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Capital Cities in the New EU States – Economic Status Quo and Current Trends

In the course of the economic catching-up process of the new EU states, the capital cities of the countries in central and eastern Europe were the economically most successful regions in their countries. How distinct are economic disparities between the capitals and the rest of the countries today? What were the determinants of the related economic developments? And do current economic trends support the leading position of the capital cities in the new member states?

The states of central and eastern Europe which joined the EU in May 2004 are – with the exception of Poland with 38.2 million inhabitants – rather small countries on a European scale. Altogether they have a population of 73 million people, which corresponds to only 16% of the inhabitants of the EU25. The population of most capital cities in the new member states is also rather small compared to other European capital cities, e.g. Madrid, London, Paris or Berlin (see Table 1). Roughly half a million people live in the smallest of these cities, Ljubljana and Tallinn. The biggest – Warsaw and Budapest – have about 1.7 million inhabitants each. In most of the countries, the capital's population accounts for a considerable share of the overall population.

Leading Economic Centres

Currently, in all of the new EU states the capital cities are the leading economic centres of these countries. This is reflected in their high share of overall national employment and gross value added (see Figure 1). They have a share in total national employment ranging from 7.6% in Warsaw to more than 45% in Tallinn. Regarding gross value added (GVA) the capital cities have even higher shares, ranging from almost 13% in Warsaw to 59% in Tallinn.

Altogether, the highest concentration of economic activities in capital cities is to be found in the smallest of the new EU states, Estonia and Latvia. In these countries, the capital cities strongly dominate the economic development of the corresponding country with a share of almost 60% of GVA. The spatial concentration of employment and GVA is lowest in Poland and the Czech Republic, which are the largest among the countries considered.

The higher percentage share of total national GVA compared to the share of total national employment in the capital cities of central and eastern Europe indicates that they have a more productive economic sector than the average for the countries as a whole. In the year 2002, productivity in the capital cities surpassed national productivity by between roughly 22% (Ljubljana) and almost 80% (Budapest) (see Figure 2). The productivity gap between capital cities and the national average is accompanied by significant disparities in per capita income measured as GDP per capita. Per capita income is distinctly above the national average in the capital cities (see Figure 2). This

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Table 1
Population Figures, Country and Capital cities, New EU States, 2003[a,b]

Country	Population size, country, thousands	Capital city	Population size, city, thousands	Population share of capital city
Czech Republic	10,207	Prague	1,164	11.4
Estonia	1,354	Tallinn	522	38.5
Latvia	2,325	Riga	737	31.7
Lithuania	3,454	Vilnius	848	24.6
Hungary	10,130	Budapest	1,712	16.9
Poland	38,195	Warsaw	1,688	4.4
Slovakia	5,380	Bratislava	600	24.8
Slovenia	1,996	Ljubljana	494	11.1

[a] Malta and Cyprus are not included in the analysis [b] NUTS3 level

Sources: Eurostat: New Cronos Database, 2005; own calculations.

holds especially for Bratislava, Prague and Budapest where per capita income is more than twice as high as in the corresponding countries as a whole. Indeed, half of the capital cities already have a per capita income (measured in purchasing power parities) well above the EU15 average. For example, in 2002 in Prague GDP per capita exceeded the EU15 average by 40%, in Warsaw by 21% and in Budapest by 14%.

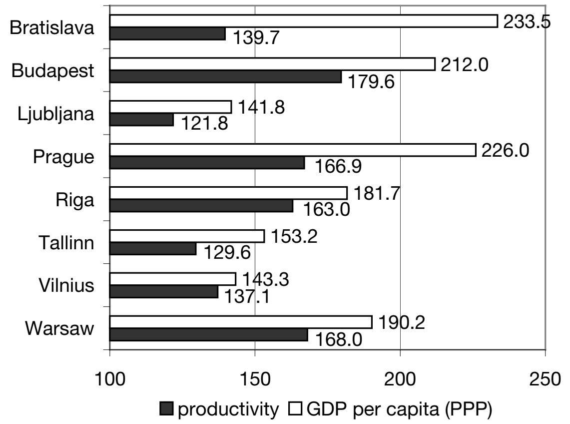
Disparities in per capita income and productivity are accompanied by distinct differences between capital cities and the country as a whole regarding the share of agriculture, industry and services in GVA (see Figure 3). In the year 2002, the share of services sectors ranged from 73.0% in Vilnius to 83.4% in Prague. The lowest share of the services sector in capital cities in the new EU states in central and eastern Europe is similar to the EU15 average share of the services sector in the year 2002, which was 71%. The highest share is close to the services share in London (86%)

Figure 1
Capital Cities' Share of GVA and Employment; 2002, ordered by Size of Country

* Budapest: share of employment 2001.

Sources: Eurostat: New Cronos Database, 2005; own calculations.

Figure 2
Productivity (GDP per employee) and GDP per capita, country=100; 2002[a]



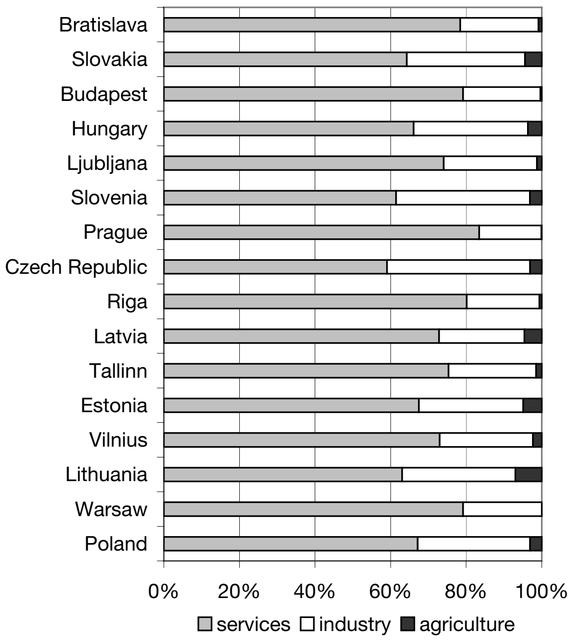
[a] Budapest: productivity 2001.

Sources: Eurostat: New Cronos Database, 2005; own calculations.

which is one of the highest in EU cities. The difference between the services share in the country and the corresponding city ranged from 7.3 percentage points (Latvia) to 24.4 percentage points (Czech Republic).

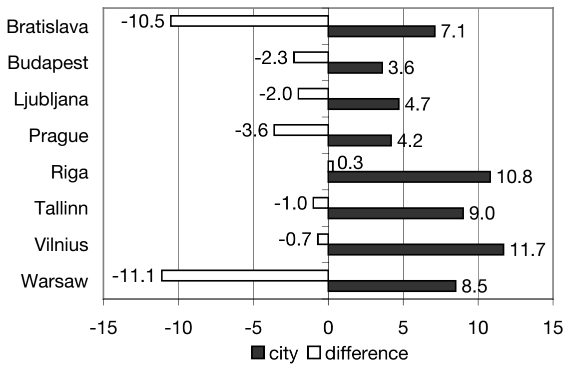
The leading economic position of the capital cities in the new member states is reflected in comparatively low unemployment rates (see Figure 4). Four

Figure 3
Share of Sectors in GVA, 2002



Sources: Eurostat: New Cronos Database, 2005; own calculations.

Figure 4
Unemployment Rate in Capital cities, Difference to the Unemployment Rate on the National Level in percentage points, 2003



Sources: Eurostat: New Cronos Database, 2005; own calculations.

capital cities - Bratislava, Budapest, Ljubljana and Prague – even exhibit unemployment rates distinctly below the EU15 average (8.1%) for 2003. Additionally, unemployment among groups with comparatively difficult access to the labour market is lower in capital cities than in the corresponding country on average.[1]

Unemployment rates in the capital cities considered vary from 3.6% in Budapest to 11.7% in Vilnius. Ranging from 0.3 to 1.0 percentage points, the difference between the national unemployment rate and the corresponding capital city are low in the Baltic States, which are the smallest countries considered here. In the biggest country among the new EU states, Poland, the national unemployment rate is more than twice as high as the unemployment rate in Warsaw.

To sum up, the capital cities of the new EU states show an outstanding position within their countries in terms of per capita income, employment and productivity. Furthermore, the share of services in GVA is much higher than in the country as a whole. Capital cities are the economically dominating centres of the EU countries in central and eastern Europe with an economic base which is much more productive than the national economy on average. Furthermore, capital cities currently offer better labour market opportunities than the corresponding countries as a whole – reflected among other things by relatively low unemployment rates. Which factors could explain these strong economic disparities between capital cities and the national average in the new EU states? And will the relevant mechanisms continue to support the economic leadership of capital cities in central and eastern Europe?

Transition, Integration and Structural Change

The economic development of central and eastern Europe and its capital cities since the beginning of the 1990s has been strongly shaped by two interdependent forces: transition and advancing EU integration. After the collapse of the Iron Curtain, which had previously protected the relatively unproductive economies of these countries against competitors from abroad, they became a part of the world economy facing global competition. The effects released by transformation were reinforced by the reduction of customs duties and other restrictions in trade and factor mobility between the EU and acceding countries in the run-up to EU enlargement. This period was marked by a more intensified division of labour in Europe via increased international trade and factor mobility between the EU15 and the acceding countries. Since productivity and competitiveness were low in the former communist countries, in the first years of transition a huge amount of foreign commodities were imported, many local companies collapsed and considerable rises in unemployment took place.[2]

Transition, specialisation and trade as well as changes in factor endowment introduced an enormous change in the economic structure of the respective countries. Inefficient production facilities were closed down and productivity gains were realised. The corresponding economic adjustments were driven by a reallocation of production factors among sectors and regions. The intensity and direction of structural changes in the course of transition spatially differed depending on factor endowment, economic structure, flexibility of wages and other local factors, i.e. infrastructure facilities and qualification of the labour force. Altogether, regions in which the economic structures were reorganised comparatively quickly in the course of these processes gained advantages from the realisation of relatively rapid productiv-

[1] For example, in 2003 youth unemployment in Bratislava and Warsaw was some 20 percentage points below the national average. Female unemployment in 2003 in Bratislava was 9.5 percentage points, and in Prague 4.6 percentage points, below the national average. Cf. Eurostat: New Cronos Database, 2005.

[2] Andrew Dawson: Foreign Direct Investment: A Sectoral and Spatial Review, in: David Turnock (ed.): Foreign Direct Investment and Regional Development in East Central Europe and the Former Soviet Union, Aldershot 2005, Ashgate Economic Geography Series, pp. 39-54.

ity gains. Consequently, these regions managed to take part successfully – at least in certain branches – in international economic competition earlier than regions where structural change only took place at a low pace. The capital cities were apparently more efficient than the corresponding countries on average in adjusting their economies to new conditions.

However, the overall share of the capital cities in national economic activities in the new member states was already high at the beginning of the transition. Furthermore, capital cities were also – due to the influence of the communist period and other historical factors – the national centres of political decision-making, education, culture and transport infrastructure. The concentration of public infrastructure positively affected economic growth. Apart from these local factors specific to capital cities, their above-average performance is the outcome of several demand and supply side factors. Among these, structural change seems to be one of the most important reasons for current disparities in productivity, income and unemployment rates between capital cities and the national average in the new EU states.[3]

More Rapid Structural Change in Capital Cities

At the beginning of the 1990s, agriculture was much more important for employment in the new member states than for the EU15 economies. For example, in 1993 22.5% of Lithuanian employees worked in the agricultural sector, while in the EU15 this share was just 5.3%. In 1994, the share of industrial employees in the new member states ranged from 26.5% in Latvia, which is slightly below the EU15 average (27.7%), to 42.2% in the Czech Republic. The share of the services sectors was therefore far below the EU15 average (66.5% in 1993). The lowest share of the services sectors in total employment was to be found in Lithuania (44.5%) and the highest in Latvia (51.9%).[4]

Vidovic, for example, states that the economic disparities observable between cities and other parts of the country in central and eastern Europe today can be traced back mainly to spatially differing industrial structures in the era of central planning.[5] The capital cities, based on a relatively diversified economic structure, were more flexible in adjusting their economic structures in the course of transition and advancing EU integration. Former mono-industrialised regions, in particular regions concentrating on armament, mining, steel and textile industries under central planning, are more affected by unemployment. Conversely, big cities with a developed services sector have a relatively low unemployment rate.[6] Rutkowski et al.[7] for Poland and Fazkas[8] for Hungary found evidence of a portfolio effect. The hypothesis behind this effect is that the more diversified industry structure is, the higher is the probability that laid-off workers will find employment in other sectors and hence the lower the unemployment rate is. In the most urbanised areas of the new member states, among them capital cities, the risk of aggregate shocks was low because of the more diversified production structure.[9] In capital cities, the rapid rise of employment in the services sectors could also compensate for the reduction of employment in industries, which was not the case in rural areas where the agricultural sector strongly dominated and services increased only slowly.[10]

Furthermore, transition not only led to a relocation of resources between sectors but was accompanied by a process of technological upgrading. Technological development was also supported by inflows of technical knowledge from abroad – related to FDI among other things – and a comparatively high participation in the international trade of capital cities. Capital cities were more successful in attracting foreign investments than smaller agglomerations.[11]

[3] Artis Kancs: Sozioökonomische Differenzierungsprozesse auf regionaler Ebene; in: Bundesinstitut für ostwissenschaftliche und internationale Studien (ed.): Differenzierungsprozesse in Ostmittel- und Osteuropa – 7, Brühler Tagung junger Osteuropa-Experten, Cologne 2000, pp. 50-58.

[4] Sectoral employment data for the new EU states on a harmonised data base are only available from 1996 onwards. In 1996, Poland had the lowest share (42.8%) and Hungary the highest (58.6%) of services in total employment while EU15 average was 68.2%.

[5] Hermine Vidovic: Labor Market Trends in Central and Eastern European Countries, in: Bernard Funck, Lodovico Pizzati (eds.): Labor, Employment, and Social Policies in the EU Enlargement Process, Washington 2002, The World Bank, pp. 27-46.

[6] Ibid.

[7] Jan Rutkowski, Marcin Przybila: Poland: Regional Dimensions of Unemployment, in: Bernard Funck, Lodovico Pizzati, op. cit., pp. 157-175.

[8] Károly Fazekas: Regional Disparities in Unemployment in Central and Eastern Europe: The Case of Hungary, in: Labor, Employment, and Social Policies in the EU Enlargement Process, Washington 2002, The World Bank, pp. 176-196; Károly Fazekas: Effects of Foreign Direct Investment on the Performance of Local Labour Markets. The Case of Hungary, Budapest Working Papers No. 3, Budapest 2003.

[9] Anna Maria Ferragina, Francesco Pastore: Mind the Gap: Unemployment in the New EU Regions, IZA Discussion Paper No. 1565, Bonn 2005.

[10] Artis Kancs, op. cit.

[11] Andrew Dawson, op. cit.

Table 2
Residents Qualified at Several ISCED Levels, in % of Total Population, 2001

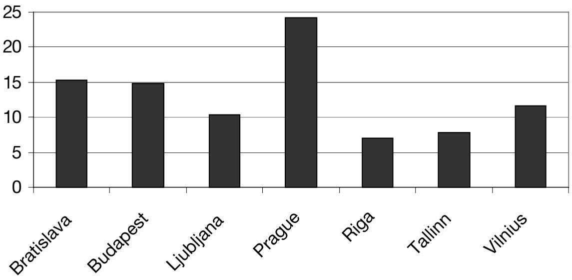
	Primary or first stage of basic education	Lower secondary or second stage of basic education	Upper secondary and post-secondary non-tertiary education	Tertiary education
Prague	12.5	12.5	55.9	16.3
Czech Republic	0.3	23.2	66.2	10.3
Tallinn	7.7	11.4	35.6	28.8
Estonia	13.7	21.0	41.5	23.8
Riga	11.9	13.1	39.5	16.2
Latvia	19.2	23.4	45.1	12.3
Vilnius	12.5	8.8	36.7	28.9
Lithuania	21.9	15.8	42.2	20.0
Budapest	7.9	23.7	40.7	18.0
Hungary	13.4	30.0	38.6	9.6
Warsaw	14.5	n.a.	49.3	22.0
Poland	31.7	n.a.	57.9	10.4
Ljubljana	n.a.	16.0	46.1	20.4
Slovenia	5.1	27.0	54.8	13.1
Bratislava	n.a.	13.0	48.2	20.9
Slovakia	9.2	48.6	28.0	8.6

Sources: Eurostat: New Cronos Database and Urban Audit, 2005; own calculations.

In Poland for example, Warsaw and a few other cities accounted for 90% of FDI stock and in Hungary most of the FDI stock was concentrated in Budapest and other urban areas.[12] In Slovakia, more than 60% of all FDI stock is in the Bratislava region.[13] As an outcome of the technical upgrading of production, labour demand shifted from low-skilled to high-skilled workers.[14] These structural changes in labour demand supported unemployment among people with a relatively low educational level while demand for people with a higher educational level rose. Hence, regions relatively well equipped with a highly qualified population had an advantage in coping with the transition shock and adjustment pressures resulting from economically integrating into the EU.

In the capital cities considered here, the educational level of the residents is higher than on the national average, due among other things to the fact that they are the national centre of education (see Table 2). Capital cities exhibit a distinctly higher share of residents qualified at a tertiary education level than the countries on average, being e.g. almost twice as high in Budapest as in Hungary and more than twice as high in Warsaw and Bratislava as in Poland and Slovakia respectively. Furthermore, the human capital endowment of capital cities improved in the course of the economic upswing of the cities, attracting qualified workers from other parts of the country due to better economic opportunities. The relatively high educational level of their population may have contributed to the relative economic success of capital cities due to their having a more flexible labour force and their adjusting to technical upgrading, which required relatively highly qualified labour.

Figure 5
Share of Services in GVA, Difference to Country in percentage points, 1995[a]



[a] Riga and Vilnius 1996; Warsaw is not considered here because NUTS3 data is only available from 1998 onwards.

Sources: Eurostat: New Cronos Database, 2005; own calculations.

Current Trends

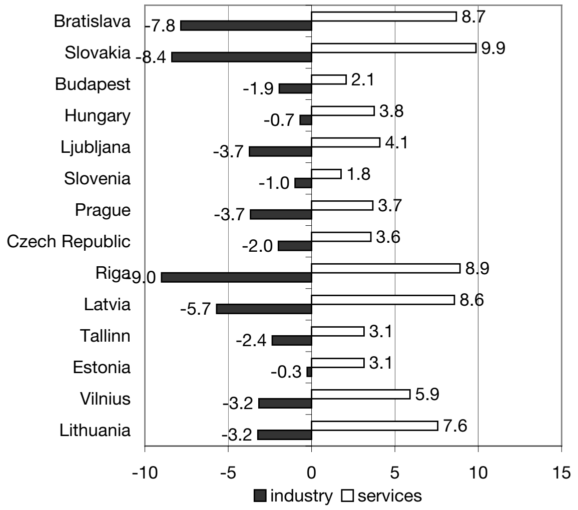
Altogether several factors, e.g. disparities in FDI, a relatively highly qualified labour force and relatively diverse economic structure, may have accelerated the rebuilding of the economy in capital cities. On an aggregate level, the convergence of economic structures in the countries of central and eastern Europe towards that of the mature market economies of the EU15 results in an increase in the services sector and a reduction of the agricultural and industrial sectors. Structural change of this kind is quite far advanced and distinctly more so in the capital cities than in the corresponding countries on average. The forces described above were already at work in the early phases of transition and shaped the economic disparities between the capital cities and their countries. Already in 1995, only a few years after transition began, specialisation in the services sector was more strongly developed in all capital cities than on the national average (see Figure 5). The primary example is Prague, with a share of services in GVA 24 percentage points higher than the country on average. Also, the GVA of services in Bratislava and Budapest, Vilnius and

[12] Anna Maria Ferragina, Francesco Pastore, op. cit.

[13] Hermine Vidovic, op. cit.

[14] Anna Maria Ferragina, Francesco Pastore, op. cit.

Figure 6
Development of Industry and Services Share in GVA, in percentage points, 1995 to 2002[a]



[a] Estonia, Latvia, Slovenia 1996 to 2002; Warsaw is not considered because NUTS3 data is only available from 1998 onwards.

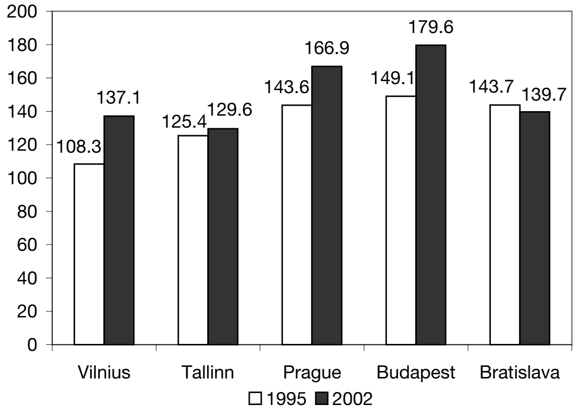
Sources: Eurostat: New Cronos Database, 2005; own calculations.

Ljubljana was 10 to 15 percentage points higher than on the national average.

Since 1995, only in the capital city of Slovenia was the advancing structural change towards a services society distinctly more rapid than the national average, and Riga and Prague slightly surpassed national development in this respect. In the remaining countries, disparities in the share of the services sector in GVA between capital cities and the national average diminished during the period 1995 to 2002. Nevertheless, development towards a services society – as in the EU15 states – continues to proceed while de-industrialisation is still taking place in the countries on average as well as in capital cities (see Figure 6).

Closely related to overcoming obsolete production structures in the transition countries was productivity growth. We find a tendency of increasing productivity gaps between capital cities and the countries on average within the time period ranging from 1995 to 2002 (see Figure 7). In most of the countries considered the productivity gains of the capital cities distinctly surpassed the corresponding development in the countries on average. Simultaneously GDP per capita in the capital cities grew faster than on the national average (see Figure 8). Therefore, current developments in central and eastern European countries contribute to widening the per capita income gap between capital

Figure 7
Productivity in Capital Cities, country=100; 1995 and 2002[a]



[a] Tallinn 1996 and 2002; Budapest 1995 and 2001. Data for Ljubljana, Riga and Warsaw only available from 2000 onwards.

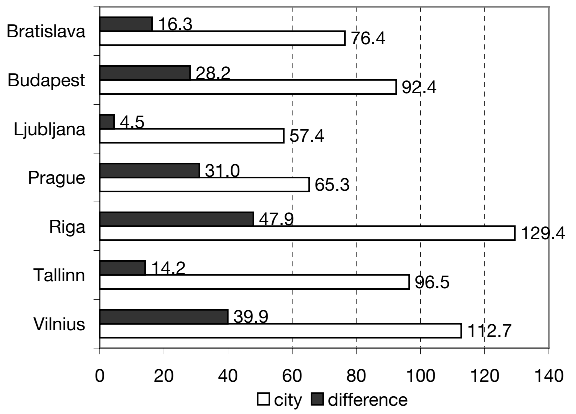
Sources: Eurostat: New Cronos Database, 2005; own calculations.

cities and the national average. This development is especially pronounced in Latvia and Lithuania, while the per capita income gap between the capital cities and the rest of the country increased to a lesser degree in Slovenia, Estonia and Slovakia.

Conclusion

Obviously, capital cities were more ready to cope with the aggregate shock of transition and – up to now – more successful in adjusting to economic

Figure 8
GDP per capita (in PPP): Growth 1995-2002, City (%) and difference to country growth (in percentage points)[1]



[1] Warsaw is not considered because NUTS3 data is only available from 2000 onwards.

Sources: Eurostat: New Cronos Database, 2005; own calculations.

structural change in the course of advancing European integration. Currently, structural change is much more advanced in the capital cities than in the corresponding countries on average. And capital cities exhibit distinctly higher productivity and per capita income as well as comparatively low unemployment rates. Structural change towards higher specialisation in services in the new member states is still going on. However, in the time period ranging from 1995 to 2002, the growth of the services sector share of GVA was higher on the national average than in the respective capital city in some of the countries. Nevertheless, at the same time the per capita income gap as well as the productivity gap between capital cities and the national averages widened during that period of time. Regarding future development, capital cities exhibit several local factors which put them in a good position regarding growth. Among these, the fact that they represent the point of intersection of transport infrastructure, the relatively effective services sector and the high educational level of their inhabitants are of greatest importance.