

	Budapest	Agglomeration	BMR	Country
Creative industries	13,6	10,6	13,1	11,4
ICT	3,6	5,1	3,8	3,2
Finances	4,2	1,0	3,6	2,1
Law and business	6,5	4,2	6,0	4,5
R&D, higher education	2,4	1,1	2,2	1,8
<i>Creative knowledge sector</i>	<i>30,3</i>	<i>22,0</i>	<i>28,8</i>	<i>23,0</i>
Total	100,0	100,0	100,0	100,0

### Distribution of employees in the creative knowledge sector (%)

	Budapest	Agglomeration	BMR	Country
Creative industries	45,0	48,1	45,4	49,6
ICT	11,7	23,2	13,3	14,0
Finances	13,9	4,7	12,6	9,3
Law and business	21,3	19,0	21,0	19,4
R&D, higher education	8,1	5,0	7,6	7,7
<i>Creative knowledge sector</i>	<i>100,0</i>	<i>100,0</i>	<i>100,0</i>	<i>100,0</i>

### Proportion of employees in the BMR in the creative knowledge sector (%)

	Budapest	Agglomeration	BMR	Country
Creative industries	38,3	6,5	44,8	100,0
ICT	35,6	11,1	46,7	100,0
Finances	63,1	3,4	66,5	100,0
Law and business	46,4	6,6	53,0	100,0
R&D, higher education	44,3	4,4	48,7	100,0
<i>Creative knowledge sector</i>	<i>42,3</i>	<i>6,7</i>	<i>49,0</i>	<i>100,0</i>
Total	32,1	7,0	39,1	100,0

Source: CSO Hungary, 2004

## Annex IVc

### Annual revenues of companies in the creative knowledge sector

	Budapest	Agglomeration	BMR	Country
Creative industries	9595857,2	1291650,3	10887507,5	17465951,8
ICT	6179542,4	2289326,8	8468869,1	19665425,4
Finances	5263841,0	67326,1	5331167,1	5846866,8
Law and business	2819705,7	320379,7	3140085,4	4712554,3
R&D, higher education	157511,2	13917,0	171428,2	221137,2
<i>Creative knowledge sector</i>	24016457,5	3982599,8	27999057,3	47911935,5
Total income of companies	91828163,9	21828878,8	113657042,7	213780104,0

### Distribution of annual revenues by creative knowledge branches (%)

	Budapest	Agglomeration	BMR	Country
Creative industries	10,4	5,9	9,6	8,2
ICT	6,7	10,5	7,5	9,2
Finances	5,7	0,3	4,7	2,7
Law and business	3,1	1,5	2,8	2,2
R&D, higher education	0,2	0,1	0,2	0,1
<i>Creative knowledge sector</i>	26,2	18,2	24,6	22,4
Total	100,0	100,0	100,0	100,0

### Distribution of annual revenues in the creative knowledge sector (%)

	Budapest	Agglomeration	BMR	Country
Creative industries	40,0	32,4	38,9	36,5
ICT	25,7	57,5	30,2	41,0
Finances	21,9	1,7	19,0	12,2
Law and business	11,7	8,0	11,2	9,8
R&D, higher education	0,7	0,3	0,6	0,5
<i>Creative knowledge sector</i>	100,0	100,0	100,0	100,0

### Proportion of annual revenues in the BMR in the creative knowledge sector (%)

	Budapest	Agglomeration	BMR	Country
Creative industries	54,9	7,4	62,3	100,0
ICT	31,4	11,6	43,1	100,0
Finances	90,0	1,2	91,2	100,0
Law and business	59,8	6,8	66,6	100,0
R&D, higher education	71,2	6,3	77,5	100,0
<i>Creative knowledge sector</i>	50,1	8,3	58,4	100,0
Total	43,0	10,2	53,2	100,0

Source: CSO Hungary, 2004

## Annex V.

### Microeconomic arrangements and programmes for creative industries in Hungary supporting the realisation of the Lisbon strategy

Arrangements	Descriptions	Financial support in 2006
Improving the utilisation of R+D outcomes, establishing cooperation with economy	Jedlik Ányos Programme: Support of long term projects among others on the field of information technologies Pázmány Péter Programme: establishment of focal points of global importance, which pursue outstanding R+D and technological innovation activities,	7,5 Billion HUF
Strengthening the R+D field prospective for Hungary, international cooperation	Supporting international (R+D) grand projects within the frame of international R+D cooperation	4,6 Billion HUF
Strengthening entrepreneurial innovation and innovative abilities	Irinyi János Programme – Innovation-based development of the economy and competitiveness of regional; establishment and strengthening regional innovation networks Baross Gábor Programme – supporting the appearance of new innovative enterprises and new products, services and processes on the market	13,5 Billion HUF
Stimulation the R+D field prospective for Hungary, international cooperation	Asbóth Oszkár innovation programme of advanced branches – objective is to accelerate the evolution of advanced branches in the field of developed technologies (biotechnology, info-communication, medical industry)	2,5 Billion HUF
Issues of market frame regulation ICT regulatory and institutional frames	Revision of the regulatory conditions of e-commerce, increasing the intensity of competition in the telecommunication market, promoting digital television industry, introduction of digital legal treatment, establishment of a knowledge centre for info-communication, innovation and standardisation.	No data
Application of ICT in administration and public services	E-administration and public services, electronic environmental protection and health care programme, establishment of digital archives, application of intelligent traffic systems and services	18 Billion HUF
Digital contents, ITC-content industrial branch development	Digital Content Industry developments	1,4 Billion HUF
Establishment of network information safety and interoperability	Programme for increasing safety in Informatics	415 Billion HUF
Spreading of ICT means and application among the population and companies	Development and stimulation of information economy and commerce	160 Billion HUF
Promoting appearance of domestic competitive industries on international scenes.	Urging the international presence of info-communication sector, strengthening the creative sector in Hungary	285 Million HUF

## Annex VI.

Concrete priorities and programmes in the Core Programme of Budapest regarding creative industries and knowledge-based and innovative development

### 1. DYNAMIC ECONOMY PRIORITY

#### *1.1 Strengthening knowledge city function in the city and the region*

In the framework of strengthening the knowledge city function it is essential to build a strong relationship between the higher educational, economic and governmental organisations, to lay the foundation of clusters fundamental for the region and to support the development of science parks and technopolices.

Living Lab Budapest PPP-based partnership is to be established by the unification of the key actors of info-communication and with the participation of private investors, R+D institutions and urban developers to introduce the mobile info-communications novelties among the wider circle of potential users.

The objective is to make info-communication technologies accessible within a non-profit structure, later after summing up the experiences gained in this framework to determine the new directions of development regarding urban information technologies.

**Programme components:** a) **Development Pole Programme** – Development of innovation resources, building networks (governmental-educational-research), supporting knowledge-industry clusters and incubators; b) The “intelligent city” – introduction of info-communication novelties in the field of urban administration and public services (e.g. transportation, health care, education), culture, public and private services (Living Lab Budapest PPP).

#### *1.6 Budapest EU-border city, elaborating the distributing role of the city and strengthening the role played in logistics*

The transfer-role of Budapest has shown a marked development in the past decades, and this process is supported by the EU developments in progress. The transfer role automatically upgrades the logistic potential of the region, which is an elemental interest of Budapest.

**Programme components:** a) Strengthening Budapest in its regional and international region organiser and commercial role, in which the ReEvolutio international project-market and estate investment forum is outstanding, b) Development of the economic connections between Central Hungary and the EU member states.

### 5. CULTURAL VALUE CREATION PRIORITY

The objective of the priority is to increase the efficiency of the basically privately run cultural economy, mainly by applying indirect means.

In the field of culture the fundamental aim is not establishing new institutions, but to widen the circle of people participating in cultural consumption, which is rather limited compared to the total population, **making culture part of everyday life.**

#### *5.1 Cultural programmes in public urban spaces*

**Programme components:** a) The cultural programme of the everyday life; b) Strengthening the special cultural potential of urban areas with strong cultural identity by neighbourhood revitalisation; c) Establishment of the event-plan and -system of grand programmes with special respect to music events.

### 7. PARTNERSHIP WITH THE REGION PRIORITY

#### **Promoting the regional integration of the city and its surroundings**

The objective of the priority is to express institutionally the existing regional mutual dependence, to strengthen regional links and to integrate them into one unified decision making system.



### ***7.1 Establishing a common development programme of Budapest and its surroundings (the agglomeration)***

In the past few years in the Central Hungary region the formal institutional system has been established, but this system does not guarantee effective cooperation for its representation is not sufficient, its power is scarce. The mid term ambition should be that besides the political cooperation the professional cooperation is also enhanced.

**Programme components a)** The establishment of the institutional system of the regional cooperation with special respect to certain tasks related to harmonised economic development, infrastructural developments, service provision and protection environment.

### ***7.2 Regional partnership***

The existing formal channels of regional negotiations – Central Hungary Regional Development Board and the Budapest Agglomeration Development Board – play an indispensable role in bringing regional level political decisions, however the real spatial integrations exist on other levels. There are frequent conflicts between the Budapest districts and the agglomeration settlements, as well as between the thematic interests of the capital city and Pest county.

**Programme components a)** Making the informal channels of regional cooperation work.

## References

- Barta, Gy. (1999). *Industrial restructuring in the Budapest Agglomeration*. Discussion Papers (30), Centre for Regional Studies HAS, 53 p.
- Beluszky, P. (1999). A budapesti agglomeráció kialakulása. [The evolution of the Budapest agglomeration] In: Barta, Gy. & Beluszky, P. (eds), *Társadalmi-gazdasági átalakulás a budapesti agglomerációban I. [Socio-economic transformation in the Budapest agglomeration]*, Budapest, pp. 27-68.
- Csabai, L. (2004). Csapdában – lakásügyr 1 szintén [Trapped – frankly on housing issues] *Önkorkép*, 6, pp. 6-9.
- Csizmady, A. (2005). A panels lakótelepek jövője [Future of the panel housing estates] In: T. Egedy, ed. 2005, *Városrehabilitáció és Társadalom [Urban Rehabilitation and Society]* Budapest: Hungarian Academy of Sciences, pp. 243-268.
- Dövényi, Z. & Kovács, Z. (2006a) Budapest: Post-socialist metropolitan periphery between ‘catching up’ and individual development path. *European Spatial Research and Policy*, 13 (2), pp. 23-41.
- Dövényi, Z. & Kovács, Z. (2006b). Urban development in Hungary after 1990. In: Altrock, U. – Güntner, S. – Huning, S. – Peters, D. (eds) *Spatial Planning and Urban Development in the New EU Member States*. Ashgate, Aldershot, pp. 163-179.
- Egedy, T. (2005) A városrehabilitációs stratégiák szerepe az épület- és lakásállomány megújulásában [Urban regeneration strategies in the renewal of the building- and dwelling stocks in Hungary]. *Tér és Társadalom*, (20) 1., pp. 37-56.
- Enyedi, Gy. & Szirmai V. (1992). *Budapest : a Central European capital*. London, Belhaven Press.
- Enyedi, Gy. (1996). Urbanization under Socialism. In: Andrusz, G. - Harloe, M. - Szelenyi, I. (eds) *Cities after Socialism*. Urban and Regional Change and Conflict in Post-Socialist Societies, Blackwell, pp. 100-118.
- Földi, Zs. & Van Weesep, J. (2006). Impacts of globalisation at the neighbourhood level in Budapest, *Journal of Housing and the Built Environment*
- Földi, Zs. (2006). *Neighbourhood dynamics in Inner-Budapest – A realist approach*. Netherlands Geographical Studies, (350). Utrecht, 345 p.
- Gorzalak, G. (1996). The Regional Dimension of Transformation in Central Europe. Regional Policy and Development Series 10. Jessica Kingsley, London.
- Hegedüs, J. & Teller, N. (2005) *Háttér tanulmány Budapest lakáskonceptjének elkészítéséhez [Background study for the housing concept of Budapest]* Budapest: Metropolitan Research Institute (manuscript)
- Hegedüs, J. & Várhegyi, É. (2000). *The Crisis in Housing Financing in the 1990s in Hungary* (manuscript)
- Izsák, É. & Probáld, F. (2001). Recent differentiation processes in Budapest’s suburban belt. In: Meusburger, P. & Jöns, H. (eds), *Transformations in Hungary*, pp. 291-316. Heidelberg: Physica-Verlag.

- Keresztély, K. (1998). A kínai közösség Budapesten [The Chinese community in Budapest ]  
In: Barta, Gy. (ed), *Budapest nemzetközi város [Budapest–the international city]*, pp.203-220. Budapest: Hungarian Academy of Sciences.
- Keresztély, K. (2005). Metropolis of Europe – Urban cultural life and inter-city cultural interactions for ‘cultural diversity’ – Budapest report, manuscript
- Keune, M. – Nemes Nagy, J. (2001). (eds) *Local development, institutions and conflicts in post-socialist Hungary*. International Labour Office, Budapest. 224 p.
- Kiss, E. (2004). Spatial impacts of post-socialist industrial transformation in the major Hungarian cities. *European Urban and Regional Studies*, 11 (1), pp. 81-87.
- Kok, H. & Kovács, Z. (1999). The progress of suburbanisation in the agglomeration of Budapest. *Journal of Housing and the Built Environment*, 14 (2): 119-135.
- Kovács, K. (1999). A szuburbanizációs folyamatok a fő városban és a budapesti agglomerációban [Suburbanisation processes in the capital city and in the agglomeration of Budapest]. In: Barta, Gy. & Beluszky, P. (eds), *Társadalmi-gazdasági átalakulás a budapesti agglomerációban I. [Socio-economic transformation in the Budapest agglomeration]*, Budapest. pp. 91-114.
- Kovács, Z. (1992). Assessing the postwar urban development in Budapest. In: Kertész, Z.-Kovács, Z.: *New perspectives in Hungarian geography*. Studies in Geography in Hungary (27), Budapest, pp. 159-169.
- Kovács, Z. (1994). A city at the crossroads: Social and economic transformation in Budapest. *Urban Studies*, 31 (7), pp. 1081-1096.
- Kovács, Z. (2000). Hungary at the threshold of the new millenium: the human geography of transition. In: Kovács, Z. (ed.) *Hungary Towards the 21st Century. The Human Geography of Transition*. Studies in Geography in Hungary (31), Budapest, pp. 11-27.
- Kovács, Z. (2004). Socio-economic transition and regional differentiation in Hungary. *Földrajzi Értest* , [Geographical Bulletin]. Tom. LIII. No. 1-2. pp. 33-49.
- Meusburger, P. (2001). The role of knowledge in the socio-economic transformation of Hungary in the 1990s. In: Meusburger, P. & Jöns, H. (eds), *Transformations in Hungary*, Heidelberg: Physica-Verlag. pp. 1-38.
- Michalkó, G. (2001). Social and geographical aspects of tourism in Budapest. *European spatial research and policy*. 8 (1). pp. 105-118.
- Nagy, S. (1999). Külföldi m köd t ke a budapesti agglomerációban [Foreign capital in the Agglomeration of Budapest]. In: Barta, Gy. & Beluszky, P. (eds), *Társadalmi-gazdasági átalakulás a budapesti agglomerációban I. [Socio-economic transformation in the Budapest agglomeration]*, pp. 155-165. Budapest: Regional Research Fund.
- Nemes Nagy, J. (2003). Geography and Spatial Modelling: Regional Income Inequalities in Hungary. In: Jakobi, Á. (ed.) *Frontiers of Geography*. Budapest-Heidelberg. pp. 45-58.
- Perger, É. (1999). Közigazgatási dilemmák [Administrative dilemmas]. In: Barta, Gy. & Beluszky, P. (eds), *Társadalmi-gazdasági átalakulás a budapesti agglomerációban I. [Socio-economic transformation in the Budapest agglomeration]*, pp.181-223. Budapest: Regional Research Fund.
- Ságvári, B. & Dessewffy, T. (2006) *On creative economy – Europe and Hungary in the creative age*. Budapest: DEMOS Hungary Foundation.
- Tasan-Kok, T. (2004). *Budapes, Istanbul, and Warsaw – Institutional and spatial change*. Delft: Eburon Academic Publishers.

Tóth, K. (2005). *Lakáspiaci változások Magyarországon és Budapesten* [Changes in the housing market of Hungary and Budapest]. (25 Feb 2006), [www.ingatlanpiac-info.hu/toth-krisztina.pdf](http://wwwingatlanpiac-info.hu/toth-krisztina.pdf)

Várhegyi, É. (1998). *Budapest kézikönyv, VIII. kerület* [Handbook of Budapest, 8th district] pp. 207-211. Budapest: CEBA Publishing House.

<http://www.urbanlegends.hu/2005/02/15/a-pesti-hajlektalanok-szamarol/>

***Publications of the Hungarian Central Statistical Office:***

Bakos, N. (2006). *Beruházások a Közép-magyarországi régióban 2001-2004* [Investments in the Central Hungarian Region 2001-2004]. Budapest: Központi Statisztikai Hivatal.

Bakos, N., Brinszkyné Hidas, Zs., Kezán, A. & Pásztor L. (2006) *Budapest mozaik* [Budapest Mosaic], (2), Budapest: Központi Statisztikai Hivatal.

Brinszkyné Hidas, Zs. (2006). *Népesedési folyamatok a budapesti agglomerációban* [Demographic trends in the agglomeration of Budapest]. Budapest: Központi Statisztikai Hivatal.