# BUDAPEST

# Past and Future

Edited by Tamás Sikos T. – Dóra Molnár

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Edited by Tamás Sikos T. – Dóra Molnár



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Authors Pál Beluszky (†) Zoltán Dövényi Tamás Egedy Mariann Fonyódi László Jeney Kornélia Kiss Zoltán Kovács Gábor Michalkó Dóra Molnár Viktor Pál Tamás Sikos T. Gáborné Székely Dóra Szendi Tibor Tiner Annamária Uzzoli

Consultant Mariann Veresné Somosi

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### Recommendation

"The royal capitals of Buda and Pest, as well as the market town of Ó-Buda and Margaret Island, the latter having been carved out of Pest County, shall be united into a single municipality under the name of Buda-Pest Capital."

One hundred and fifty years ago, the sentence quoted above marked the start of Act XXXVI of 1872, which established the unified capital. For the momentous occasion of this anniversary, this exquisite collection of studies has been released under the title Budapest Past and Future. Within the pages of this magnificently crafted volume, the spotlight shines on the historical narrative, the present and the future of Budapest, a city that stands as a beacon in the Carpathian Basin and a defining force within East-Central Europe. Beyond mere historical reflections, the authors delve into recent developments, revolutionary concepts, and defining trends that shape the city's evolving landscape. From the intricate details of urban infrastructure to the shifting spatial dynamics, this volume examines the development, current situation, and every aspect of Budapest and its agglomeration, revealing a multifaceted story of progress and transformation. Expounding upon the rich tapestry of the capital's administrative history, the evolution of its housing market over a century and a half, and the burgeoning opportunities within the local retail sector, our authors paint a vivid portrait of Budapest's societal fabric. Peering into the realm of residents' well-being, they address the critical nexus between health and quality of life, offering a nuanced exploration of the creating and cultivation of 'good places' that enrich leisure pursuits. Amidst a backdrop of economic globalisation and the rise of multinational enterprises, the authors dissect the intricate web of Budapest's economic landscape, showcasing both the challenges and opportunities that lie ahead. Positioning Budapest within the broader context of the East-Central European urban hierarchy, a diverse array of statistical measures are employed to illustrate the city's strategic significance. Looking towards the horizon, they offer a compelling vision of Budapest's future, anchored in digital innovation, sustainable growth, and a commitment to liveability for all residents. Through their deeply insightful analyses, the authors provide a candid and far-reaching exploration of the city's legacy and a roadmap for navigating the complexities of the years to come. This collection is sure to captivate and inspire readers with its thoughtful reflections and bold vision for Budapest's ongoing journey towards excellence.

> Tibor Navracsics Minister of Regional Development

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### Foreword

This volume is the follow-up of a series of conferences on the history, development, and future of Budapest, launched by the Institute for Economy and Competitiveness of the Eötvös József Research Centre in the framework of the Modern Cities programme. The interest shown in the presentations, which were attended by a large number of professionals, along with the upcoming 150<sup>th</sup> anniversary of Budapest's foundation, prompted the editors of this volume to draw on the ideas presented to formulate the most important topics for research on the country's capital.

As we approach the anniversary, it is essential to examine the place of Budapest within the system of Central European cities, particularly regarding the spatial distribution of its society and economy. The unification of the three cities - Pest on the left bank of the Danube and Buda and Óbuda on the right bank – enabled the capital to become a rival centre of the Austro-Hungarian Monarchy, alongside Vienna, and the focal point of the Carpathian Basin. At that time Budapest was the cornerstone of social and technical modernisation. It was the city's industry that played a pivotal role in its advancement, allowing it to enter the global markets with products that were considered major innovations. The industrial success was crucial in driving the city's development and shaping its international relations. For a long time, Budapest's industry not only spearheaded its growth but also determined the capital's position on the world stage. The regime change in 1989–1990 further consolidated this process, making Budapest one of the most dynamic cities in the region and giving it the opportunity to assume a significant position in the international network of cities in Eastern and Central Europe. This was partly due to the influx of foreign capital: multinational companies began establishing their networks in the capital because here they found everything they needed – a skilled and affordable workforce that was professionally adaptable and flexible, as well as a well-developed infrastructure and significant purchasing power potential.

Apart from a few brief periods in history, the capitals of East-Central Europe have rarely managed to exert a region-wide attraction, especially during the closed confines of the socialist decades. With the change of regime and deepening globalisation, however, cities in East-Central Europe have unquestionably become the driving forces of their countries. But can this transformation alone propel Budapest or its competitors to lead their metropolitan areas? Due to the European integration of the former socialist bloc, regional borders have become easily crossable and regional co-operations such as the V4 have gradually deepened. This raises the pertinent question of whether Eastern and Central Europe has a defining 'capital' at all. Can Budapest, as the gateway to the Balkans and the primary centre of the Carpathian Basin, aspire to a leadership role within the Visegrád Group?

The volume also examines the specific, long historical development path that intertwines the capital with its agglomeration through myriad ties. This region, as the central, densely populated area of the Carpathian Basin, has been pivotal in the spatial structure of the country since pre-capitalist times. The unification of the city in 1873 formally acknowledged the early stages of agglomeration. The spatial development of this agglomeration gained particular emphasis after the regime change, when the relationships and the division of labour between Budapest and its suburbs entered a new phase. The evolution of the metropolitan transport network, unfolding across several stages, has played a key role in transforming Budapest into a metropolis. Over the span of a century and a half, this process has been characterised by a continuous network expansion, adapting to evolving travel demands. Simultaneously, it has been crucial for fostering multifaceted passenger transport links between the capital and its ever-expanding agglomeration, necessitating enhancements in fixed-route and road transport networks. The volume presents a brief assessment of the current state of the transport network in Budapest and its agglomeration, highlighting principal operational challenges. Then, on the one hand, it outlines strategic development objectives essential for shaping a liveable metropolis with an efficient and environmentally friendly transport system. On the other hand, it identifies all the development tools to achieve these objectives. The most important of these include: 1. establishing a safe, predictable, and integrated metropolitan transport system; 2. deepening and diversifying cooperation in transport links within the agglomeration; 3. promoting smart development of the network, emphasising energy efficiency, low pollution, and noise reduction; 4. achieving optimal balance between vehicular and pedestrian traffic in public spaces of the capital, while minimising conflicts; 5. expanding and enhancing passenger-centric intermodal transport connections.

For the past 150 years, Budapest has served as a place for entertainment, culture, sports, health, and active recreation. The capital has consistently offered its residents and visitors alike a wealth of "good venues" for both individual and social leisure, creating joyful and memorable experiences.

In today's complex landscape, challenges such as the impacts of globalisation, Industry 4.0, artificial intelligence, and the ongoing growth demand effective urban development solutions. Consequently, research into smart cities has become a top priority. Since the turn of the millennium, Hungary has also witnessed the strengthening of its creative economy, particularly the remarkable growth of knowledge-intensive industries over the past two decades. As a result, the significance of Budapest has risen, and the role of its agglomeration within the Hungarian creative economy has expanded significantly, which the crises could not substantially influence. These developments actively shape Budapest's contemporary landscape: the city's society, economy, and not least, its physical environment and geographical outlook are undergoing profound transformations.

Budapest, 22 June 2022

The editors

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#### Pál Beluszky

## The Hungarian Capital on the Rollercoaster of Time

Pest-Buda has come a long way on the rollercoaster of history to arrive at the stop of 'today'. This study explores the highlights of this journey for the city, examining the causes and conditions of these 'good' periods.

#### 1. Natural endowments

In the Carpathian Basin, the Danube Bend region, including the 'tributary' of the stretch of the river crowned by Gellért Hill (between today's Margaret Island and Csepel Island), has long had and still has excellent potential for urban development; these few dozen square kilometres of land were predestined for the growth of a (large) city.<sup>1</sup>

The geographical energies of Pest-Buda are complex:

- 1. The area surrounding the Danube Bend is at the heart of the Carpathian Basin, serving as its centre of gravity. While not the geometric centre, it is the hub in terms of population, economy, and governance the geopolitical centre of gravity, as it offers optimal access to the peripheries, and its advantages in power, administration, military and trade functions are clear.
- 2. In a vast and nearly perfect basin like the area surrounded by the Carpathians (which is approximately 300,000 km<sup>2</sup> in extent), a *central-radius spatial structure* inevitably develops, reinforced by natural routes along river valleys that lead towards the basin's core, and by centripetal and centrifugal forces resulting from the differing economic characteristics of mountainous regions compared to the lowlands and hills of the basin floor. These forces are also influenced by the division of labour between these areas. For such a spatial structure, only the 'location' of the centre of the radial structure is needed to define the location of the heart of the Kingdom of Hungary. The strategic location of the Danube Bend and its surroundings has been pivotal in establishing this area as the economic and political centre of the Carpathian Basin. This advantageous position has facilitated a centre–periphery relationship that extends beyond topographical factors, positioning the region as a key national political and economic hub.

<sup>&</sup>lt;sup>1</sup> Obviously, we do not assume that 'nature', natural resources or geographical energies automatically create cities anywhere. However, when the society settled in a landscape or region reaches a level of development where division of labour occurs among its members or groups, geographical division of labour inevitably emerges, necessitating the creation of places for exchange – i.e. cities. Society must then select suitable locations for urban development. Pest-Buda was brought to life by social necessity, but the site of its development was also suggested by the advantages provided by 'nature'.

- 3. The excellent position of Pest-Buda as a traffic hub was not merely due to its central location: throughout the history of the Carpathian Basin, great significance has been given to the Danube waterway and the inland route along the right bank of the river, which connected the Balkans, Asia Minor, and even the Levant and the central regions of Europe.<sup>2</sup>
- 4. In the Middle Ages, the Danube was of strategic importance. In the 18th and 19th centuries increased trade led to most of Hungary's agricultural exports being shipped via this river. This surge in trade stimulated the growth of numerous small and large grain-producing towns along its banks, in addition to Pest-Buda, including Újvidék (Novi Sad), Apatin, Baja, Dunaföldvár, Vác, Komárom, Győr, Moson and Pozsony (Pressburg, and from the 20th century, Bratislava). The unprecedented rapid growth of Pest-Buda during the late 18th and early 19th centuries, and its emergence as a national centre, would have been inconceivable without the Danube waterway, as the river facilitated traffic and enabled the purchasing of crops, thus supporting the burgeoning of the bourgeoisie. Buda was also the point where the internationally significant *route* along the Danube connected to another key international route leading from the Adriatic Sea through Zagreb, the Balaton Uplands, and the town of Fehérvár, which was crucial for maritime import-export trade, facilitating the transport of goods by sea. The route from Pest, running along the foothills of the North Central Mountains (and the Highlands), was used by traffic to Poland via the Hernád Valley and the Szepesség (Spiš) region, but it was also the most important route connecting the region with Transylvania via the Tokaj ferry crossing. Finally, the trade route from Pest along the left bank of the Danube to Moravia and Bohemia, via Nagyszombat (Trnava) on the northern edge of the Kisalföld (Little Hungarian Plain), was a particularly busy one in the Middle Ages.
- 5. It is also no coincidence that the turning point for routes of international importance was established at Pest-Buda. These routes had to cross the Danube if they were to connect the different parts of the country. On the Carpathian Basin section of the Danube, particularly along its north-south course from the Danube Bend to the mouth of the River Drava, there were surprisingly few suitable crossing points (as flood plains and regularly flooded islands made crossing difficult). Only at Pest-Buda, and to a lesser extent at Baja, was there a crossing point on

<sup>&</sup>lt;sup>2</sup> According to archaeological evidence, the Danube has served as a route for the contact and migration of peoples and cultures since prehistoric times. During the Roman Empire, it was a defence line, and the fortified road along its right bank had strategic significance. After the establishment of the Hungarian state, the so-called Jerusalem Road was 'designated' to create a connection to the Holy Land, which was not only travelled by pilgrims but also by traders dealing in 'Eastern' goods. This route turned Buda into a hub of an international network.

this north–south course of the Danube that could be used for most of the year. The narrowest section of the Danube is at the foot of Gellért Hill in Pest, where the present-day Elisabeth Bridge stands. For centuries, the *Tabán ferry crossing* was a point of distinction for the collection and distribution of traffic in the Carpathian Basin, making its surroundings ideal for the development of a settlement with national significance. The town's importance is highlighted by the fact that the Romans built a fortress on the left bank of the crossing, in the Barbaricum area, to protect it. The first post-Conquest inhabitants of Pest, the Ishmaelites (Khwarazmians, a group of Muslims), settled in the ruins of this Roman fortress.

- 6. All these traffic advantages were activated by an expansion of the exchange of goods due to progress in the social and geographical division of labour. Progress began in the 13th century during the Middle Ages and intensified especially from the second half of the 18th century. Increased exchange activated the so-called trade routes, or zones of exchange, between regions producing different types of goods. The main trade routes in the Carpathian Basin were established between the mountains and the lowlands, and along the Danube. In the Pest-Buda area and its surroundings, the four major basins of the Carpathian Basin converge: the Alföld (Great Hungarian Plain), Transdanubia, Upper Hungary and the Kisalföld (Little Hungarian Plain). Nowhere else in the Carpathian Basin are there such a large number of distinctive market lines clustering together. These zones are the most dynamic where they are intersected by transport lines and where constraints (such as mountain passes, ferry crossings and extensive traffic barriers) divert traffic. At Pest-Buda, one of the most important, if not the most important, ferry crossings in the Carpathian Basin intersects with a series of natural (and, later, constructed) routes of international importance at the junction of trade routes. These factors and conditions have created the most energetic point of the Carpathian Basin at Pest-Buda (Figure 1).
- 7. Another factor in the development of Pest-Buda as a dominant (or possibly hegemonic) city with nationwide jurisdiction (extending across the Carpathian Basin prior to the Treaty of Trianon) was *the centralised nature of the Hungarian state organisation*. Unlike many European countries where regional and federalist aspirations flourished, significant autonomous provinces or federal states did not emerge in the Kingdom of Hungary, with the exception of the uniquely situated Transylvania. This was in contrast to France, often cited as an example of a centralised state in the Middle Ages, not to mention Germany, Italy, or even Austria (the Habsburg Empire), none of which existed until the second half of the 19<sup>th</sup> century. Centralised power contributed to the concentration of the economy and culture in a single centre: Pest-Buda.

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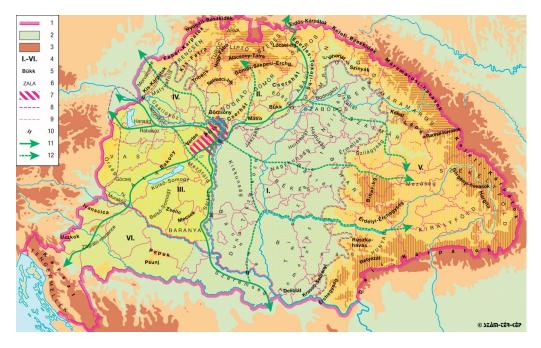


Figure 1: The position of Pest-Buda in the Carpathian Basin, and the main roads and trade routes Source: compiled by the author

*Notes:* 1 = Borders of Hungary during the period of the Dual Monarchy; 2 = lowlands; 3 = high mountains; 4 = the country's major regions: I Great Hungarian Plain, II Upper Hungary, III Transdanubia, IV Little Hungarian Plain, V Transylvania, VI Croatia and Slavonia; 5 = names of geographical regions; 6 = county names; 7 = 'the centre of the country'; 8 = the most important trade lines of the Carpathian Basin; 9 = trade routes; 10 = important ferry crossings on the Danube; 11 = the most important (natural) international routes; 12 = other important routes

8. Naturally, a complete picture of the outlined scenario includes some missing attributes and 'bad luck'. Already in the middle of the medieval period, Pest-Buda's development was constrained by the Carpathian Basin and the city's isolation from the sea. After the storms of the Migration Period, Europe's consolidating economy and trade heavily relied on maritime traffic, port cities, and proximity to the sea. The 'workshop' or trading hub of medieval Europe was Northern Italy and its two metropolises, Venice and Genoa, along with Europe's most populous city, Constantinople. Later, in the early modern period, the port cities of the Atlantic Ocean became the 'flagships' (apologies for the mixed metaphor) of the world economy and trade (London, Ghent, Bruges, Ypres, Amsterdam, Hamburg, etc.), but cities like Paris and Cologne also had direct sea connections, and the Hanseatic cities owed their flourishing to their maritime ports and trade. According to Norman J. G. Pounds: "At the beginning of the 14<sup>th</sup> century, a belt stretching from

Southeast England and the Low Countries through the Rhine region to Northern Italy was the axis on which most of the great cities were situated, and the largest share of the continent's internal trade took place."<sup>3</sup> Pest-Buda was far from this zone of urbanisation, which undoubtedly limited its developmental opportunities.

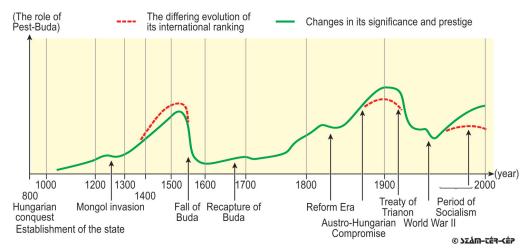
Finally, mention should be made of the vulnerability of Hungary and Pest-Buda to external influences. Primarily, these were the Ottoman Empire's expansionist ambitions; its occupation of the central third of Hungary, which turned Pest-Buda into a Turkish fortress for one and a half centuries and removed it from the current of European urban development; and the nearly four-century-long 'dependency on Austria', which relegated Pest-Buda to a secondary role behind Vienna. Then came the Treaty of Trianon, which forced Hungary into the ranks of small states and reduced Budapest's 'sphere of influence' to one-third of its original size. Lastly, after World War II, the dependence on 'Moscow' also severed the city from the urbanisation processes of the developed world.

In the following section, we will trace the realisation of these potential advantages and limiting factors over the centuries. The figure below attempts to illustrate the changes in the urban significance of Pest-Buda over the centuries (*Figure 2*).

It is clearly seen that in the two and a half to three centuries following the Hungarian conquest, no settlement with an unequivocal urban role emerged in the area around present-day Budapest. In the Roman province of Transdanubia and between the Drava and Sava rivers, settlements were established that could be considered cities at that time (including a fort and garrison town around 40 AD, and a civilian community called Aquincum at the site of present-day Óbuda). However, the Roman cities, including Aquincum, were destroyed in the turmoil of the migrations. The approximately 400,000–450,000 Hungarians who settled in 895–896 took possession of a land without any city. During the decades and centuries following the conquest and the establishment of the state, up until the end of the 12th century, conditions were not favourable for urban development in the Carpathian Basin. The economy of the country was close to autarky, the geographical division of labour was undeveloped, and as the roles of agricultural workers and craftsmen did not separate, the latter could not concentrate in communities (cities). Without distinct craft and commercial activities, and the people who specialised in these activities, i.e. without an urban bourgeoisie and without substantial, continuous trade, 'genuine' cities could not evolve or only in very small numbers, even though certain 'central functions' appeared in the area of Pest-Buda or its surroundings during these early centuries - for instance, a royal estate centre operated in Óbuda, and a chapter served as a place of authentication.

<sup>3</sup> POUNDS 1990: 93.

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*Figure 2: Changes in the urban significance of Pest-Buda over the centuries Source:* compiled by the author

#### 2. Pest-Buda on the first crest of the wave (13th century - 1541)

It was by the 13<sup>th</sup> century that the development of the Hungarian society had reached the stage where it needed cities and could maintain them. It is a tribute to the capabilities of the rulers that they recognised this process and supported urbanisation themselves. In the structure of society and the level of production, the following changes that supported the emergence and growth of cities are noteworthy:

- The adoption of innovations from the 12<sup>th</sup>-13<sup>th</sup> century European 'agricultural revolution' and favourable changes in the climate of Europe doubled agricultural yields, enabling an increasing amount of goods to be brought to market. This allowed a larger proportion of the population to leave agriculture, thereby deepening the *division of labour*. The growing exchange of bulk goods grain, wine, livestock, fish, honey, animal skins, wool, etc. stimulated trade and enhanced the positions of communities favourably located for transport, aiding their urbanisation.
- The social division of labour also advanced with the separation of agricultural and craft activities.
- Due to external threats, particularly the fear of repeated Mongol attacks after the Mongol Invasion (1241–1242), national defence became a primary concern. The experiences of the Mongol Invasion showed that effective protection could only be provided by fortresses and cities surrounded by stone walls. Therefore, the ruler, King Béla IV, and his successors strongly supported urban development. It was during this time that the ruler relocated the remaining population of the area to Castle Hill in Buda.

At the end of the 13<sup>th</sup> century, Pest-Buda was not yet the country's hegemonic capital; the Hungarian kings did not reside permanently in Buda, but stayed more often in Óbuda or, according to medieval customs, travelled around the country with their court. From the beginning of the 14<sup>th</sup> century until the Turkish occupation (1541), Pest-Buda continued on this path of development, which then reached its full potential.

In economic terms, the fulfilment of Pest-Buda's functions marked its rise to the ranks of international trade centres and its clear and increasingly significant role as the economic hub of the country. Buda and Pest were no longer just occasional marketplaces for foreign traders, venues for bustling annual fairs, or merely points of multiplied traffic. Instead, their activities became integrated into the European economic system, with their connections becoming diverse and institutionalised. A characteristic form of this was the permanent or temporary settlement of foreign merchants in Buda, most of whom arrived with significant capital and maintained their familial and business ties with their previous residences. Most of them came from German-speaking areas, including Austrian and southern German provinces, Vienna, Nuremberg and Regensburg. During the reign of the Anjou dynasty and in the second half of the 15<sup>th</sup> century, several merchants from Northern Italy also settled in Buda. In the 15<sup>th</sup> century, modern forms of international trade, such as agencies and depots of 'multinational' companies, also appeared in Buda (e.g. the Fugger dynasty, the Welser company of Augsburg, and Florentine firms).

Buda also became the dominant centre of domestic trade. It is estimated that 70% of foreign goods entered the country through the mediation of Buda's citizens, who then distributed them to the country's trading locations. So, even in the medieval context, Pest-Buda could be referred to as the country's 'hydrocephalus', although this development was also influenced by Buda's staple rights and the associated mandatory route.

Pest-Buda increasingly possessed the essentials of contemporary urban life. In the early 16<sup>th</sup> century, there were 25 guilds operating in Buda and 11 in Pest. In the 14<sup>th</sup> and 15<sup>th</sup> centuries, Buda gradually became the country's undisputed centre of *political power* and *administration*. King Sigismund undertook large-scale constructions on the Castle Hill of Buda, and King Matthias continued it with Renaissance splendour. Sigismund had already relocated national institutions to Buda.

Buda also became the centre of the Kingdom of Hungary's *international relations*. These connections were directed partly towards the Balkans and partly towards Central Europe i.e. the German principalities, Poland, and Northern Italy. Buda was, therefore, primarily a 'metropolis' of Central Europe and occasionally of the Balkans. Despite the multifaceted international economic, political and diplomatic network, the limitations of Pest-Buda's international role, which have re-emerged repeatedly up to this day, were already recognisable then. These are:

 Buda was primarily a recipient of foreign connections: foreign companies opened agencies there, foreign merchants settled there, foreign capital arrived through their mediation, and the royal court received foreign advisors, humanist artists, and scholars; it was not the people of Buda who conquered foreign lands.

- The economic weight of Buda, the wealth of its citizens, and the volume of its 'firms' significantly lagged behind those of Northern Italian and Southern German cities, and even Vienna.
- In Buda, the return on capital was demonstrably lower than in the more developed regions of Europe.
- Buda, and therefore the country, primarily interacted with the western regions of Europe through intermediaries; Hungarian merchants usually only reached Vienna, but for example, cattle for slaughter, Hungary's increasingly significant export product towards the end of the period, was often purchased by intermediary traders in Western Hungary.
- The economic 'action radius' of Buda extended to Central Europe: to the Austrian provinces, Bohemia and Moravia, the cities of Northern Italy, and the nearer areas of Southern Germany (*Figure 3*).

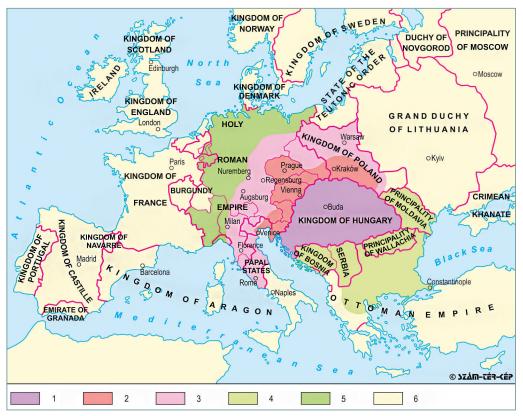


Figure 3: Buda's international relations at the end of the Middle Ages

Source: compiled by the author

*Notes:* 1 = territory of the Kingdom of Hungary; 2 = zone of intensive and multilateral relations; 3 = zone of medium-intensity relations; 4 = zone of special relations (power-related and political relations before the Turkish occupation; afterwards theatre of war and diplomatic activity); 5 = low-intensity but regular relations; 6 = occasional, scarce relations.

- The three cities of Buda, Pest and Óbuda – which contemporaries regarded as a single city despite its legal separation – had a population exceeding 20,000 in the 15<sup>th</sup> century; Buda had 13–14,000, and Pest nearly 10,000 residents. With this population, they could compete with Central European cities like Vienna and Prague. Meanwhile, there were cities with 80–100,000 inhabitants in Italy, and cities with 25–50,000 inhabitants in Western Europe.

The mid-15<sup>th</sup> century was the peak of Hungary's and Pest-Buda's medieval development; we can agree with the opinion of historian László Makkai, who stated that "[...] the distance between Western European and Hungarian urbanisation was the smallest in the early decades of the 15<sup>th</sup> century".<sup>4</sup>

#### 3. Far from Europe

However, at the end of the 15<sup>th</sup> century, with the inexorable expansion of the Ottoman Empire, the spectre of submission to the Turks also arose. The ominous shadow became reality, and the process of catching up with the 'West' remained incomplete. The 'end' had already begun with the death of King Matthias Corvinus (1490). The weakening of royal power, the court's lack of funds, the loss of the southern defence line of the country to Turkish control, and the increasing number of Turkish incursions had already compelled a number of wealthy Buda citizens to leave the country at the turn of the 15<sup>th</sup> and 16<sup>th</sup> centuries. In September 1526, the Turks also entered Buda; and although after a two-week stay, they withdrew with plunder, the fate of Pest-Buda was sealed. The decade and a half before the city finally fell into Turkish hands had already been in agony: after the death of Louis II, the divided Hungarian estates elected two rulers. The supporters of the two kings repeatedly and mutually besieged and occupied Buda, and also expelled citizens who supported the opposing side. In 1541, Sultan Suleiman captured a depopulated, impoverished city stripped of its former functions and splendour. The centuries of construction work and the chance to catch up with the 'West' disappeared in just a few short decades.

Before outlining the consequences of the Turkish subjugation, it is important to emphasise that these bleak centuries were not only due to the central regions of the country becoming territories under Turkish control, nor solely due to the endless Hungarian 'internal strife'. A stealthy process was also at play, namely the regional, geopolitical, and economic realignment of Europe, with its *economic centre gradually shifting* from Northern Italy (and the Mediterranean in general) to 'Atlantic Europe', encompassing the Netherlands, the western provinces of Germany, the Rhine region, and eventually England. From the 15<sup>th</sup> century onwards, this region assumed a leading role in the development of *early capitalism*. The disintegration of feudal relations opened up space for the spread of early forms of capitalist industry. The centre of global trade

<sup>&</sup>lt;sup>4</sup> Маккаі 1961: 41.

shifted to the Atlantic coastal region, and to its flourishing major port cities (Antwerp, Rotterdam, Amsterdam, Bremen, Hamburg, London, etc.). The nature of international trade also changed. While previously global trade involved mainly luxury goods - expensive textiles, jewellery, 'eastern' spices, etc. - from the 15th-16th centuries onwards, the exchange of bulk goods took place; food and raw materials were imported to supply the rapidly growing urban population and, in return, industrial goods (primarily textiles, cloth and metal tools) were delivered to less developed regions. The rapidly increasing demand for food and raw materials in Western Europe, along with the influx of precious metals from the Americas, led to a 'price revolution': due to increased productivity and supply, the prices of industrial goods did not or barely rose, while the prices of food skyrocketed several times over in the 16<sup>th</sup> century. These significant price movements had a highly vigorous effect on Europe's economy. Large areas - the Baltic Sea coast, Poland, Bohemia, Hungary, and the eastern German provinces – became involved in mass (agricultural) production and export, thereby also creating a market for Western European industrial goods. Agricultural East-Central Europe increasingly became the periphery of industrial and commercial Western Europe. These processes primarily favoured agricultural production. Due to the changed price ratios, Western European industrial goods became cheaper in Central Europe, creating very strong competition for local industry. Therefore, East-Central Europe could not transition to the modern, capitalist forms of industrial organisation and mass production. The industry in Central European cities increasingly produced for the local market (not even the national market), retreating behind the walls of guild frameworks due to growing competition. Instead of becoming the engine of capitalist production, it hindered it. Hungarian guilds also fought a desperate battle against the very beginnings of capitalist business organisation, prohibiting guild members from employing 'outworkers', making the conditions for guild admission more difficult, and restricting the sale of goods produced outside the guild. Jews were banned from free royal cities. The landowning nobility of Central Europe, on the other hand, exploited the agricultural boom by increasing feudal dues, expanding demesne lands (manorial farming), and increasing the labour required to cultivate these lands. To achieve this, it was necessary to increase feudal dependence; ultimately, all this led to the divergence of Central Europe's social development from the 'path' of Western Europe.<sup>5</sup>

The processes outlined above are clearly evident in Hungary as well. The structure of Hungarian foreign trade was extremely one-sided: it almost exclusively exported agricultural and mining products (precious metals) and imported a large quantity of industrial goods. This prevented a greater increase in the number of industrialists and, ultimately, further urbanisation.

All these processes, as well as the Turkish occupation, radically changed the relationship between Pest-Buda, the communities and inhabitants of the Carpathian Basin, and Europe. From being the country's centre and a city with a Central European influence,

<sup>&</sup>lt;sup>5</sup> Beluszky 2014: 172.

it became a border town of the Ottoman Empire, a garrison town, and a frontier fortress defending the entire subjugated territory. Most of the civilian population was replaced; the German-speaking citizens were expelled even before the Turkish subjugation, and in 1541, most of the Hungarian population also fled. The city's 'Christian' institutions ceased to exist, and the city itself ceased to be an autonomous entity; its buildings decayed, and its area shrank. The Christian armies made several attempts at recapturing the city, and finally, after 145 years of Turkish rule, Buda was retaken in 1686 following a devastating three-month siege. The siege, the sanctioned looting, and the indiscriminate capture of survivors turned Buda and Pest into deserted ruins.

#### 4. In the shadows (1688–1790)

Life slowly returned to the ruins, but it could not resume where it had left off in 1541 (or 1526, or even more so the mid-15<sup>th</sup> century). This was not only due to the destruction of the buildings, the absence of the former citizenry, or the lack of urban traditions and culture that had been interrupted for 145 years, but also because the *conditions for urbanisation* in Hungary, including in Pest-Buda, *had changed* since the early 16<sup>th</sup> century.

The consolidation of Central Europe's *peripheral status* advanced during the decades of Turkish rule, and its 'lateness' turned into a form of otherness, increasingly confining this region to the role of food and raw material supplier to the West. The emergence of industrialisation was hindered by cheap Western industrial goods, and the guilds of the region, relying on their old privileges, prevented all attempts at industrial organisation and modernisation outside the guilds.

The relationship between Europe and Hungary was mediated through the Habsburg Empire; the country's – and Pest-Buda's – direct economic relations were almost exclusively limited to the hereditary lands and at most the Balkans. During the period of Turkish subjugation, the country's *political independence and integrity ceased*. Consequently, Pest-Buda's function as a capital also ceased. The empire, the imperial and royal court, and the imperial offices were headquartered in Vienna, while the Hungarian state offices and the parliament remained based in Pressburg (today's Bratislava).

If this overview aims to account for the 'peaks' of urban development, we can briefly deal with the 18<sup>th</sup> century. The twin cities slowly repopulated, primarily with foreign German and Serb settlers, but even forty years after the city's recapture, they were only small towns: in 1724, Buda had 13,840 inhabitants, and Pest had approximately 6,000. Wine production revived on the Buda slopes, and artisans arrived in the cities with the various waves of settlers; by the end of the century, about 1,000 master craftsmen were working in Pest and Buda, with 77 trades practiced in the latter. However, most of the masters worked in small workshops with at most 1 or 2 journeymen or apprentices, and there were no attempts at modern industrial organisation. There were no pathways 'out' (e.g. towards manufacturing) or 'upward' (e.g. towards the bourgeoisie) from the

craft industry. Each industry employed relatively few people, and they did not produce enough goods to enter the national market. Pest-Buda was a craft centre producing for the regional market. Artisans continued to work within the framework of guilds.

Among the resources that would fuel Pest-Buda's explosive urban development in the 19<sup>th</sup> century, *trade* – more precisely, the *exchange of goods* – was the first to appear, although until the end of the 18<sup>th</sup> century, the commerce of the twin cities operated more on the *regional* than the national market. In assessing the role of trade, we must consider that even in the 18<sup>th</sup> century, the roles of producer and distributor of goods were not always separate; consequently, the number of full-time merchants was small (in 1720, only 17 in Buda and 15 in Pest), and the localities often merely served as venues for commercial activity, with most transactions still taking place at weekly markets and fairs.

Ultimately, until the 1780s, Buda and Pest were no more than the *largest small towns in a country relegated to the periphery*.

#### 5. Formation of the national centre (1780s–1867)

We often fall into the mistake of limiting Pest-Buda's modern 'era of success' to the period of the Dual Monarchy. However, a long journey led from the small town existence at the end of the 18<sup>th</sup> century to the metropolis with a 'limited sphere of influence' in the period of the Dual Monarchy. The twin cities began their ascent on the increasingly steep trajectory towards the 'era of success' at the end of the 18<sup>th</sup> century. By that time, the country had been *repopulated* (according to the 1784–1787 census data, the population of the lands of the Hungarian crown was approximately nine and a half million), its agriculture had been reorganised, and the modernisation of its administration had become necessary. From the end of the 18<sup>th</sup> century, it became increasingly impossible to ignore that Pest-Buda had once again become the 'centre of the country' and its traffic hub (that is, the geographic features previously mentioned had been revived).

The years around 1780 marked a significant boundary in the life of Pest-Buda. The rapid population growth (24,000 in Buda and over 13,000 in Pest in 1784) and the economic expansion (see below) laid the foundation for Joseph II's rational decision to relocate the most important government offices to Buda and Pest.<sup>6</sup> As a result of this move, Pest-Buda became the *administrative centre of the country*, although not yet its political centre, a role still held by Pressburg (Bratislava) for some time. This developmental trend continued over the following decades, leading to another *structural shift* after 60–70 years of continuous growth. During these decades, alongside its national governmental and administrative role, Pest-Buda also became the centre of the country's

<sup>&</sup>lt;sup>6</sup> In 1777, the University of Nagyszombat (Trnava) moved to Buda, and then in 1784, as part of his measures to streamline state administration, the 'enlightened' Emperor Joseph II relocated the government institutions operating in Pozsony (today's Bratislava, then called Pressburg, including the Vice-Regal Council, the Chamber, the High Command, and the National Archives) to Buda.

cultural, educational, scientific, and social life, as well as the focal point of national aspirations. By the end of this period, Pest-Buda had become Hungary's recognised and almost exclusive *intellectual and political capital*, and was a city that drew the attention of the entire country, attracting writers, scholars, and the intellectual, social, and political elite of the nation, a city visited even by the 'notaries of Peleske' [*simple-minded rural advocates who viewed urban life as outsiders, with abhorrence – the Editors*] who wished to recoil in horror from sinful urban life, and a city serving as a cultural centre for national minorities such as Slovaks, Serbs, and Germans. The spectacular increase in the political and intellectual weight, significance, and achievements of the twin cities was underpinned by a rapid development in the economy – the exchange of goods, transport, industry (including manufacturing), and later the financial markets. By the end of the period, this growth had not only created the largest economic conglomeration in the country, but also the *organisation, management and decision-making centre* of a national economy in the process of *being organised into a system*, while also acting as its largest producer.

Among Pest-Buda's economic activities, *the exchange of goods* was the first to achieve national significance, despite the obstacles that remained in place at least until the 1840s and 1850s.<sup>7</sup> The supply of (raw) materials (live animals, wool, rawhides, wine, tobacco) and the turnover at fairs increased exponentially. At the end of the 18<sup>th</sup> and the beginning of the 19<sup>th</sup> century, Pest hosted one of Europe's busiest wool markets. The increase in trade continued to boost the attendance of the Pest fairs while also facilitating growth in the number of local traders operating year-round,<sup>8</sup> as well as their accumulation of wealth.

By the early 19th century, the main activities of Pest-Buda trade had already evolved into:

- intermediary trade in *agricultural raw materials*, gradually accompanied by certain storage and processing activities
- supplying the country with handicraft and (mainly foreign-origin) industrial products, and colonial goods – *distributive trade*
- increasing demand, driven by population growth, for the direct supply of goods to residents, with markets, weekly fairs, and chandleries (and peddlers) being the key points of supply
- the twin cities' markets along the trade route facilitated significant *interregional* trade

<sup>&</sup>lt;sup>7</sup> The conditions for the country's trade were extremely unfavourable. The feudal legal system no longer met the needs of the modernising economy: there was a lack of commercial adjudication and a legal and regulatory framework for trade; burdens included the absence of credit – Hungary's first financial institution was not established until 1840 – or its high cost, the multitude of bridge, road, and ferry tolls; and there was a lack of manufactories and factories – which could have supplied goods for trade to reach consumers, as opposed to artisans selling their own products. Additionally, there were notoriously poor road conditions, and so on.

<sup>&</sup>lt;sup>8</sup> For example, the Medardus Day Fair of 1790 recorded the arrival of 12,735 carts and about 30,000 traders.

Simultaneously with the quantitative increase in commercial activity, starting from the 1820s, the commercial activity of the twin cities was augmented by a series of elements that represented steps towards *'systematic' trading*. As a result, by the end of the period, the exchange of goods in Pest-Buda represented a 'new' quality. The most important developments included the following:

- In 1826, a new marketplace was opened on today's Erzsébet Square with nearly 600 permanent stalls (booths) for trade fairs.
- According to an 1817 decree, factories with imperial privileges could establish depots anywhere. By 1828, 99 companies maintained depots in Pest and Buda. These depots meant that the profits from trade in factory goods went to the manufacturers (and not the traders of Pest), but they increased the cities' trade volume nonetheless.
- In the 1830s and 1840s, numerous specialised shops and luxury goods stores opened in the city centre.
- Several commercial 'institutions' were established in the second quarter of the century: the Pest Civic Board of Trade established in 1827–1828, which published the first *trade newspaper* in Pest in 1828, organised a *trade training institute*, and built a *trade hall* and so on. In 1845, the Royal Privileged Wholesale Merchants' Board was established. In 1840, the National Assembly passed a series of laws regulating economic activity, including credit laws.

Before reviewing the further development of trade in Pest-Buda, let us take a look at an essential condition for trade: the *transport options*.

The greatest impact on the flow of goods in Pest was undoubtedly exerted by *the revolution in transport*. Although Pest and Buda were already the centre of Hungary's *postal road network* at the beginning of the 19<sup>th</sup> century, goods transport still faced numerous obstacles at that time: the vast majority of domestic roads were undeveloped and almost impassable for part of the year. Rivers were unregulated, and the length of navigable canals was minimal. Throughout its history, the Danube was a waterway of almost invaluable importance for Pest-Buda, but horse-drawn shipping was slow – the journey from Pest to Vienna by cargo ship could take up to four weeks, and shipments from the Lower Danube took three months to reach Vienna.

The first result of the transport revolution was the appearance of steamships in 1829 and the regularisation of steamship navigation. Cargo ships reached Vienna from Pest in three days, and passenger transport operated on a schedule. While about 100,000 'measures' (i.e. 9,370,000 litres, or approximately 7,215 tonnes) of wheat were shipped from Pest to Vienna at the beginning of the 19<sup>th</sup> century, by the mid-1840s, nearly 2 million 'measures' (approximately 144,100 tonnes) were shipped.<sup>9</sup> As a result,

<sup>&</sup>lt;sup>9</sup> 1 Pest mérő [1 Pest "measure"] = 93.7 litres.

by 1847, there were already 170 (!) grain merchants registered in the city. However, the potential of steamship transport was limited by its dependence on navigable waters, thus restricting the extent of accessible areas. Regions like Transylvania, Upper Hungary, and much of Transdanubia remained barely accessible to Pest-Buda; Fiume (today's Rijeka) was unreachable, and navigation was occasionally halted (due to river icing, floods, and low water levels). To develop the national market and the nationwide commercial role of Pest, a revolution in *land freight transport* was also necessary. In Europe, steam-driven railways appeared in the early 1830s; in Hungary, railway matters surprisingly quickly gained widespread support; by Act XXV of 1836, a specific, extremely centralised railway network plan was approved, with Pest-Buda at its centre. Eight radial lines were to run from Pest-Buda towards all major regions of the country. However, up until 1848, only short sections of the national network were built, from Pest to Vác – as part of the line heading to Vienna – and the Pest–Szolnok line, as part of the lines running towards the major grain-collecting cities of the Great Hungarian Plain, such as Szeged, Temesvár (Timişoara), Arad (Oradea), Debrecen, and Békéscsaba.

In 1842, Lajos Kossuth declared that "the nation without industry is a one-armed giant". In 1840, the National Assembly passed the 'Law on the Legal Status of Factories', which was a step towards industrial freedom, dismantling the obstruction of guilds. Within a decade after 1840, 60 new industrial enterprises were founded in Pest and Buda, including the first steam mill in Pest.

Although with considerable delay, the first modern banks also appeared in Pest-Buda; by 1848, three financial institutions had been established in the city. While they alleviated the credit hunger of the Pest-Buda economy, Pest had not yet fulfilled the role of the country's financial centre.

The other 'segment' of Pest-Buda's development into a capital city, the *process of becoming an administrative, political and intellectual centre,* continued unabated in the first half of the 19<sup>th</sup> century. Alongside its administrative and governmental role, it also assumed the function of being the national centre for political and intellectual life. The national enthusiasm of the Reform Era established in Pest and Buda the 'institutions of the nation' (the National Theatre, the National Museum, the National Casino, the Hungarian Academy of Sciences, the National Gallery, etc.). An increasing number of representatives of Hungarian literary and artistic life moved to Pest-Buda (previously, they had 'sheltered' in mansions – such as Berzsenyi, Kölcsey, Kazinczy, the Kisfaludy borthers, etc. – or in the market towns of the Great Hungarian Plain – such as Csokonai Vitéz, Katona, Arany, Fazekas, etc.). Newspapers were edited there. The national political scene increasingly shifted to Pest (even though the national assemblies still convened in Pozsony – then called Pressburg).

Due to the growth in the economy and in the administrative and cultural role of Pest-Buda, the population of the two cities began to increase rapidly from the end of the 18<sup>th</sup> century (*Table 1*).

Year	Population	As a percentage of the population in 1785
1785	47,363	100
1813	70,217	148
1826	94,140	199
1840	106,700	226
1851*	126,847	268
1857	186,945	395
1869**	215,380	455

Table 1: Population growth in Pest-Buda (combined), 1785–1869

\* The so-called legal population numbered 156,506, while the population actually present, including the military, was 169,058.

\*\* The actually present population was 180,058.

Source: FARAGÓ 1995: 381

Although all these processes were influenced by the 1848–1849 Revolution and War of Independence, it could not stop them: in fact, the bourgeois transformation (supported by the achievements of 1848) created new factors for urban development.

The removal of the *economic restrictions imposed by the feudal orders* (such as feudal property relations, the limitations on industrial development enforced by guilds, and the absence of legal conditions for a capitalist economy, etc.) created free-market conditions in economic development and its regional aspects. Consequently, free competition also became a defining factor in urban development.

- Emancipation of the serfs made *migration completely free*.
- The capitalising and modernising economy gave rise to new factors for the development of communities, such as manufacturing, modern transport, railway hubs, and, after the Austro–Hungarian Compromise of 1867, the institutions of civil administration.
- In the middle of the century, the industrial revolution, which was peaking in England and unfolding in the more developed regions of Western and Central Europe, further increased demand for foodstuffs and raw materials. A new phase of *agricultural boom* emerged, and in this context, Hungary had a particularly advantageous position.
- The customs union with Austria gave Hungarian products advantageous market positions within the Monarchy.
- The construction of the railways opened up transport opportunities for agricultural products in ever larger areas of the country, allowing an increasing number of districts to join the agricultural export trade.
- Agricultural production techniques and mechanisation improved, and average crop yields increased. By the turn of the century, wheat production had increased two and a half times, corn production seven times, and sugar beet production six times. Grain exports were already five times higher in the years around the Austro–Hungarian Compromise than the average in the years following 1849.

- Rapid economic growth was aided by the fact that by the middle of the 19<sup>th</sup> century, the 'industrial revolution' had created the *technical conditions* that allowed the economy to modernise rapidly and increase production by leaps and bounds (steam engines, steamships, railways, modern telecommunications, large-scale iron and steel production, factory equipment, agricultural machinery, etc.).
- The *international conditions* for the modernisation and growth of the Hungarian economy were favourable after 1848; a worldwide *boom* began around 1850. The developed countries of the world accumulated considerable *capital surpluses*, and their capital exports grew rapidly. However, Hungary's capital imports only accelerated after the political situation stabilised following the Austro–Hungarian Compromise.

#### As a result of this:

- The transport situation in Pest-Buda (as a national transport hub) underwent a radical change with the beginning of the country's railway network construction. While in 1850 there were 176 kilometres of railway lines in operation in the country, by 1860 this had increased to 1,605 kilometres, and by 1867 to 2,279 kilometres. The developing road network was strongly centralised, with Pest-Buda as its dominant centre (*Figure 4*). However, at the time of the Austro–Hungarian Compromise, large blank spaces still occupied most of the map of 'modern' transport in Hungary (see Transylvania, Upper Hungary, Croatia).
- By the end of the era, Pest-Buda had become the most significant *financial centre* in the country, though not hegemonic, as its financial activity was still only a small fraction of the total achieved by the end of the Dual Monarchy. However, up until the year of the Austro–Hungarian Compromise, the only independent bank – other than a branch or savings bank – operated in Pest.
- The *manufacturing industry* of the city (or cities) developed slowly during the two decades of absolutism, but the success story of Hungarian manufacturing had already begun with the establishment of the modern milling industry. Significant industrial operations included the shipyard in Óbuda and the foundry of Ábrahám Ganz.
- During these two decades, changes in the *commerce* of the city (cities) included further increases in trade, the continued development of the national institutional framework for commerce, and the structural transformation of trade itself. In 1851, the Pest Chamber of Commerce and Industry began operations. In 1854, Pest merchants established the Lloyd Company, and the grain warehouse it maintained was a precursor to the commodity exchange, which would later be organised as a stock and commodity exchange in 1863. According to György Szabad's summarising observation: "The opening of the exchange marked the end of the process by which Pest became the centre of domestic commodity trade during the development of capitalist relations."<sup>10</sup>

<sup>&</sup>lt;sup>10</sup> SZABAD 1987: 331.

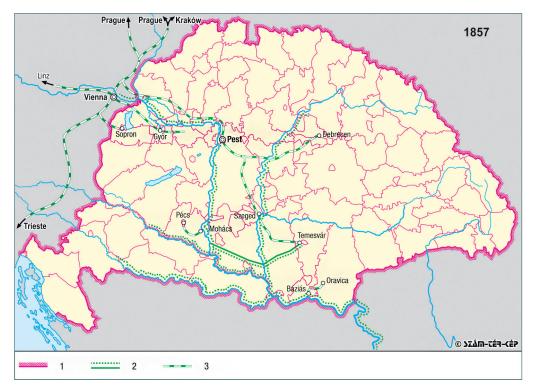


Figure 4: Hungary's railway network in 1857 Source: Kovács–Katus 1987: 225

*Notes:* 1 = national borders; 2 = major rivers and canals (dotted sections were navigable by steamboats); 3 = operational railway lines

#### 6. Life on the crest of the wave – The birth of a metropolis (1867–1918)

During the years of absolutism (1849–1866), despite the unfavourable public and political conditions, Pest-Buda laid the foundations for its development into a city of international significance, drawing on the energies of bourgeois development liberated by the 1848 reforms. According to Károly Vörös, the emergence of bourgeois society brought about a "significant strengthening of the city, which [...] increasingly made Pest-Buda more suitable for organising the entire Hungarian national market in the Hungarian part of the Habsburg Empire, and thus for addressing, articulating, and supporting all the demands aimed at Hungary's possible separation within the empire".<sup>11</sup>

The decades of the Austro–Hungarian Compromise represented a unique *period of grace* in Pest-Buda's history. Due to a confluence of various factors, the city's 'natural' advantages – such as its central location in the country, excellent transport infrastructure,

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<sup>11</sup> Vörös 1978: 126.
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economic boom, and the opportunities provided by technological progress – *flourished*, *aligned with political and social intentions*, supported its 'great and glorious' growth, and created favourable positions in the European landscape (economic boom, abundance of money).

What were these factors?

The restoration of state sovereignty greatly stimulated Pest-Buda's development. This not only led to the establishment of state and administrative organisations, offices, and institutions of civic governance in Pest-Buda – including ministries, a statistical office, the meteorological service, a geological institute, public health institutions, the banknote printing house, and foreign embassies – but also enabled the development of an independent Hungarian social and economic policy. Part of this latter was to support the development of the *capital into a modern (global) city*. This aligned with the grand long-term political, geopolitical, and power-related visions of the Hungarian state leadership: by developing Budapest into a 'co-capital' of the Monarchy, they aimed to increase Hungary's weight within the Austro–Hungarian Monarchy, establishing a balanced relationship between the two 'halves'. Additionally, they intended to make Budapest a bridgehead for economic and political expansion towards the Balkans, the gateway to the Balkans, and the nearest major city in southeastern Europe capable of assuming a mediating role.

Similarly, ideas with a broader horizon guided the Hungarian state in shaping its *transport policy*. The *railway network development concept*, formulated by Imre Mikó (Minister of Transport in the government formed after the Austro–Hungarian Compromise), adopted earlier ideas to ensure Budapest's prominent role in the Hungarian urban network, promoting its clear integration as an 'assimilation' centre.

The state's *industry support laws* (of 1881, 1890 and 1899) were intended to promote the development of manufacturing – although with relatively modest amounts of investment compared to the total volume of industrial investments –, and the state also participated in the establishment of credit institutions in Hungary.

The actual opportunities for co-operation among various economic actors at the macro-economic level were almost exclusively available in Budapest. This advantage was not limited to the co-operative relationships between different industries (for example, the Budapest mills, which operated as elements in the global economy and owed much of their competitiveness to the excellent quality of their products, could obtain world-class milling machinery 'first-hand' from Budapest's machine 'manufacturing industry'), but also included the intensive relationship between innovative industrial sectors and the excellent scientists at the Technical University, the connections between various economic actors and financial institutions, the relationship between the sizeable consumer market and the economy, the supply of quality labour, and so on.

The *international conditions* for the economic growth and modernisation of the country and Budapest remained favourable in the last third of the 19<sup>th</sup> century. A global economic boom began in the mid-19th century, which included an agricultural boom in Europe. Naturally, the economy of Hungary and Budapest both profited from this new phase of the agricultural boom. The customs union with Austria provided advantageous positions for Hungarian agricultural products within the Monarchy. The significance of this increased particularly at the end of the 19th and the beginning of the 20th century when overseas grain, Australian wool, and (due to railway construction in Russia) Russian wheat appeared in Europe en masse. As a result of railway construction, the conditions for the transport and trade of agricultural products were established throughout the country, and the products generally flowed towards Western Europe through Budapest via the railway network. In the years immediately following the Austro-Hungarian Compromise (1867–1871), grain and other plant products accounted for 37.4% of Hungary's exports, live animals for 24.7%, and food industry products for 15.4%, meaning that the dominant portion, 77.5%, of Hungary's exports consisted of agricultural products. This proportion had barely decreased (to 75.4%) by the beginning of the 20<sup>th</sup> century, with only the share of processed products increasing relative to raw materials. The Budapest-based food industry – milling, distilling, and brewing - was focused on agricultural products, and along with the commodity exchange operating there, were among the key factors shaping the development of the capital.

The global economic boom, the *accumulation* of excess capital in the world's developed states, and Hungary's increase in prestige and political stability following the 1867 Austro–Hungarian Compromise facilitated and led to the influx of foreign capital into the country: in the years following the Compromise, approximately 60% (and in the last three decades of the 19<sup>th</sup> century, roughly half) of investments in Hungary were financed by foreign capital. One indication of the interest and confidence in Hungary and Budapest was that in 1870, it took only a few weeks to secure a loan of HUF 24 million from a Franco–Austrian consortium to finance Budapest's urban development projects. In the wake of the economic boom peaking around the time of the Austro–Hungarian Compromise and as a result of the stimulation from the political climate, company establishment soared in Hungary after 1867: 4,000 kilometres of railway lines were constructed, 170 industrial joint-stock companies were established, and over 500 financial institutions began operating between 1867 and 1873.

Finally, it should be noted that Budapest's position was significantly 'enhanced' by its *unrivalled position* at the top of the settlement hierarchy in Hungary. The city's standing had been continuously strengthening since the late 18<sup>th</sup> century, and in the last third of the 19<sup>th</sup> century it further distanced itself from other cities and regional centres; its rate of growth also exceeded that of provincial towns and cities. While at the beginning of the bourgeois era only 1.5% of the country's population lived in the capital, this ratio had risen to 4.8% by 1910 (and the

emergence of an agglomeration ring around Budapest had begun, although still within the city's administrative boundaries at that time). The combined number of people engaged in trade across the 12 regional centres was less than half of the number of traders in Budapest. Additionally, in terms of financial activities, Budapest on its own outstripped the leading provincial cities combined, including both regional centres and all county capitals, etc.

The evolution of Budapest's economy was determined by the following processes and their outcomes:

- becoming a national transport hub, enabling quick access to the entire country from the capital, and the possibility of integrating into the exchange of goods, Budapest is the centre of the unified national market
- *further growth in the volume of trade and exchange* in Budapest, but loss of its dominant role in the city's economy
- rapid emergence of its *financial sector*, making it a national financial centre
- the formation of the country's largest manufacturing concentration Note 1: The details of railway construction during the Dual Monarchy cannot be covered here; however, it is worth noting that the railway industry, alongside financial institutions, was the fastest-growing sector of the economy, with its performance increasing by 10.5% annually between 1867 and 1890, and by 5.5% per year until 1914. Between 1867 and 1874, 585 (!) kilometres of railway were put into operation each year. It can be concluded that the Budapest-centred transport and communications network in Hungary enabled the economic integration of the country, organising it into a unified economic and social space.

Note 2: Among the aspects of urban life in Pest-Buda, the exchange of goods was the most significant before the Austro–Hungarian Compromise. According to Károly Vörös, before 1867, "[...] the leading economic (and partly already political) role of the twin cities was primarily ensured by the fact that, far surpassing all other domestic cities, they became the largest commodity market in the country".<sup>12</sup> The capital retained this role even after the Austro–Hungarian Compromise; the volume of trade continued to increase rapidly, due to the following factors:

- Agricultural exports continuously grew. The quantity of agricultural products shipped abroad from Budapest increased from 6 million quintals in 1874 to 32–35 million quintals by 1910.
- A growing share of agricultural products delivered to Budapest were processed (e.g. in the meat, milling, distilling, and brewing industries). The processing of agricultural products required the involvement of trade.
- The country increasingly moved away from autarky, requiring more and more commercial goods, particularly industrial products.

Despite the impressive growth in the volume of trade, its *relative importance in the capital's economy declined*. The city's economic elite were no longer composed solely of grain, pig, and wool traders but also included bankers who surpassed

<sup>&</sup>lt;sup>12</sup> Vörös 1978: 253.

them in wealth and influence, as well as wealthy industrialists. Although the forms and institutions of trade became more sophisticated, no qualitatively new features emerged in the city's commerce.

Note 3: The role of *financial institutions,* their functions, and their position in economic life had, nevertheless, changed radically. Their number, wealth, and deposit base multiplied with astonishing speed. Up until the early 1890s, the growth of financial activity was characterised by quantitative expansion, and although Budapest was the largest financial market in the country, its direct influence on the economic life of the 'countryside' was limited. After 1890, however, alongside further quantitative growth, financial institutions increasingly 'penetrated' various economic sectors and more distant regions of the country, bringing them under their control and management.

Between the 1867 Austro–Hungarian Compromise and 1873 (when a global financial crisis broke out), 23 new banks and 6 savings banks were established in Budapest in addition to the existing financial institutions. Specialised financial institutions emerged (such as land credit institutions); banks became involved in railway construction, urban development projects, and the building of factories. In the 1890s, Budapest had 17 banks, 10 savings banks, and 37 savings co-operatives. The banks in Budapest held 35% of bank deposits, provided 55.8% of mortgage loans, and controlled 66.3% of the share capital, among other things.

After 1890, financial institutions in Budapest continued to grow (their number had increased to 82 by 1905), but the change in 'development' was mainly reflected in the expansion of their scope and the nature of their activities: they acquired shares in the capital of provincial banks and established provincial branches. As a result, Budapest banks almost completely dominated the Hungarian financial market and, through it, the entire economy. For instance, in 1913, five major banks in Pest owned 47% of industrial shares.

Note 4: By the end of the era of the Dual Monarchy, Budapest also became *an industrial city*, with 44.3% of its workforce employed in industry and exactly one-quarter in manufacturing (in 1910); moreover, two out of every five industrial earners in the country were employed in Budapest. The factors contributing to the development of Budapest's major industrial concentration, by the standards of the time, included the city's emergence as a *transport hub* (allowing for the unlimited supply of all kinds of raw materials needed by industry and the distribution of manufactured goods to any region of the country or abroad), opportunities for *co-operation*, a *large market*, an adequate *intellectual background* (between 1890 and 1914, about 5,000 engineers graduated from the Budapest University of Technology, and 2,000 from foreign colleges), the skills of the available workforce, and the previously-mentioned fact that Budapest was the country's largest financial and power centre, which was not insignificant for raising financial resources and securing state orders.

# 7. Budapest during the era of the dual monarchy – The centre of intellectual life

As mentioned above, the national institutional system of public life was almost entirely concentrated in Budapest, except for church administration, as archbishoprics and bishoprics continued to operate in their traditional seats (Esztergom, Vác, Fehérvár, etc.). The number of institutions and scope of their responsibilities increased and expanded with the progress of the civil administration and the emergence of new needs.

It is more remarkable, yet equally understandable, that the national or even regional functions of social, scientific, cultural, and artistic life in their entirety and complexity developed only in Budapest during the era of the Dual Monarchy. In Budapest, every social class found nearly all the institutions that served their needs, from the aristocracy's club, the National Casino, to the fairground and the zoo.

During the period of the Dual Monarchy, the intellectual life of Budapest was characterised by the following:

- Its influence was nationwide, shaping the taste and cultural values of the country's population. The overwhelming weight and 'taste dictatorship' of Budapest's intellectual life sparked increasingly frequent anti-capital sentiments towards the end of the 19<sup>th</sup> century.
- By the end of the period, the 'action radius' of the capital's intellectual life extended far beyond the country's borders. Hungary's most outstanding artists and scholars established close connections with foreign countries, studying and creating abroad for varying lengths of time. (Just a few examples: Ferenc Liszt, Gyula Benczúr, Mihály Munkácsy, László Paál, Endre Ady.)
- In Budapest's intellectual life, *the most modern, progressive intellectual and artistic trends* took the lead. At the turn of the 20<sup>th</sup> century, a unique culture developed in the major cities of the Monarchy, primarily in Vienna, which in several areas Art Nouveau, musical life, psychoanalysis, poetry, etc. set the 'standard' for the world, and this trend also radiated to Budapest. Furthermore, 'Budapest' scholarship, particularly in the field of applied technical sciences, also became a world leader in solving practical problems.
- While at the beginning of the period, the language of intellectual life just as that of the city's population – was partially German (German-language theatre, newspapers, scientific publications; typically, the entries for the Budapest urban planning competition were also written in German) and partially Hungarian, by the end of the period it was almost exclusively Hungarian. When explaining the intellectual buzz of Budapest, Vienna or Prague at the turn of the century, almost everyone attributed a distinctive role to the meeting and switching of cultures and languages, to identity change and crisis, and to the resulting 'liminal existence'.

The impact of these changes can also be seen in the population of the capital (Table 2).

Population								
Date	Budapest before 01/01/1950	Attached to Budapest in 1950	Today's Budapest		Percentage of the 1869 census			
				Budapest before	Attached to	Today's		
				01/01/1950	Budapest in 1950	Budapest		
1869	270,476	31,610	302,086	100.0	100.0	100.0		
1880	355,682	47,024	402,706	131.5	148.8	133.3		
1890	486,671	73,408	560,079	179.9	232.2	185.4		
1900	733,358	128,076	861,434	271.1	405.2	285.2		
1910	880,371	230,082	1,110,453	325.5	727.9	367.6		
1920	928,996	303,030	1,232,026	343.5	958.7	407.8		
1930	1,006,184	436,685	1,442,869	372.0	1,381.5	477.6		

#### Table 2: Population trends in Budapest, 1869–1930

Source: FARAGÓ 1995: 388

The growth, expansion, and development of Budapest was reflected in the formation of the cityscape and urban structure (which proceeded in a systematic manner from 1870); the administrative unification of Pest, Buda, and Óbuda (1873); the appearance of suburbs and garden cities; and the rapid growth of their population (by 1910, Újpest had 56,000 residents, Pesterzsébet had 31,000, and Kispest had 30,000 residents).

Finally, the weight of the capital city within the country can be judged from the data in *Table 3*.

Table 3: Budapest's 'weight' in the country, 1910

Indicators	In the country	Absolute value in Budapest	Share of Budapest, %
1 Population	18,064,533	880,371	4.8
2 Current and cheque account, 1,000 crowns	636,749	559,964	87.9
3 Number of students in higher education	14,021	8,675	61.9
4 Mortgages on buildings, 1,000 crowns	1,196,376	733,373	61.3
5 Phone calls, 1,000 calls	171,951	71,396	41.5
6 Employees of industrial companies with more than 20 employees	392,939	128,358	32.7
7 Telegrams dispatched, 1,000 pieces	9,209	2,427	26.4
8 Those earning a living from trade	278,104	64,881	23.3
9 Savings deposits, 1,000 crowns	3,861,277	768,496	19.9

*Source:* compiled by the author

Note: Excluding Croatia and Slavonia.

Budapest's spectacular – and justified – boom was undone overnight by the peace treaties that ended World War I.

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#### László Jeney

# The Settlement Geographical Position of Budapest in the Eastern and Central European Urban Hierarchy

#### Introduction

Eastern and Central Europe is one of the most exciting playing fields for research on urban hierarchy in the 'old continent'. In the context of centuries of external power influence and limited state sovereignty, the leading cities of the region have sometimes been able to fulfil the role of a capital city only slowly. Even with delayed urbanisation, only three modern metropolises (Budapest, Warsaw, and Prague) were able to develop in rather eccentric geographical positions. The position of the most important cities relative to each other have continuously shifted and rearranged, however, none of them has been able to exert a wide-spread attraction over the entire Eastern and Central Europe, especially within the closed state framework of the decades of socialism. With the transition to a new political system and globalisation, the cities of the Visegrád countries have been given the opportunity to strengthen their functions in the international city competition.

With the geographic expansion of the European integration process, increasingly permeable state borders, and the progressively deepening Visegrád co-operation, the question arises whether the Hungarian capital can become the 'capital' of Eastern and Central Europe. Can Budapest aspire to – and in what capacity – achieve a leading role in the region? The mapping of the evolving city rankings raises the question whether size is a determining factor in the Visegrád countries' urban hierarchy, and whether the population of a city truly serves as an 'indirect measure' of its significance? Finally, comparing the two aspects of city competition, it is also worth examining whether or not a city's position in the urban hierarchy correlates with its economic development.

#### 1. Milestones in the long-term development of the Eastern and Central European urban network

There are several interpretations of Eastern and Central Europe. The geographic term refers to the eastern part of Central Europe in contrast to the western part identified with the German-speaking areas. According to a broader interpretation related to natural landscapes and historical-cultural boundaries, Eastern and Central Europe encompasses the entire area of historical Poland and the Carpathian Basin, with its southern border extending up to line of the Mura, Drava, and Danube rivers. However, in academic literature, Eastern and Central Europe most commonly refers to the Visegrád Group

countries.<sup>1</sup> This narrower interpretation, which is in line with the borders of the states, is also the geographical framework of this study.

The Visegrád countries form a distinctive group based on their similar cultural and intellectual values and their shared history. However, they also face similar disadvantages, which impeded their internationalisation during the political transition.<sup>2</sup>

The position of the Hungarian capital in the Eastern and Central European city competition cannot be separated from the overall development of the region. The leading cities of Eastern and Central Europe have been subject to various external (German– Austrian, Russian, and Turkish) sovereignties, and their ranking in the urban hierarchy has continually changed.

#### 1.1. Early Middle Ages: Buda as the second most important centre in the region after Prague

Compared to Western Europe, feudal urban development in Eastern and Central Europe appeared late, in the 10<sup>th</sup> and 11<sup>th</sup> centuries. The favourable geographical location of the three capitals (such as the meeting of different landscapes, central basin location, or the intersection of roads) was crucial in strengthening their commercial role. Buda increasingly strengthened itself ahead of other potential centres in the Carpathian Basin (Esztergom, Fehérvár – today's Székesfehérvár – and Visegrád).

However, Buda was preceded by Prague, which became an important European trading hub of its time. The cultural significance of the city is indicated by Central Europe's oldest university, Charles University. However, Prague's influence and network later shifted towards West-Central Europe instead of Eastern and Central Europe, as the capital of the Holy Roman Empire.

In Poland, on the one hand, Krakow, which became a bishop's seat in the 10<sup>th</sup> century and the capital in the 11<sup>th</sup> century, was significant, while on the other hand, Poznań, an important centre of the early Polish state in the 10<sup>th</sup>–11<sup>th</sup> centuries and located at the intersection of important transit routes in western Polish territories, was also significant. Both cities prospered for centuries. Krakow experienced its golden age in the 15<sup>th</sup>–16<sup>th</sup> centuries, while Poznań became one of Eastern and Central Europe's most important craft trading cities by the 15<sup>th</sup> century.

#### 1.2. New centres after the fall of Buda – The strengthening of Pressburg and Warsaw

During the era of the great geographical discoveries, all Eastern and Central European cities were disadvantaged by their lack of direct access to the Atlantic Ocean, resulting in

<sup>&</sup>lt;sup>1</sup> Mráz 2016: 376.

<sup>&</sup>lt;sup>2</sup> Kőrösi 2015: 160.

their exclusion from global trade and gradual lagging in development amid the changing power dynamics. The situation was further exacerbated by the strengthening of the Austrian and Ottoman Empires, which had a differentiating impact on the region's urban hierarchy. While Buda, Krakow, Poznań, and Prague lost their positions, the status of Pressburg (Pozsony) and Warsaw was strengthened.

Prague lost its position in the city competition due to Habsburg rule and Buda lost its position due to Turkish rule. Vienna took over Prague's role, while Buda's role was gradually assumed by Pressburg, which was also increasingly fulfilling capital functions (such as coronations and parliamentary sessions). In Krakow's case, geopolitical factors were also at play, but not in the form of an external oppressive power. Instead, Warsaw, with its more central location, irrevocably took over the capital role from Krakow, which was becoming increasingly peripheral in the Lithuanian and Swedish power environment.<sup>3</sup> Poznań, in turn, suffered a series of tragedies, being repeatedly destroyed and burnt by Swedish troops, and then plagued by epidemics and natural disasters.<sup>4</sup>

# 1.3. The gradual transformation of Budapest into a world city

The retreat of Ottoman rule and, in conjunction with this, the strengthening of Habsburg dominance once again restructured the urban hierarchy in favour of Vienna and Buda, at the expense of Prague, Pressburg, Warsaw, and Krakow. During the reign of Emperor Joseph II, while Prague was further overshadowed by Vienna, Buda gradually regained its position relative to Pressburg. Several government institutions (such as the Lieutenancy Council and the Hungarian Chamber) were relocated to Buda, and Pressburg's role was limited to the estates' diets. From the 1830s, although Pressburg's economy continued to grow rapidly as the Danube became an important international trade route, its role in the urban hierarchy diminished to that of a regional centre due to the changed power dynamics following the Austro-Hungarian Compromise.<sup>5</sup> The competition between Buda and Pressburg was finally settled with the unification of Buda, Pest and Óbuda in 1873. One of the biggest beneficiaries of the onset of capitalist development was the Hungarian capital. Budapest gradually became Vienna's partner city. Particularly, the Pest side of the city experienced rapid growth. Major infrastructure investments were initiated in preparation for the Millennium Celebrations (such as the underground railway and the city's outer ring road).<sup>6</sup> Thanks to its dynamic development, the modernising Budapest was considered the eighth largest city in Europe at the turn of the 20th century.<sup>7</sup> By 1890, the Hungarian capital had become the first city in Eastern and Central Europe to reach a population of half a million, and by 1920, it had also been the first metropolis to reach a population of one million.

- <sup>4</sup> Parisek–Mierzejewska 2006: 291.
- <sup>5</sup> JACOBS 2013: 508.
- <sup>6</sup> Elter–Baross 1993: 190.
- <sup>7</sup> Beluszky 2003: 74.

<sup>&</sup>lt;sup>3</sup> ENYEDI 1978: 238.

Poland came under Prussian, Austrian, and Russian rule in the 18<sup>th</sup> century. As the centre of Silesia, Breslau (Wrocław) had been part of the German sphere of influence since 'times immemorial', and the more significant Polish cities were originally incorporated into Prussia or Austria, not into Russia, which controlled the largest territories. Łódź and Warsaw came under Russian influence only after the Napoleonic Wars, in 1820. The loss of Polish state independence particularly affected Warsaw, whose control for a long time was limited to Mazovia and the other Polish territories under its jurisdiction.<sup>8</sup> Due to the tripartite division, instead of having a unified central 'head', Polish cities followed different developmental paths 'side by side' within various empires, which contributed to the formation of the still-characteristic polycentric nature of the Polish urban hierarchy. This was further reinforced by the fact that, while Poznań (in South Prussia) and Lemberg/Lwów (in Galicia and Lodomeria), coming under Prussian and Austrian rule, received more significant administrative roles, the previously more prominent Krakow and Warsaw were downgraded to peripheral provincial cities.

Despite the difficulties, both Warsaw and Krakow experienced dynamic population growth. Warsaw, after Budapest, was the second city to surpass a population of half a million in the 19<sup>th</sup> century. Krakow, which enjoyed a relatively high degree of autonomy, was able to undertake significant developments. The city's development plan for the next 100 years was completed, and in relation to this, the area of the city was expanded. By the time of World War I, the population had already grown to 180,000.<sup>9</sup>

At the very beginning of the 20<sup>th</sup> century, rapid demographic and economic development led to the emergence of two more modern cities in Eastern and Central Europe. On the one hand, Breslau (Wrocław), an important economic centre in Germany at the time, had a population of half a million by 1910.<sup>10</sup> Prague also developed rapidly and soon became one of the most important economic and cultural centres of the Habsburg Empire.<sup>11</sup> With Prague's 'open city' declaration in 1866, the population of the rapidly growing area exceeded half a million by 1920.

#### 1.4. Nation state efforts shaping urban hierarchy: The strengthening of Prague and Warsaw

The territorial changes that concluded World War I had a significant impact on the urban hierarchy of Eastern and Central Europe. The post-war boundary changes favoured metropolitan development, as the victorious powers created buffer states of varying sizes between the empires. In these states, the establishment of strong, symbolic capitals was part of the conscious nation-building efforts of the majority nationalities.

<sup>10</sup> Książek–Suszczewicz 2017: 53.

<sup>&</sup>lt;sup>8</sup> Niemczyk 1998: 301.

<sup>&</sup>lt;sup>9</sup> Romańczyk 2018: 139.

<sup>&</sup>lt;sup>11</sup> Sýkora–Štěpánek 1992: 92.

This was particularly true for Czechoslovakia, which had a multi-ethnic and polycentric urban hierarchy. The strengthening of Prague, which was relatively modest in size compared to the expanded country, also served the interests of the state-building Czech nationality against Hungarian, Moravian, Ruthenian, or Slovak counterweights – such as Brno, Pressburg (Slovakian: Bratislava, Hungarian: Pozsony), Košice (Hungarian: Kassa), and Uzhhorod (Hungarian: Ungvár). By 1940, Prague's population had nearly reached one million, although many people moved to rural areas due to the war and food supply issues.

In Poland, the re-established state after a long period of fragmentation also favoured the reinforcement of Warsaw, the capital that symbolised the nation. During the interwar period, the Polish capital, which had grown into a million-strong metropolis, temporarily took over demographic leadership from Budapest.

Even in Hungary, which suffered territorial losses, the urban hierarchy became more concentrated. However, rather than the conscious strengthening of the capital, the direct role of the territorial changes played a significant role in the reduction of state territory and the loss of potential counterweights – such as Pozsony (Bratislava) to Slovakia or Kolozsvár (Cluj) to Romania. The 1920 Dictate of Trianon further intensified the concentration of Hungarian urban hierarchy by relocating a significant portion of the Hungarian population from the detached territories to Budapest. After the Dictate of Trianon, the global economic crisis further hampered economic growth, bringing an end to the golden age of the Hungarian capital.

In addition to Warsaw, Łódź was declared an industrial city due to its favourable geographic location. From the mid-19<sup>th</sup> century, the dynamically developing cotton industry strengthened the city, attracting professionals from German territories, thus increasing both its economy and population.<sup>12</sup> Consequently, Łódź, renowned for its textile industry, also joined the ranks of Eastern and Central Europe's cities with a population of over half a million before World War II.

After World War I, Pressburg (Pozsony/Bratislava) became part of Czechoslovakia. As the capital of the short-lived First Slovak Republic declared in March 1939, it held a brief leading role until 1945.

# 1.5. Centralised urban hierarchies excluded from urban competition in the socialist framework

Post-World War II urban development in all three countries of Eastern and Central Europe shared similar elements. For several cities, rebuilding after war damage became crucial. The city of Breslau (Wrocław), which later became part of Poland from Germany, suffered severe damage. In Budapest, many facilities built in the late 19<sup>th</sup> century were destroyed not only by German bombing but also by the occupying Soviet army.

<sup>12</sup> LAGZI 2014: 44.

In the rebuilding of Warsaw after the war, smaller routes were redesigned with public transport considerations in mind. In Bratislava, the reconstruction of destroyed factories and infrastructure also began.<sup>13</sup>

In addition to infrastructural losses, the populations of several cities temporarily declined (e.g. Warsaw or Breslau/Wrocław). In Bratislava, which had meanwhile become the centre of Slovak nationalism, two-thirds of the population were deported, and part of the German and Hungarian populations, who were accused of collective guilt, were also expelled. Łódź suffered severe losses due to the German occupation.

With the communist takeover, a new era began for the cities under examination. During early socialism, the centralised socialist state favoured the development of capitals considered to be the basis of the working class on an ideological basis. It is therefore not surprising that the capitals of Czechoslovakia, Poland, and Hungary became the metropolises of Eastern and Central Europe.

The economic situation of the cities was fundamentally shaped by nationalisation. This affected not only property management but also dominant enterprises. Housing estate construction projects were initiated in several phases to provide affordable housing for as many workers as possible. These projects prioritised quantity over quality. In Prague, these constructions continued for an excessively long time and were only halted based on decisions made after the transitional revolution.<sup>14</sup> In the hope of finding housing and employment, many people from the surrounding settlements migrated to the cities.

To accommodate the large-scale construction and development projects, the area of cities often proved to be too limited, leading to the gradual incorporation of surrounding settlements. In 1922, the area of Greater Prague tripled, and from 1950, Budapest also expanded significantly – at 525 km<sup>2</sup> – it became fifteen times larger than the next largest county seat.<sup>15</sup> Warsaw's area was also expanded to 480 km<sup>2</sup>.

The capitals increasingly concentrated the population and the economy, becoming a 'hydrocephalus' in areas such as culture, education, and sports as well (especially in Hungary). To counterbalance the resulting imbalances, alternative centres were designated. In the late socialist period, it was Czechoslovakia and Hungary that pioneered the introduction of national urban network development plans based on a hierarchical organisation of the entire population of communities, which were also applied in the other countries of the Eastern Bloc, broadly in line with the same principles and at the same time. The system that favoured higher hierarchical levels in state-funded projects proved to be unsuccessful.<sup>16</sup>

The role of cities in international urban competition was severely limited due to the impossibility of contacts with the West within a closed state framework and the lack of foreign investment. However, Krakow's central role in culture and education was maintained.

<sup>&</sup>lt;sup>13</sup> JACOBS 2013: 508.

<sup>&</sup>lt;sup>14</sup> Sýkora–Štěpánek 1992: 95.

<sup>&</sup>lt;sup>15</sup> Elter–Baross 1993: 191.

<sup>&</sup>lt;sup>16</sup> Blais–Szeszler 2000: 9.

# 1.6. Increased involvement in international city competitions after the political transition

In Western European researchers' studies of international city hierarchies, the cities of Eastern and Central Europe were barely represented for a long time. With the fall of the Iron Curtain, studies on European city competition increasingly turned their attention to the cities of the Visegrád countries, which associated their progress towards closing the gap with the West and urban development with the improvement of market conditions and the influx of international capital.<sup>17</sup> Another aspect of the analyses addresses the role that the cities of Eastern and Central Europe might play in the pan-European urban hierarchy and whether this will have an impact on urban development in Western Europe.

According to most research, the urban network of Eastern and Central Europe could join the second tier of European cities, similar to the Mediterranean region ('Golden Banana' or 'Sun Belt').<sup>18</sup> After the political transition, new spatial structural axes emerged, independently affecting the Visegrád group of countries as well. The most famous among them was the model outlined by a Polish researcher, Grzegorz Gorzelak in 1996, which suggested that the Gdańsk–Poznań–Wrocław–Prague–Brno–Bratislava–Budapest form a development axis.<sup>19</sup> Due to its shape, it was named the 'Central European boomerang' as a mirror image of the 'Blue Banana'.<sup>20</sup>

With the political transition, new economic processes began in the cities of Eastern and Central Europe.<sup>21</sup> The industrial jobs that had lost their market for their products found themselves in a difficult position.<sup>22</sup> Beyond the economic problems, the municipal leadership of Łódź also faced the challenge of determining "the identity to assign to a city with a core element (the textile industry) that had virtually disappeared".<sup>23</sup>

The cities that found it easiest to navigate the post-transition period were those located closer to Europe's economically developed regions. In the case of Poznań, for example, a process of qualitative transformation soon began.<sup>24</sup>

Cities in the region that were particularly well-positioned were those with a skilled workforce and advanced infrastructure. In the case of Wrocław/Breslau, for example, a significant factor in the influx of foreign investments was the city's early integration into the European motorway network.

With the opening of the markets, the number of private enterprises rapidly increased in the leading settlements of the urban hierarchy. According to the data of REGON, the Polish business registry, the number of enterprises in Kraków grew from approximately 11,000 to 126,000 between 1991 and 2015.<sup>25</sup>

- <sup>19</sup> Gorzelak 1996: 128.
- <sup>20</sup> Egri–Kőszegi 2018: 28.
- <sup>21</sup> NIEMCZYK 1998: 303.
- <sup>22</sup> Pénzes–Fekete 2014: 13.
- <sup>23</sup> Lagzi 2014: 49.
- <sup>24</sup> Parisek–Mierzejewska 2006: 292.
- <sup>25</sup> Romanczyk 2018: 142.

<sup>&</sup>lt;sup>17</sup> Lichtenberger 1996: 145.

<sup>&</sup>lt;sup>18</sup> Hall 1993: 885.

As a result of all these factors, the geographical polarisation of the urban hierarchy became one of the main processes in Eastern and Central Europe, raising numerous questions. Among these, a key issue is whether economic growth will further widen or mitigate the differences between cities.<sup>26</sup>

### 2. City ranking by population size: Warsaw and Budapest at the top

When the term 'urban hierarchy' is mentioned, most people immediately think of city size, associating leading cities with the more populous members of the settlement network. As an indirect measure of 'significance', a city's population size has long served as a fairly accurate indicator of its position within the urban hierarchy.<sup>27</sup>

A significant economic centre will typically attract a larger population; as such, a key economic hub exerts a population-attracting effect due to its more favourable business and labour market opportunities. Thus, a city's population size indirectly reflects its importance. This interaction also works in reverse: larger population concentrations eventually become important themselves, drawing in institutions, jobs, transport and residential infrastructure. For the economy, this means not only a broader labour supply but also a closer consumer market, which is advantageous for minimising transport costs.

# 2.1. Million-strong metropolises: The leading cities of the Eastern and Central European urban hierarchy

Eastern and Central Europe has few metropolises, with only three capitals – Budapest, Prague and Warsaw – reaching a population of over one million.<sup>28</sup> Two key factors can be highlighted:<sup>29</sup>

- As the nations of the region were under the dominance of external powers for centuries, and due to their non-existent or limited statehood, strong sovereign capitals did not historically develop. It was only in the 20<sup>th</sup> century that independence was achieved, though this was largely nominal due to Soviet occupation.
- 2. In the case of Slovakia, the relatively small size of the state created by the dissolution of Czechoslovakia, with a population of just over 5 million also does not favour the development of million-strong metropolises.

Of the three metropolises, Budapest was the most populous for many decades, being the only one to exceed 2 million inhabitants. After reaching its peak population in the 1980s, the number began to decline (especially during the 1990s with the deepening of

<sup>&</sup>lt;sup>26</sup> Benedek–Kocziszky 2017: 261.

<sup>&</sup>lt;sup>27</sup> Kovács 2002b: 141.

<sup>&</sup>lt;sup>28</sup> Kovács 2002a: 68.

<sup>&</sup>lt;sup>29</sup> JENEY 2013: 48.

suburbanisation) or stagnate. Meanwhile, Warsaw's population has been growing rapidly, and due to the contrasting demographic trends of the two capitals, the Polish capital has surpassed the Hungarian one (1.79 million versus 1.72 million at the end of 2020). Prague, which is third in the ranking, has a somewhat smaller population compared to the other two; while it also experienced a temporary decline in the 1990s, it began to grow again after the turn of the millennium (1.3 million according to the 2021 census).

The absence of million-plus cities means that the metropolitan population ratio for Eastern and Central Europe as a whole is relatively low, at 8%. However, this ratio varies widely among the four Visegrád countries depending on the size of their states and their respective metropolises. In Hungary, it stands at 18%, which is notably high in a European context. In Czechia with similar size, the ratio is 12% due to its somewhat smaller capital. In Poland, which is four times larger than the previously mentioned countries, the ratio is 5%, and in Slovakia, which lacks a metropolitan area, the ratio is understandably 0%.

# 2.2. Regional cities: The missing counterweights

In Eastern and Central Europe, there is a significant gap in regional cities with populations between 500,000 and 1 million compared to Western Europe. Only four regional cities are concentrated in the Visegrád countries. From this perspective, Eastern and Central European countries can be classified into three main types:

- In Poland, all four regional cities have developed as counterweights to the million-strong Warsaw, creating a truly polycentric urban network. This is partly due to the historical fact that the three partitioned Polish territories developed independent centres. The polycentric nature is further supported by the fact that Poland's grid-based transport network is not Warsaw-centric.
- In Czechia and Hungary, there are no strong regional cities serving as counterweights to the million-plus capitals. Due to the radial road and rail network and the unitary state structure, strong counterweights to Budapest and Prague did not historically develop. Following the million-strong capitals, there is a significant gap to the second cities (particularly in Hungary), with Brno at nearly 400,000 and Debrecen at around 200,000.
- Slovakia does not have any cities at all. Bratislava is considered more of a mediumsized town on an international scale.

In Poland, the four regional cities house 7% of the country's population. When including Warsaw's 5% share, the proportion of people living in cities in Poland is the same as in Czechia (12%).

The rank-size rule confirms the well-known polycentric nature of the Polish urban hierarchy. Poland's curve is above the Auerbach (or Zipf) distribution curve (*Figure 1*). A similar situation is observed in Slovakia, which lacks cities, where the population of Košice, following Bratislava, is only slightly less than that of the capital, resulting in a bipolar urban hierarchy.

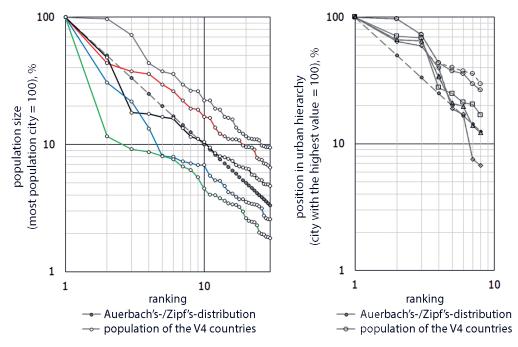


Figure 1: The degree of polarisation in the Eastern and Central European urban hierarchy based on a rank-size analysis

*Source:* compiled by the author based on the data of national statistical offices (population for Poland and Hungary means annual data at the end of 2020; and 2021 census data for Czechia and Slovakia), Eurostat (2019 GDP per capita), and Coface (2018 turnover values of large companies)

*Notes:* Left: the urban hierarchy by population size at the level of the member countries; right: city ranking according to various indicators at the V4 level. For the dotted line, the value of its NUTS3 unit is used instead of Bratislava.

In Czechia, and particularly in Hungary, the absence of regional cities results in a strong 'primate city' effect. Brno constitutes only 31% of Prague's population, while Debrecen accounts for just 12% of Budapest's population – one of the lowest ratios internationally.

# 2.3. Medium-sized towns: A characteristic settlement size category in Eastern and Central Europe

Medium-sized towns with populations between 20,000 and 500,000 play a much more significant role within the urban network of Eastern and Central Europe compared to Western Europe. Around 2020, the Visegrád countries collectively had 367 medium-sized towns, where about one-third (34%) of the region's total population, and the largest proportion of urban dwellers, were concentrated. In contrast to metropolises and regional cities, there are no extreme variations in the proportion of medium-sized towns among

the countries. In Slovakia and Poland, this proportion is slightly higher (37% and 35%, respectively), while in Czechia and Hungary, it is lower (30% each).

The medium-sized towns of Eastern and Central Europe can be classified into four distinctive types:<sup>30</sup>

- 1. As a medium-sized town, Bratislava attained the status of a capital. It had previously had capital functions for shorter periods. Today, as the capital of independent Slovakia, Bratislava is receiving significant developmental impetus compared to other medium-sized towns, helping it to ascend to a higher level in the European urban hierarchy.
- 2. From the 1970s onwards, county seats became the main beneficiaries of urban network development policies (such as Nyíregyháza, Salgótarján, Székesfehérvár, and Tatabánya). This stemmed partly from the realisation that it had become essential to counterbalance the excessive capital city concentration resulting from the misguided economic policies of the 1950s and 1960s. Paradoxically, the county seats that fared particularly well were those not granted the status of county-level towns, as they were able to control the development funds allocated for the entire county.<sup>31</sup>
- 3. The so-called 'socialist industrial towns' were artificially created, typically through greenfield investments for mining, heavy industry, or chemical industry purposes (e.g. Havířov, Kazincbarcika, Nowa Huta). These medium-sized towns, centred around one or a few factories, faced economic and demographic crises after the regime change.
- 4. On the other hand, suburban medium-sized towns experienced soaring growth with the deepening of suburbanisation around the cities (such as Érd, Gödöllő, or Vác near Budapest; Brandýs nad Labem-Stará Boleslav near Prague; Luboń near Poznań; Piaseczno near Warsaw; and Wieliczka near Kraków). Some of these towns, with populations in the tens of thousands, now rival the size of county seats. A characteristic feature of these towns is that numerous public services (such as education, healthcare, or culture) often do not keep pace with the rapid influx of residents, or do so only belatedly. However, this shortfall is only relative because their advanced transport infrastructure makes facilities of cities easily accessible. Previously, such towns were eventually absorbed by the cities. Since the transition, if they do not become mere dormitory towns, they are favoured destinations for foreign direct investment and domestic companies relocating from the central city due to their excellent transport connections (such as motorways, suburban rail, or trains) and proximity to the city. They fulfil several important central roles (such as hosting universities, tourist events, or attractions) and have a good chance of becoming sub-centres in the city region (for example, Gödöllő hosted numerous important international meetings during Hungary's EU presidency in 2011).

<sup>30</sup> JENEY 2013: 49.

<sup>&</sup>lt;sup>31</sup> Illés 2008: 145.

Due to the small number of metropolises and the lack of strong regional cities as counterbalances, highly polarised national rankings have emerged in Eastern and Central Europe. Nevertheless, in terms of population size, the urban hierarchy of the Visegrád countries as a whole is balanced. This is partly because, instead of being dominated by a single megacity, the three metropolises in the region (particularly Warsaw and Budapest) are of very similar size and are geographically relatively distant from each other within the region (Figure 2). These two factors combined have contributed to the Visegrád countries' million-plus cities appearing as independent centres, with none of them being large enough to exert a dominant influence over the entire region as the capital of Eastern and Central Europe. Budapest, which for decades (especially in the 1970s) was the unrivalled leader in terms of population, is expected to lose its demographic lead based on trends since the turn of the millennium. By the early 2020s, Warsaw had already caught up, and Prague, which is also growing more rapidly than the Hungarian capital, is increasingly closing in. These trends suggest that the top tier of the Eastern and Central European urban hierarchy is moving from Budapest-centricity towards a more polycentric structure in the future.

#### 3. City ranking based on economic functions: The leading role of capitals

The hierarchical ranking of cities by population size does not necessarily align with their economic roles. The growth of several cities has stalled due to suburbanisation, but they have maintained their positions within the urban hierarchy. The group of leading global cities (such as Amsterdam, Frankfurt am Main, or Zurich) remains largely unchanged, even though they have increasingly lagged behind the megacities of the developing world in terms of size.<sup>32</sup> This indicates that today, population size increasingly fails to serve as an 'indirect measure of significance'. However, recent trends show that the rankings of cities based on demographic and functional approaches are converging again. Among the megacities of the developing world, several (such as Mumbai or São Paulo) have meanwhile become global cities.<sup>33</sup>

Two indicators are used to determine the position within the economic urban hierarchy. Similar to population size, only absolute metrics can be used in the economic dimension to determine the hierarchical ranking of cities. Specific metrics inform about the socio-economic development of cities but do not reveal their positions within the urban hierarchy.

One of the indicators used to measure the economic significance of cities is GDP, which shows the strength and size of the economy. For cities, the challenge is that GDP data is not available at the settlement level but only at the NUTS3 level. Fortunately, Budapest and its competitors appear as separate units at the NUTS3 level, allowing their GDP to be measured. Only in the case of Bratislava does the NUTS3 unit (Bratislava

<sup>32</sup> TAYLOR: 2004: 88.

<sup>&</sup>lt;sup>33</sup> Csomós–Kulcsár 2012: 139.

County) not coincide with the somewhat narrower boundaries of the Slovak capital. Since the difference is relatively small, and given its role as the capital, Bratislava is included among the eight cities examined alongside other cities. Czechia, Hungary, and Slovakia are represented only by their capitals, while in the polycentric Poland; the four regional cities are also included in the analysis alongside Warsaw. In this case, the measurement of the economic strength of cities is based on the NUTS3-level GDP per capita for 2019, measured in purchasing power parity from the Eurostat harmonised database.

In addition to GDP, the economic significance of cities is also examined based on the turnover of their largest companies. The presence of large companies primarily and directly indicates the position of these cities in international economic life and the urban network, as well as their roles in international integration, division of labour, production, management, and employment. The presence of a large company indirectly indicates how well-known a city is, its infrastructure, human resources, and other hard-to-measure factors, such as how internationalised, well-known, or safe it is, thereby reflecting its international appeal and position.

In studies of the global urban hierarchy, the Fortune magazine ranking database of the world's 500 largest companies (Global 500) is often used. Among the headquarters of the largest globally recognised companies, Eastern and Central European cities are typically absent or barely present. However, the Coface database ranking the 500 largest companies specifically in Central and Eastern Europe (Coface CEE Top 500) provides adequate information. To convert this corporate database into an urban data series, companies were first localised by their headquarters, and then their turnover values were aggregated by city. Since the database only includes the 500 largest companies in the post-socialist region, not all companies in the examined cities are represented, only the largest ones. According to 2018 data, 343 of the 500 largest companies with turnovers exceeding 481 million euros. For simplicity, these are referred to as large companies in this context, regardless of specific terminology. Out of the 343 'large companies', 194 are concentrated in the eight examined cities.

Based on the size of the economy measured by GDP, similar to population size, the three metropolises stand out, with Warsaw alone at the forefront. Here, Budapest ranks third, not far behind Prague. The three capitals also rank well among the top cities in the EU, with Warsaw representing the 9<sup>th</sup> (!) highest value among NUTS3 units of cities, and Prague and Budapest also ranking among the top 20 cities (18<sup>th</sup> and 19<sup>th</sup> places).

To compare the different data series, it is useful to express the original values of all eight cities as a percentage of the maximum value. Thus, Warsaw stands at 100%, followed closely by Prague and Budapest at 71% and 69%, respectively. Following the three metropolises, there is a significant gap before the fourth capital, Bratislava's economy, which represents just over a quarter of Warsaw's value, at 28%. The Polish regional cities lag far behind, with Krakow at 25%, Wrocław and Poznań at 21%, and Łódź also at 21%.

The ranking of cities based on the turnover of companies listed in the Coface database is similar, especially among the leading cities. Once again, Warsaw stands out (100%), followed by the capitals. Here, Budapest surpasses Prague with 64% versus 60%, and

Bratislava again ranks fourth with 40%. Bratislava's position (41%) remains essentially unchanged if, similar to GDP, the value of the NUTS unit (Bratislava County) is used instead of the town's value (including companies in Malacky and Ivanka pri Dunaji). Among large companies, the ranking of Polish regional cities changes compared to GDP, but none reach their GDP-measured position: Poznań at 19%, Krakow at 17%. Interestingly, Łódź and Wrocław fall far behind with 8% and 7%, respectively. Instead, Płock or Mladá Boleslav appears as medium-sized towns in the top eight Eastern and Central European cities.

By averaging the percentage values of GDP and the total turnover of large companies, a complex economic urban hierarchy indicator can be created. Since Warsaw is considered the leading city of the Visegrád countries based on both economic indicators, it naturally leads the overall economic ranking with 100%. Budapest and Prague follow at the next level of the Eastern and Central European urban hierarchy with 67% and 65%, respectively. Based on its economic functions, Bratislava ranks fourth with 34%, surpassing the larger Polish regional cities. The Polish regional large cities lag behind the capitals in economic significance, with values around 10–20%.

It is worth comparing the ranking of Eastern and Central European large cities in terms of economic roles with their ranking by population size (*Figure 1*). The analysis of the Visegrád countries' urban hierarchy in different dimensions confirms that the ranking of large cities based on economic indicators (particularly the turnover of large companies) is more polarised than their ranking by population size. Economic-business roles are not linearly proportional to the size of cities (*Figure 3*). The larger a city is, the more significant its role in the economy and its ability to attract companies.

In the 2010s, Budapest's GDP growth lagged behind that of its competitor cities, with only Bratislava's economic growth being slower. If current trends continue, Budapest is expected to decline more significantly in the economic dimension of the urban hierarchy compared to its population dimension, falling behind Warsaw and increasingly Prague.

# 4. The correlation between position in the urban hierarchy and economic development

The political transition created new development opportunities for the capitals of Eastern and Central Europe. In a globalising world, the success of the cities in the Visegrád countries depends on how well they can integrate into the European urban competition.<sup>34</sup> Several academic sources confirm that among post-socialist cities, the capitals of Eastern and Central Europe are most likely to join the European city system.<sup>35</sup> This raises the question of what position the four capitals at the top of the urban hierarchy hold within their countries and the European Union's spatial structure. In other words, does a favourable position in the urban hierarchy correlate with economic development?

<sup>34</sup> JENEY 2003: 259.

<sup>&</sup>lt;sup>35</sup> BOURDEAU-LEPAGE 2004: 1.

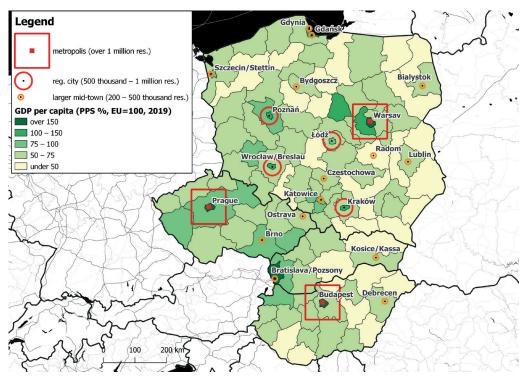


Figure 2: The relationship between the size of Eastern and Central European cities with populations of over 200,000 and the economic development of their regions

*Source:* compiled by the author based on the data of national statistical offices (population for Poland and Hungary means annual data at the end of 2020; and for Czechia and Slovakia 2021 census data) and Eurostat (GDP per capita)

Although economic development is a complex concept, the measurement of economic development differences here is based on GDP per capita adjusted for purchasing power parity at the NUTS3 level, as previously utilised from Eurostat. The analysis will focus on the positions of the four capitals within their respective countries.

In terms of economic development measured by specific indicators, Warsaw and Prague emerged as leaders again, with both cities exceeding the average development level of the European Union by more than twice (216% and 206%, respectively). Budapest's level of development reaches just over one and a half times the EU average (151%), with Bratislava also surpassing it (160%). Polish regional cities fall behind the aforementioned ones in terms of development, but, with the exception of Łódź (95%), they still exceed the average level of development within the European Union. The example of Eastern and Central Europe's medium-sized towns and cities with populations over 200,000 clearly illustrates how significant size is in economic development (*Figure 2*). The correlation calculated between the population size of the 21 largest cities marked on the map and the GDP per capita of the NUTS3 units they are part of empirically confirms this correlation (r = 0.8).

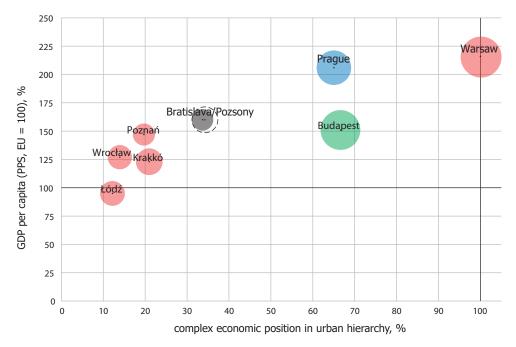


Figure 3: The correlation between the population size, economic urban hierarchy position, and economic development of the eight most populous cities in Eastern and Central Europe

*Source:* compiled by the author based on the data of national statistical offices (population for Poland and Hungary means annual data at the end of 2020; and for Czechia and Slovakia 2021 census data), Eurostat (2019 GDP per capita), and Coface (2018 turnover values of large companies)

Note: For Bratislava, a dashed line indicates the value for Bratislava County for comparability.

Broadly speaking, the order of the eight examined cities by population size, economic role, and economic development is fairly similar (*Figure 3*). Most of the cities studied confirm that the larger a city is, the more important its role in the economic dimension of the urban hierarchy, and the higher its economic development tends to be. This correlation is nuanced by the examples of Budapest and Bratislava. The Hungarian capital exemplifies how its prominent position in terms of population size is not matched by its economic role, and even more so by its economic development measured by GDP per capita. Conversely, Bratislava, despite its relatively small population, ranks as the fourth most economically significant urban unit and even surpasses Budapest in GDP per capita, placing it third.

Since the 1990s, one of the most defining phenomena in the development spatial structure of Eastern and Central Europe has been the increasing developmental advantage of capitals compared to rural areas. This has been particularly notable for the metropolises of the Visegrád Group: Budapest, Prague, and Warsaw have become some of the most dynamically developing elements in the EU's spatial structure. The economic growth of these cities has primarily stemmed from the dynamism of their tertiary sectors, while their

industrial activities have started to wane. Although to a lesser extent than spontaneous market processes, the EU's cohesion policy also primarily benefits capitals (so-called 'trade-off theory'). For instance, in Spain, it was found that between 1980 and 1996, cohesion funds were significantly directed towards Madrid, which resulted in polarisation rather than cohesion within the country in terms of the capital versus rural areas.<sup>36</sup> While the tertiarising capitals – integrating into the European city competition – have successfully caught up with their developed Western counterparts, they have left a 'gaping void' behind in their increasingly lagging rural hinterlands, which have experienced the shock of political transition more severely.

In the countries of Eastern and Central Europe, the capitals are among the most developed elements of the spatial structure, although their economic advantage over the rural areas varies from country to country. (In this paper, rural areas are considered complements to the capitals, meaning all NUTS3 units outside the capitals are classified as rural. Consequently, the capitals and rural areas together cover the entire territory of the examined countries.) The dual index  $(D_{\rm CR})$  can be used to measure the capital–rural dichotomy based on the following formula:

$$D_{CR} = \frac{\bar{y}_C}{\bar{y}_R},$$

where  $y_c$  represents GDP per capita of a country's capital, and yR is average GDP per capita of the rural areas in the same country. In 2019, the development level of the capitals in the Visegrád Group exceeded that of the rural areas by a factor of 2.8. Eastern and Central Europe thus continues to be characterised by a strong capital–rural dichotomy. Warsaw's development level was 3.3 times, Bratislava's 2.8 times, and Budapest and Prague's 2.7 times higher than their respective country's rural average.

On average in Eastern and Central Europe, the capital–rural duality peaked around 2009, with varying peaks across countries: 3.1 in Hungary (2009), 2.7 in Czechia (2010), 3.1 in Slovakia (2011), and 3.3 in Poland (2013). Since then, the contrast between capitals and rural areas has either decreased or remained stable. Therefore, the previously stated observations are now more nuanced for the 2010s. The reduced duality is attributable to the more modest economic dynamics of capitals between 2010 and 2019. A notable development in the 2010s in Eastern and Central Europe was the significant role of the industrial sector (mainly machinery) within rural areas. As a result, rural areas have gradually caught up, and the capital–rural dichotomy has not continued to increase: it has stagnated and then started to decrease.

It can be observed that the most pronounced capital–rural dichotomy still characterises Poland, but in the 2010s, the dynamic previously characteristic of capitals gradually decreased in the spatial structure of Czechia and Slovakia, and particularly in Hungary.

<sup>&</sup>lt;sup>36</sup> Kertész 2004: 68.

#### Summary

Buda, and later Budapest from 1873 onwards, has traditionally been one of the key players in the Eastern and Central European urban hierarchy. However, its role has continuously evolved over different periods. Initially, Prague was its main rival, followed later by Vienna. The Hungarian capital experienced its true golden age during the long 19<sup>th</sup> century when it developed into a genuine world city. However, its sphere of influence remained primarily within the Carpathian Basin and did not extend to becoming the capital of Eastern and Central Europe.

The 20<sup>th</sup> century fundamentally reshuffled Budapest's opportunities. Its catchment area first contracted due to the Dictate of Trianon, which turned it into a 'hydrocephalus' within the country. This was further exacerbated by the centralising and isolating policies of early socialism. Despite becoming the most populous city in Eastern and Central Europe with over 2 million residents, the socialist period limited its internationalisation. With the deepening of suburbanisation following the regime change, its population also declined, causing it to lose its demographic primacy.

Cities in the upper echelon of the urban hierarchy are also the most developed settlements in Eastern and Central Europe, having outpaced their rural hinterlands with their rapid development. However, Budapest's example highlighted that by the 2010s, the dynamic role of the capitals in the Visegrád countries had already begun to wane, reducing the capital–rural inequality.

If current trends continue, Warsaw will clearly remain Eastern and Central Europe's leading city, surpassing Budapest in both population and economic functions. Currently, Budapest stands on par with Prague in the examined dimensions. Although all three capitals play a leading role in Eastern and Central Europe's urban hierarchy, none have achieved a dominant role on a larger regional scale.

In terms of economic significance, Budapest is relatively better positioned regarding the large companies that have located there. This suggests that instead of fulfilling an Eastern and Central European capital role, Budapest might function more as a gateway city for large companies' Southeast European expansion.

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### Dóra Molnár

# Administrative Eras in the Development of Budapest and its Agglomeration

#### Introduction

The three cities, Obuda, Pest, and Buda – especially the latter two –, were aimed to be unified even in the decades and indeed centuries before the official amalgamation. In the case of Pest-Buda, despite the unfavourable constitutional and political conditions during the years of Absolutism (1849–1866), it was possible to lay the groundwork for its development into a major city, relying on the energies provided by the civic development made possible by 1848.<sup>1</sup> It is not surprising that Károly Vörös writes in his monograph that the emergence of civil society brought about "such a profound enhancement of the city that [...] Pest-Buda became increasingly suited within the Hungarian part of the Habsburg Empire for organising the entire Hungarian national market and thus for the multifaceted articulation, expression, and support of all the demands aimed at Hungary's possible distinctiveness within the empire".<sup>2</sup> After the Austro-Hungarian Compromise of 1867, Pest-Buda became the political, economic, cultural, academic, and administrative centre of the country and the seat of national institutions. With the unification in 1873, the rapid development that began positioned Budapest at the forefront of the urban hierarchy in Hungary by the end of the century. Budapest's administrative structure still reflects this central role today, although its unique administrative system still fails to address many issues effectively. Perhaps the most pressing of these is the connection between the capital and its agglomeration, also from an administrative perspective, as the areas can only be properly managed if treated as a unified whole considering their population size.

#### 1. History of administration from state foundation to the Austro–Hungarian Compromise

Following the establishment of the state, Óbuda became the residence of the kings. Chronicles mention stone houses, a Roman-origin road network, its market, and also that in 1223, a fire destroyed the city along with the cathedral.<sup>3</sup> After the reconstruction, a royal castle was built in the area in the 13<sup>th</sup> century, while in Buda, scattered manorial settlements, ecclesiastical estates, and villages of royal servants developed, where the

<sup>&</sup>lt;sup>1</sup> Beluszky 2014: 52.

<sup>&</sup>lt;sup>2</sup> Vörös 1978: 323.

<sup>&</sup>lt;sup>3</sup> Garády 1939: 79.

population primarily lived from viticulture and winemaking. In contrast, Pest – which had Slavic–Bulgarian and Muslim merchant inhabitants in the 10<sup>th</sup> century – became a flourishing, wealthy German merchant city surrounded by walls by the 12<sup>th</sup> century, and in 1230, it received a charter from King Andrew II.<sup>4</sup>

The Árpád dynasty kings increasingly convened the diets on the Rákos Field – first mentioned in writing in 1074, and by 1289 already referred to as "the centre of the country"<sup>5</sup> – and established their court in Buda, where, after the devastation of the Mongol Invasion, King Béla IV ordered the construction of a stone castle.

Louis I (the Great) chose Buda as his permanent residence, while his mother preferred Óbuda, which had become the city of queens until the Turkish conquest.<sup>6</sup> However, a genuine upturn took place during the reign of King Matthias Corvinus: the royal palace, the library, and the humanist court modelled after Italy gained European fame. By this time, the fates of Buda and Pest were already closely intertwined, as evidenced by the fact that in 1522, the councils of both cities jointly regulated prices.<sup>7</sup> Buda then had a population of approximately 13,500, while Pest, Óbuda, as well as the market towns of Felhévíz and Szentfalva – together as an agglomeration – totalled more than 20,000 inhabitants.<sup>8</sup>

Following the Turkish conquest and the division of the country into three parts, medieval Hungarian urban administration only seemingly remained intact, as the work of the judges and city jurors serving on the municipal council in Buda and Pest was directed by the Turks, and so they became employees of the Ottoman Empire. The liberation of Buda in 1686 came at a tremendous cost: the castle, the city, and the population were almost entirely destroyed.

The subsequent period was marked by reconstruction, which initially progressed slowly. Pest and Buda regained their rights and privileges as a result of approximately two decades of joint struggles, and their status as free royal cities was not restored until 1711.<sup>9</sup> This also meant that their leaders, including the mayor, the judge, and the constable, could be elected by the citizens themselves, and the city council was responsible for managing municipal affairs. Buda's first mayor was Farkas Prenner, whose imperial rank as a constable indicated that the city was still under military administration.<sup>10</sup> In contrast, Pest was managed by a judge for about 80 more years –János Jakab Vatula was only elected as the city's first mayor in 1773.<sup>11</sup> The city leadership, however, extended beyond the city walls to the surrounding areas of Pest and Buda (including Terézváros, Ferencváros, Józsefváros, Lipótváros, as well as Tabán, Víziváros, Krisztinaváros, Országút, and Újlak).

- <sup>4</sup> Budapest története [History of Budapest] [s. a.].
- <sup>5</sup> KATONA [s. a.].
- <sup>6</sup> Budapest története [History of Budapest] [s. a.].
- <sup>7</sup> Viczián 2018.
- <sup>8</sup> Végh [s. a.].
- <sup>9</sup> Fónagy [s. a.].
- <sup>10</sup> Fónagy [s. a.].
- <sup>11</sup> Kovács 1943: 57.

The following century brought about significant development. This was reflected both in population increase – during this period, Pest's population rose above 100,000, while Buda reached 50,000 – and in the fact that while Buda became the administrative centre of the country, Pest became the hub of the country's commerce. The permanent ferry bridge built in 1769, which was exposed to extreme weather conditions, represented not only a symbolic connection between the two cities, but also linked the population of the Great Hungarian Plains and Transdanubia.<sup>12</sup> Pest's development continued at a rapid pace, and by the mid-19<sup>th</sup> century, the city had undeniably become the centre of the country. This required a programme addressing all aspects of development and modernisation. Count István Széchenyi was the first to articulate and lay the foundations for this programme. He was also the first to propose the unification of Pest and Buda under the name Budapest in 1829.<sup>13</sup>

Act XXIII of 1848 on free royal towns introduced significant changes to both the internal organisation and administration of Buda, affecting the election of officials and the municipal assembly. The elections took place on 27 May 1848. According to Article 15 of the Act, all eligible voters in Buda could participate in the election of officials based on the principle of popular representation. Accordingly, the mayor, the chief judge, the constable, the deputy captain, the clerks, the public prosecutor, the archivists, the land judge, the treasurer, the chief physician, the chief surgeon, and the chief engineer were elected.<sup>14</sup> Immediately after the elections of officials, the elections for representatives were held. Since Buda's population exceeded 30,000, it was classified as a city (Article 4), thus requiring its representative body to consist of at least 157 members (Article 21). Ultimately, a body of 167 members was elected through a secret ballot, and 80% of them (134 individuals) were civilians. Their tasks included the division of Buda into constituencies.<sup>15</sup>

On 24 June 1849, Minister of the Interior Bertalan Szemere issued a decree on the unification of Pest, Buda and Óbuda. The decree, which appeared in *Közlöny* [Gazette] on 27 June 1849, states that "the unification of the authorities of Buda and Pest, and of ó-Buda, respectively, is decreed, and the two sister capitals are hereby united as Budapest [...]".<sup>16</sup> Although the (dictated) Olomouc Constitution of March 1849 stipulated that the governing and administrative functions of Pest, Buda and Óbuda were to be performed by the municipal council appointed by the district high commissioner instead of the elected bodies, the process of unification continued, albeit in a forced manner: Buda and Óbuda were united politically on 8 November 1849 and administratively on 19 December 1849, which was followed by an administrative unification of Pest and Buda on 13 November 1850.<sup>17</sup> However, the organisation of civic administration that began in 1848–1849 was interrupted. After the suppression of the Revolution and War of Independence, in 1850,

- <sup>14</sup> BARACZKA 1943: 243.
- <sup>15</sup> BARACZKA 1943: 236.
- <sup>16</sup> Domonkos 2019.
- <sup>17</sup> Domonkos 2020.

<sup>&</sup>lt;sup>12</sup> Rácz 2012: 13.

<sup>&</sup>lt;sup>13</sup> Budapest története [History of Budapest] [s. a.].

a municipal council (*Gemeinderat*) modelled after the Austrian system was organised, with members appointed by the district high commissioner of Buda. The diploma of October 1860 restored the legislative authorities of the free royal cities after a decade: the municipal council was replaced by a civic committee, and the 'departmental system' was established in Pest, which defined the capital's official structure for nearly a century.<sup>18</sup>

#### 2. The birth of Budapest: The 1873 unification

Following the Austro–Hungarian Compromise, the actual unification of the city was realised when the National Assembly passed Act XXXVI of 1872 on the unified Budapest. Article 1 of the Act stipulated that "Buda and Pest, the royal capitals, as well as Óbuda, a market town, and Margaret Island, with the latter being detached from Pest County, shall be unified into a single administrative entity under the name Buda-Pest".<sup>19</sup> The bill was submitted by Mór Wahrmann, representative for Pest-Lipótváros, and Ferenc Házmán, representative for Buda and the last mayor of Buda. The unification process, which lasted for a year, ended on 17 November 1873, when, following a ceremonial assembly, the new bodies took over the administration of the city. This marked the beginning of a new chapter in the history of Budapest and initiating an unprecedented period of growth that continues to be notable to this day. This act established the foundations, framework, and operational possibilities of Budapest's municipal policy up until World War I.

A delegation of 34 representatives was elected from the three cities, with twenty from Pest, ten from Buda, and four from Óbuda's municipal representation (Article 134). Led by Mihály Széher, the Pest representative, the delegation developed the district division, established the constituencies, determined the committee structure of the assembly, designed the city symbols, and decided on the method for electing council officials.<sup>20</sup> The *Lord Mayor* was chosen for a six-year term from among three candidates proposed by the king (Article 68). The Lord Mayor, as the representative of the executive power, was responsible for overseeing the metropolitan local government and safeguarding the interests of the state administration conveyed by the authority – essentially performing representative functions. The first Lord Mayor of Budapest, and later re-elected four times, was Károly Ráth, who was loyal to the government. Meanwhile, Károly Kammermayer was elected as the *mayor* and chairman of the committee, thus becoming the actual leader of the city.<sup>21</sup> He held his position for 23 years during which he played a major role in the development of the administration and the organisation of the new district administrations. During his tenure, Erzsébetváros was separated from the

<sup>&</sup>lt;sup>18</sup> ANTALL 1953.

<sup>&</sup>lt;sup>19</sup> Act XXXVI of 1872 on the establishment and regulation of the Buda-Pest metropolitan legislative authority.

<sup>&</sup>lt;sup>20</sup> *Múlt-kor* 2015.

<sup>&</sup>lt;sup>21</sup> Károly Gerlóczy was appointed as deputy mayor, which is why this era is also known as the era of the 'three Károlys'. HORVÁTH 2021.

previous District VI and established as a new District VII, while Kőbánya<sup>22</sup> was formed as District X, incorporating the former outer areas of Józsefváros. The rules for electing the joint municipal administrative authority were established, and the bodies of the General Assembly were also set up.

Under Article 22 of the Act, the metropolitan legislative authority was represented by the metropolitan *committee*, which exercised official powers on behalf of the authority. The committee consisted of 400 members, elected for a six-year term. The first elections for Budapest were held on 25–26 September 1873. The first representative body of Budapest was freely elected by about 16,000 eligible citizens, who chose 200 members, while another 200 were selected from among the 1,200 largest taxpayers. Ten departments were established, each headed by a councillor, with the mayor's secretariat (i.e. the presidential department) led by the chief city clerk.<sup>23</sup> *With this, the complete administrative structure of the capital city was established*.

According to Act XXXVI of 1872, the foundation of the capital's legal status was the recognition of its extensive government. The representative body could exercise its municipal rights through *general assemblies* regulated in Chapter III of the Act, which were held at least twice a year (in spring for the closure of the previous fiscal year and in autumn for the approval of the new budget), with the possibility of convening extraordinary assemblies as needed (Article 57). Its responsibilities included, among other things, the drafting and adoption of ordinances; the definition and delimitation of administrative districts and constituencies; the adoption of measures related to the capital's roads, streets, utilities, public works, and construction projects; establishing, amending or abolishing taxes; acquiring or alienating fixed assets; electing officials, boards, and committees; supervising officials; relieving them from responsibility, suspending them, ordering preliminary investigations into disciplinary matters; and determining officials' salaries (Article 58). Additionally, it had the right to discuss national political issues, take positions on them, and, if necessary, address the National Assembly directly.

The act also sanctioned the division of the capital into districts, which were created with consideration for the constituencies established based on the needs and functions of the committees. The determination of the number and size of the districts was delegated to the General Assembly's authority. Each district was headed by an appointed prefect, along with a suitable number of jurors as assistants to form a prefecture. The prefect and the jurors together constituted the district prefecture (Article 82). The district prefectures directly reported to the city council, and were not allowed to interact directly with other authorities, and were only allowed to receive instructions from the city council.

Chapter VII of the act regulated the election of officials. Metropolitan officials included the mayor, deputy mayors, councillors, the chief clerk and his deputy clerks,

<sup>&</sup>lt;sup>22</sup> Vörös 1998: 2–3.

<sup>&</sup>lt;sup>23</sup> These are 1. the Department of Legal and Personnel Affairs; 2. the Department of Public Constructions; 3. the Department of Private Buildings, Land Surveys and Regulation; 4. the Department of Orphans and Guardians; 5. the Department of Taxes and Fees; 6. the Department of Health; 7. the Department of Finance and Economics; 8. the Department of Education; 9. the Department of Industry, Law Enforcement and Poverty; and 10. the Department of Military Affairs.

the chief prosecutor and his deputy prosecutors, the chief engineer, the chief physician and district physicians, the chief auditor, and those given similar official status by the General Assembly. The committee elected them for a term of six years, while the chief archivist and the director of the statistical office were appointed for life (Article 106).

Interestingly, Margaret Island already had a special legal status at this time, as Article 140 of the act stated: "The royal minor benefits previously exercised on Margaret Island, which is a separate private property, shall remain untouched even after its unification with the capital", and it was exempt from tax obligations ("as long as it serves as a public recreational area, it remains exempt from the municipal supplementary tax on land, buildings, and income, except for law enforcement contributions"). This unique constitutional status is still reflected in the currently effective act on municipal governments.

In this established system, the proper co-ordination of local and governmental interests was achieved, and the system was balanced. This was considered a significant accomplishment – not only by the standards of the time but also in comparison with modern standards. This was further supported by so-called constitutional safeguards:

- The capital city had the right to:

- refuse to comply with government or ministerial orders that sought to impose taxes or conscription numbers not approved by the National Assembly or to issue related orders
- protest against any government decree it deemed unlawful and prohibit its implementation by its staff
- The Lord Mayor had the right to directly control the metropolitan apparatus if a given decree (even if maintained against the capital's objections) was issued by a minister with reference to endangered state interests. In such a case, the representative body could only subsequently file a complaint with the National Assembly.<sup>24</sup>

# 3. Towards World War I

The first period of urban development, which began with the city's unification, came to an end around the turn of the millennium. A significant milestone in this process was that, in 1892, Budapest became a second imperial capital, on par with Vienna in all respects. During this period, an unprecedented construction boom began, and by the end of the century, Budapest had grown into a global city: by 1890, it had risen from 17<sup>th</sup> to 8<sup>th</sup> place in the ranking of European capitals. However, this rapid development was challenging for the city's policies and administration to keep up with, although institutional frameworks remained in place until World War I.<sup>25</sup> The reason was that over the few decades since

<sup>&</sup>lt;sup>24</sup> Vörös 1998.

<sup>&</sup>lt;sup>25</sup> A notable sign of change was the increasing participation of citizens in the elections for representatives of the capital in the National Assembly. Although voting conditions remained unchanged until World War I, social changes and inflation expanded electoral participation. Growing discontent among the petty

1873, rapid technical progress had shifted the focus to technical issues (as opposed to the previously predominant legal and administrative matters), and new areas of concern such as public education, social policy, and urban economics emerged, addressing issues typical of large metropolitan areas.

The inevitable administrative reform eventually took place in 1911. Mayor István Bárczy submitted his proposal to the General Assembly in June for the re-organisation of central administration, which was approved without changes. The most significant elements of this reform included the following:

- The number of deputy mayors was increased from two to three, and a significant majority of the decision-making and supervisory powers were transferred to the deputy mayors, thereby relieving the mayor of most of the ongoing administrative tasks.
- The number of departments was increased, and they were divided into three groups, each under the direct supervision of one of the deputy mayors.
- In the General Assembly, each department's relevant area of expertise came under the oversight of a specific committee (except for the finance committee, which retained jurisdiction over the entire administration).

The Greater Budapest concept is also attributed to István Bárczy. In 1906, inspired by the writings of Ferenc Harrer, he introduced the idea, and two years later, the Bárczy–Haller proposal was elaborated.<sup>26</sup> However, the conditions for its implementation were not yet in place at that time. They had recognised early on that Budapest had reached a stage of development where unified regulation had become inevitable. The interrelationships among administrative and settlement policies, public health, transportation, and food policy were no longer manageable within existing constraints, necessitating a unified framework.<sup>27</sup> This period of development was interrupted by World War I.

# 4. The administration of Budapest between 1918 and 1945

After World War I, the political role and significance of Budapest continued to grow, despite the government's efforts to reduce the city's internal governance. During the 1920s, several minor acts were enacted (such as the Act IX of 1920, which was in effect for only three years), but more comprehensive changes had to wait until the 1930s. The *Act XVIII of 1930*, concerning the administration of Budapest as a royal city, brought about radical changes by significantly modifying the district divisions.<sup>28</sup> According to Article 2, Paragraph 5, 14 districts were established, including four new ones numbered

<sup>26</sup> Szegő 2010.

bourgeoisie contributed to the opposition's victory in the 1906 elections. This shift was evident in Budapest, where the opposition won in all districts except Lipótváros, the stronghold of the bourgeoisie.

<sup>&</sup>lt;sup>27</sup> György 1993: 2.

<sup>&</sup>lt;sup>28</sup> This Act was later modified by Act XII of 1934 amending certain provisions of Act XVIII of 1930 on the administration of the capital city of Budapest.

XI–XIV.<sup>29</sup> Districts XI and XII were created by dividing District I into three parts on the right bank of the Danube, in the former Buda area, and were officially established from 1 March 1934 (District XI) and 1 July 1940 (District XII). Districts XIII and XIV were formed on the left bank of the Danube, in the former Pest area, by separating and dividing the outer city area bounded by Dráva Street – Arena Road (now Dózsa György Road) – Kerepesi Road – the then city boundary (northern ring railway) – Danube into two parts along the Vác railway line. The western part became District XIII (officially from 15 June 1938), and the eastern part became District XIV (officially from 15 June 1935).<sup>30</sup> Additionally, the city's area increased as the state port area from Csepel (as part of District IX) and the forest area owned by the city from Budakeszi (as part of District XII) were annexed to Budapest [Art. 3(2)].

This act also provided for the alteration of Budapest's flag and coat of arms.<sup>31</sup> Act XVII of 1930 also established that the responsibilities of the capital's municipal authority were threefold: local government, the mediation of state administration, and the discussion of national affairs. The regulations of the 1930s included significant administrative restrictions (such as Act XII of 1934 and Act III of 1937), but despite these, Budapest retained control over its own assets, conducted independent financial management, and was able to count on a portion of city taxes among its revenues. In 1937, Act VI on the 'city planning and building' assigned the task of organising 22 communities<sup>32</sup> around the capital and reforming their administration to the Council of Public Works. In 1934, the powers of the Lord Mayor were significantly expanded, with the appointment being made directly by the Head of State on the proposal of the Minister of the Interior, bypassing the municipal General Assembly. This period also saw the evolution of a suburban agglomeration ring around the capital – detailed in point 11 -, incorporating smaller and larger villages and municipalities that had already very closely linked to the capital city. Kispest, for instance, was granted city status in 1922, Pesterzsébet and Rákospalota in 1923, Budafok in 1926, and Pestszentlőrinc in 1936, while additional settlements such as Pestszentimre, Rákoshegy, Rákosliget, and Sashalom were upgraded to municipalities. Using peculiar solutions, suburbs tried to create integration clusters in this period. Notable examples include the efforts of Újpest, Pestújhely, and Rákospalota to establish a city with municipal authority, or the planned Kispest-Pestszentlőrinc merger. But these were not the only unsuccessful attempts: it took a few more years before a 'Greater Budapest' was created.

<sup>30</sup> 90 éve történt [90 years ago].

<sup>&</sup>lt;sup>29</sup> Act XVIII of 1930 on the administration of the capital city of Budapest.

<sup>&</sup>lt;sup>31</sup> The red–yellow–blue colours were replaced by a red–yellow–blue tricolour. See FLIER 2020.

<sup>&</sup>lt;sup>32</sup> These settlements are Újpest, Rákospalota Pestszenterzsébet, Pestszentlőrinc, Kispest, Budafok as towns, as well as Alag, Albertfalva, Békásmegyer, Budatétény, Cinkota, Csepel, Mátyásföld, Nagytétény, Pesthidegkút, Pestújhely, Rákoscsaba, Rákoshegy, Rákoskeresztúr, Rákosliget, Rákosszentmihály, and Sashalom.

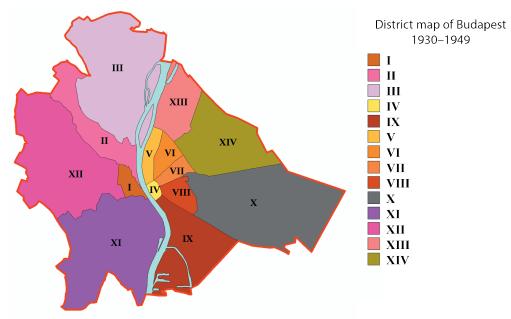


Figure 1: Districts of Budapest, 1930–1950 Source: 90 éve történt [90 years ago]

# 5. The years of the greater Budapest concept and centralisation

With the introduction of the Soviet-type council regime in 1950, the development of public administration definitively broke with the traditions of democratic evolution, and centralised leadership allowed no room for local interests. At the same time, the political conditions for the creation of Greater Budapest were closely linked to the ideas of the Hungarian Communist Party (HCP), which saw that the administrative unity of Greater Budapest would provide an opportunity to strengthen the power of the two worker parties and, within that, to achieve the HCP's dominance. Act XXVI of 1949 on the new boundaries of Budapest<sup>33</sup> – adopted based on the proposal 'The Borders of Greater Budapest' by architect Gábor Preisich and coming into effect on 1 January 1950<sup>34</sup> – marked a significant era change. It established Greater Budapest as "an administrative unit comprising cities and municipalities forming an economic unit with the capital". The previously 14-district Budapest was expanded to include 23 surrounding municipalities (7 towns and 16 large villages),<sup>35</sup> and the city was divided into 22 districts. The new districts were numbered

<sup>&</sup>lt;sup>33</sup> It was János Kádár, as the competent member of the government, who submitted the proposal to the National Assembly.

<sup>&</sup>lt;sup>34</sup> Act XXVI of 1949 on the re-establishment of the territory of the capital of Budapest.

<sup>&</sup>lt;sup>35</sup> Article 1a of Act XXVI of 1949 on the re-establishment of the territory of the capital of Budapest: The county towns of Budafok, Csepel, Kispest, Pestszenterzsébet, Pestszentlőrine, Rákospalota and Újpest, Albertfalva, Békásmegyer, Budatétény, Cinkota, Mátyásföld, Nagytétény, Pesthidegkút, Pestszentimre,

between XV and XXII, and District IV was also extended. As a result, the area of the capital more than doubled (from 207 sqm to 525 sqm), and its population grew to 1.6 million.<sup>36</sup> This reform is rightly referred to as the *second city unification*.<sup>37</sup>

However, the Greater Budapest concept was fundamentally different from the ideas of the early 20<sup>th</sup> century, such as those proposed by Ferenc Harrer, István Bárczy, Károly Szendy, István Egyed, Kálmán Oszoly, József Fischer, and Pál Granasztói. While these concepts varied significantly, they all shared one common aspect: respect for the existence of Hungarian local government and the preservation of autonomy. This is precisely what was missing from the act adopted in 1949. The council regime abolished the administrative traditions that allowed for meaningful debate on mutual benefits and drawbacks, resulting in Budapest completely losing its economic independence. The government controlled its revenues, and within the country's planned economic system, the capital required material resources from central sources for its operation. Addressing the issues of the Greater Budapest agglomeration also increasingly burdened the city. The act also stipulated that matters which, at the time of its enactment, were within the competence of municipal bodies in the capital and state administrative bodies in the cities and municipalities integrated with the capital, would henceforth be managed by specialised state administrative bodies acting as the capital's authorities. The new representative body of the capital was the Metropolitan Council, headed by the Executive Committee, which was more of a political than a professional body, lacking in expertise. Act IX of 1954 on the election of council members and Act X of 1954 on the council attempted to ease the excessively regulated state control with limited success. Thus, Greater Budapest, as an administrative city, resembled only in name the city that had failed to emerge over many decades.

The architect Gábor Preisich had another element in his general plan for Greater Budapest that could not be realised in that historical period. According to the 'petty-bourgeois concept', the densely built-up inner area (up to the line of Dózsa György Road – Orczy Road – Haller Street in Pest) would have formed a closed unit, surrounded by a green ring extending from the Danube to the Danube (which would have been created by connecting the City Park, the racecourse, the Kerepesi Cemetery, and the Népliget, and by developing new areas). The outermost ring would have been formed by garden suburbs made up of small settlements.<sup>38</sup>

#### 6. Budapest during the council regime

Following the suppression of the 1956 Revolution, the centre of control remained Budapest. Both state and party bodies were based in the capital, which continued to develop

- <sup>37</sup> National Geographic 2020.
- <sup>38</sup> ABLONCZY 2020.

Pestújhely, Rákoscsaba, Rákoshegy, Rákoskeresztúr, Rákosliget, Rákosszentmihály, Sashalom, and Soroksár.

<sup>&</sup>lt;sup>36</sup> Szegő 2010.

the administrative structures that had already been initiated. Under this new system, only minor changes were made prior to the regime change.

Under the council regime, municipal governments were reorganised in the Soviet style, with the newly formed local councils functioning as local organs of socialist state authority. Budapest was granted county status, and independent councils were established for the districts, although they lacked genuine autonomy. In this centralised system, it was impossible to mitigate territorial inequalities, and the administrative boundaries became extremely rigid. The regulations of the council regime did not account for the unique characteristics of the capital and instead sought to align its position more closely with that of the county council and local councils. The duties of the Budapest Council included the development of the entire city, as well as fulfilling fundamental local council responsibilities related to the population and services. In this role, it exercised all powers typically granted to county councils and managed local council duties that affected multiple districts simultaneously. The functions and powers of the district councils in the capital generally mirrored those of local councils, however, the districts established and maintained institutions and enterprises on a scale far exceeding basic population needs, addressing significant local demands even at that time.<sup>39</sup> To curb the 'excessive power' of the Metropolitan Council, regulations stipulated that for significant issues concerning the development and provision of services in the districts, the opinions of the district councils had to be sought in advance. Additionally, when regulating the competencies and organisation of the metropolitan and district councils and their respective organs, it was required to take their specific circumstances into account.

The 1980s brought a turning point in the development of administration, both nationally and in Budapest, with steps taken towards establishing a local government system in 1984 through the abolition of rural subdivisions and the relaxation of the rigid council regime. A solution also needed to be found to integrate the administrative connections between the capital and its surrounding areas, which had become inseparable entities over the past forty years.

# 7. The beginning of a new era: 1990

In 1990, following the civil democratic elections, the newly formed National Assembly established the framework for the current system of local government by amending the Constitution and enacting Act LXV of 1990 on local governments along with other related legislation. The preamble of the Local Government Act further emphasised the significance of the principle of local government declared by the Constitution, defining it as the independent and democratic management of local public affairs by the residents of the municipality.<sup>40</sup> Based on one of Europe's most liberal municipal acts, the 1,420 municipal councils were restructured into 2,905 local governments, leading to a fragmented system

<sup>39</sup> WALTER 2007.

<sup>&</sup>lt;sup>40</sup> Act LXV of 1990 on local governments.

predominantly consisting of small villages. This pattern also applied to Budapest, where in addition to the 22, later 23 districts, 67, and eventually 102 independent and isolated local governments were established within the Budapest agglomeration.<sup>41</sup> Naturally, following the regime change, the efforts for autonomy among local governments were understandable; however, many problems could have been avoided if municipalities had recognised the benefits of associations earlier. Unfortunately, Act CXXXV of 1997 on the associations and co-operation of local governments did not bring the anticipated breakthrough.<sup>42</sup>

The elements of local government administration were established by Act XX of 1991 on the duties and powers of local governments and their bodies, as well as the commissioners of the republic and certain central subordinate bodies. Also known as the 'Transitional Act', this legislation largely adopted a straightforward approach by automatically converting the powers of the old council regime into those of the new local government system. Consequently, many roles were simply renamed: the former council body (executive committee) was rebranded as the 'general assembly', the council chairman became the mayor, and the executive committee secretary was renamed the clerk, or chief clerk.

The capital city became a city with an independent, two-tier administrative system similar to that of a county. The administration of the districts and that of the capital city were separated from each other. Thus, Budapest had 22 districts along with an additional administrative unit, and by 1996, when Soroksár became an independent district, there were 23 districts and one additional unit, making a total of 24 local governments. The primary administrative body of the capital, responsible for municipal duties was the Metropolitan General Assembly. Between 1990 and 1994, the assembly had 88 members elected through a two-vote system:<sup>43</sup> 66 representatives were chosen directly from party lists, and one representative was delegated by each of the 22 district governments.<sup>44</sup>

The significance and complexity of the capital's administration led to the creation of a separate act to regulate the local government system of the capital and its districts. Act XXIV of 1991 on the local governments of the capital and the capital districts designated Budapest and its districts as local governments with equal status but differing duties and powers. As a general rule, duties related to basic public services were assigned to the district governments, while duties that exceeded the competence of the district governments or related to the capital's unique national status were assigned to the metropolitan government. The act thus positioned the district governments at the centre of regulation, primarily endowing them with powers related to municipal government, and rejected the concept of a unified administrative approach for the capital. To ensure interchangeability

<sup>&</sup>lt;sup>41</sup> Perger 2002: 184.

<sup>&</sup>lt;sup>42</sup> Az önkormányzatok fejlesztési célú központi támogatásainak problémái, módosítási igények [Problems of Central Development Aid to Local Governments, Needs for Change] 2003.

<sup>&</sup>lt;sup>43</sup> In practice, this meant that the capital's voters received three ballots: one for the district's individual candidate, one for the district list, and one for the list of members of the capital city's general assembly.

<sup>&</sup>lt;sup>44</sup> The threshold was then 4%, i.e. a party or social organisation had to obtain 4% of the total valid votes to be eligible for a mandate.

between duties, the act stipulated that with the capital's consent, district governments were allowed to assume the organisation of public services falling within the capital's competence; conversely, the General Assembly could also initiate the transfer of duties and powers.<sup>45</sup>

Thus, a distinctive model emerged, combining the unified, integrated capital model with a federative model based on the loose association of districts. In this model, the metropolitan government was established as a unique territorial level, incorporating some decentralised features (regarding the legal status of the districts). However, none of the participants was satisfied with this system. Among its grievances, the metropolitan government noted that the districts frequently avoided addressing issues affecting Budapest as a whole, or even obstructed the implementation of the metropolitan government's initiatives. The internal districts argued that they were unable to manage resources generated in their areas according to their specific needs. In contrast, the external districts complained that they did not receive adequate support to match the infrastructure and service levels of the inner districts.<sup>46</sup>

The legal status of the metropolitan government also had unique characteristics. The Constitutional Court highlighted this by stating that "the division of duties and powers between the metropolitan government and the district governments fundamentally differs from the division of duties and powers between municipal governments and county governments. Consequently, the legal status of the metropolitan government and district governments also differs from that of other local governments."<sup>47</sup> It was noted that this difference in legal status stems from the capital's unique status within the country and the fact that the entire capital constitutes a natural geographical unit, a municipality. In the new system, the administrative separation of the capital and the agglomeration was maintained, with the municipalities of the agglomeration remaining part of Pest County and continuing to form a territorial unit with the local governments there. The local government system failed to provide a solution for public services and urban development crossing municipal boundaries. While there was an option for voluntary co-operation, in practice, it could not fill the gap created by the absence of regional co-ordination.

Conflicts increasingly arose both between the metropolitan and the district administrations, as well as between the capital and the surrounding agglomeration. In the former case, issues included resource distribution, urban development, and public services, while in the latter, concerns such as urban and regional development, transport, education, healthcare, and municipal problems became prominent. Recognising these issues, the metropolitan government established three expert groups in 1992, which presented various solutions in 1993. The Research Centre for Political Science, led by Géza Kilényi, proposed a plan entitled 'Budapest – A City Model'. This proposal envisioned a unified administration for Budapest, with district bodies having advisory,

<sup>&</sup>lt;sup>45</sup> It is worth adding that the district could refuse to do so if the assumption of its mandatory tasks would jeopardise the performance of those tasks or if the conditions necessary for their performance were not available.

<sup>&</sup>lt;sup>46</sup> Perger 2002: 185.

<sup>&</sup>lt;sup>47</sup> Decision 56/1996 (XII. 12.) AB.

propositional, and derived powers, along with several compulsory areas of co-operation. The 'Active District – Strong Capital' model, advocated by the Metropolitan Research Institute, focused on a strong metropolitan government, with district governments given significantly narrower autonomy and primarily tasked with administrative functions.

The novelty of the proposal was the establishment of a new, intermediate-level local government type called the Budapest Region. The third concept, developed by City Consulting Bt. and Péter Szegvári, became known as the 'city concept'. Its essence was that although the city centre ('city') and the outer districts were distinct from each other, they formed a unique association.<sup>48</sup>

#### 8. Changes after 1994

Following these developments, the Local Government Act was amended in 1994. The amendment aimed to centralise administrative organisation to create a more unified management of the capital, however, despite this intention, the changes did not significantly alter the existing two-tier local government system.

The 'metropolitan act' was repealed and its content was incorporated into the Local Government Act as Chapter VII. This chapter included special provisions that differed from other chapters of the act. A defining feature of the amended act was that it continued to classify the capital as a municipal local government and did not treat it as a special or priority local government in terms of its legal status.

The newly created system did not strictly follow any of the three models outlined earlier, although it resembled the second proposal in most aspects. If we were to briefly characterise the period between 1990 and 1994, we could use the term 'strong districts, weak capital', while the period between 1994 and 2010 could be described as 'weaker districts, stronger capital'. Concurrently, while up until 1994, the system was characterised by 'consensual resource allocation' and a 'majoritarian electoral system', after 1994, 'capital-dominant resource allocation' and a 'consensual electoral model' became the prevailing features.<sup>49</sup>

While the legal equality between the metropolitan government and the district governments, as well as the two-tier administration, remained intact, the *new regulations were marked by the metropolitan government's predominance*. The latter was still not allowed to directly interfere in district decisions but could do so indirectly. For instance, the metropolitan government could implement resource allocation, fund some district developments through grants, and compel districts to align their regulations, or make decisions on territorial development issues. The act also emphasised a 'stronger capital' by stipulating that although the metropolitan government was required to consult with the district governments on numerous issues, the district administrations were required to accept the final decision made by the metropolitan government. The change in the

<sup>&</sup>lt;sup>48</sup> Szegvári 2016: 100.

<sup>&</sup>lt;sup>49</sup> Szegvári [s. a.].

composition of the General Assembly of Budapest also reinforced the metropolitan government's predominance. District governments could no longer delegate representatives, reducing the General Assembly's size to 66 members, with the Lord Mayor becoming an ex officio member. To channel district interests, district representatives appointed by district governments participated in the General Assembly with advisory rights as district delegates. This change was necessary because Hungary had signed the European Charter of Local Governments, which would have been inconsistent with the indirect election of municipal bodies. The method for electing the Chairman of the General Assembly, the Lord Mayor, also changed: the previous indirect election was replaced by direct election, and deputy lord mayors were elected from among the members of the General Assembly to assist in its work. There was no difference between the two levels regarding the exercise of ownership rights, economic and business freedom, independent regulation, and state oversight of decision compliance. However, the scope of action for metropolitan and district local governments significantly differed in terms of financial opportunities and resources, as well as the level of proprietary revenues. The automatic allocation of municipal government tasks to district governments was also abolished. Instead, the act specified the tasks that must be performed by the municipal, the district, or the capital government.

The 1994 amendment created an unusual model of metropolitan administration that gave the metropolitan government responsibilities similar to those of the regulating, redistributive role of states. However, there was still room for conflict, for example, due to the means left in the hands of the district administrations, such as the refusal to issue building permits, but also the obligation to consult with the district governments. The 1998 change in government brought about a shift, as the central government, being a strong ally of the district administrations, was able to influence the local governments' situation directly through regulation. However, the greatest flaw of the amendment was considered to be the unresolved issue of connecting the capital with the agglomeration.<sup>50</sup> The Budapest Transport Association was to be established to address this problem, but it was hindered by disputes over the distribution of duties among the parties involved.<sup>51</sup> Although another initiative, the Budapest Agglomeration Development Council (BAFT), established by the 1996 act on regional development, was promising, it remained ineffective due to a lack of resources and inadequate composition (the Budapest districts, for example, had no representative). The Central Hungary Regional Development Council, established as the successor to the BAFT, was inherently not a suitable framework/ organisation for connecting the capital with its agglomeration - particularly because out of its 18 members, only one represented the capital city, and one represented all the districts. Thus, the administrative connection between the capital and its agglomeration remained unresolved.

<sup>50</sup> Perger 2002: 189.

<sup>51</sup> 24.hu 2005.

#### 9. Budapest today: After 2010

Following the 2010 elections, an intensive period of legislation began, with the adoption of the Fundamental Law being the first and most important element. The legislation also affected local government regulation, as the National Assembly enacted a new act: Act CLXXXIX of 2011 on local governments in Hungary (LGA).<sup>52</sup> The new Fundamental Law moved away from the community-centred approach to local government and instead emphasised the importance of close co-operation between local governments and state administration. In the new system, which differed significantly from the previous state organisational structure, the relationship between local governments and state administration also underwent a necessary transformation. The system of local government responsibilities shifted, placing greater emphasis on mandatory tasks and transitioning from normative to duty-based financing for local governments. The role of the mayor as a single leader was strengthened compared to the representative body and the city clerk.

According to the new regulation, the two-tier local government system of the capital continued to exist, and a unique institution was inserted between the local governments of Budapest and of the districts: "Margaret Island, directly managed by the metropolitan government", which, as a unified administrative area, came under the direct control of the Metropolitan Government [LGA, Article 22(4)]. The new legislation is grounded in the island's significant tourist value.<sup>53</sup> In addition to highlighting the capital level, the new regulation provides clearer provisions regarding the relationship between the metropolitan and the district governments. However, this act does not include any provision related to the agglomeration either.

The 2014 amendment to the LGA brought about significant changes to the local government system of the capital by increasing the influence of the districts and moving the Hungarian model towards a kind of association model. Act XXIII of  $2014^{54}$  modified the composition of the Metropolitan General Assembly. Previously, the 34 members of the assembly were elected through a proportional, party-list system. However, following the amendment, the assembly now consists of the Lord Mayor of Budapest, the 23 district mayors, and 9 additional members elected from the capital's compensatory list [Article 2(c)]. These 9 compensatory members are designed to address disparities between the districts' populations. Another significant change involves decision-making, which is now also influenced by the number of inhabitants. The amended Article 47(3) of the LGA stipulates that, in addition to the required simple or qualified majority, "the mayors of the districts of the capital with a combined population of more than half of the total population of the capital shall also vote in favour". *Figure 2* summarises the complex decision-making system thus established.

<sup>&</sup>lt;sup>52</sup> Act CLXXXIX of 2011 on local governments in Hungary.

<sup>&</sup>lt;sup>53</sup> Nagy–Hoffman 2014: 79.

<sup>&</sup>lt;sup>54</sup> Act XXIII of 2014 on the amendment of certain acts related to local governments in connection with elections.

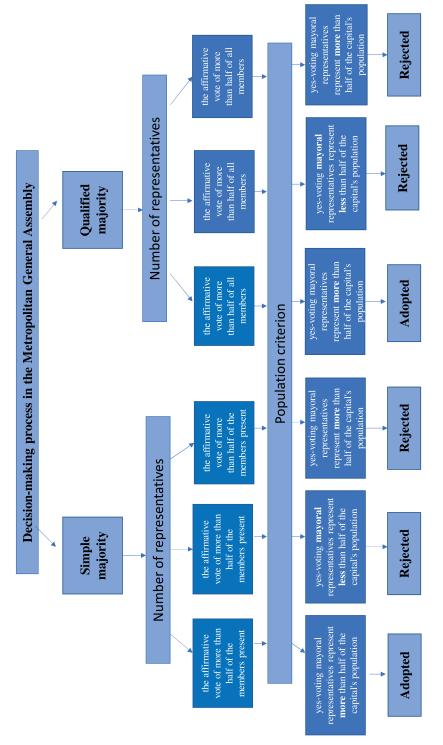


Figure 2: Decision-making in the Metropolitan General Assembly Source: HOFFMAN 2014: 3

#### 10. The troubled fate of the agglomeration

The 1960s witnessed the beginning of a series of top-down reforms in Western Europe aimed at linking cities and agglomerations and at making the resulting municipal structure more reflective of the region's interconnections and more consistent with the spatial structure. As a result, several Western European regions adopted federative solutions in their regional governance systems.

However, in Hungary – specifically concerning the only agglomeration, Budapest – the situation is different, and it seems as if the agglomeration is treated as a stepchild.

The development of suburban areas took place in four phases leading up to the creation of Greater Budapest.<sup>55</sup> Until 1850, only two smaller suburban settlements emerged (Albertfalva and Újpest), and the smaller towns on the Buda and Pest sides had not yet been integrated into Buda or Pest in a cohesive manner. In the second phase, lasting until 1870, conditions were created that allowed for the subsequent agglomeration processes to begin. On the Pest side, Újpest, along with Rákospalota and Rákoskeresztúr, became the 'growth towns' due to their population explosions. With the merging of the cities, a new era began: the migration process toward Budapest started. In the third phase, lasting until 1895, the population of the capital increased by 200,000, which directly led to suburban development. New communities were established on previously uninhabited lands from which later municipalities and city districts developed (such as Pestszentlőrinc or Pesterzsébet). The first land parcelling also began during this period, in what would later become Kispest and Erzsébetfalva. During this time, the influence of the capital was already noticeable beyond the future boundaries of Greater Budapest (for example, in Pécel, Csömör, Törökbálint, Budakeszi, Dunakeszi, Solymár). The fourth phase, leading up to 1950 and the birth of Greater Budapest, saw the establishment of suburban transportation, thereby eliminating obstacles to daily commuting. This had an almost immediate impact not only on demographic processes but also on the social composition, and the development of suburban industrial zones also began.<sup>56</sup> By the end of the 19th century, the city's service area had already reached, and even exceeded, the boundaries of Greater Budapest, incorporating more distant regions such as the Galga and Tápió areas into the capital's supply network. After World War I, as Budapest's development stalled, the agglomeration explosion gained new momentum in terms of both population growth and economic development. In the 1920s, the population of agglomeration settlements grew by 4.4% annually (while Budapest grew by only 0.8%), and by 1940, the population in the zone had already exceeded half a million.<sup>57</sup> The process of urbanisation was also significant: Újpest, Kispest, Pesterzsébet, Rákospalota, Budafok, and Pestszentlőrinc were granted city status. However, the agglomeration process did not stop at the narrow ring boundary but also affected geographically more distant settlements. Thanks to

<sup>&</sup>lt;sup>55</sup> Beluszky 2002: 122.

<sup>&</sup>lt;sup>56</sup> Four major industrial centres have developed in the peripheries of Budapest: Újpest, Kispest–Pesterzsébet–Pestszentlőrinc, Csepel and Budafok.

<sup>&</sup>lt;sup>57</sup> Beluszky 2007: 177.

the railway network, it extended north to Vác, northeast including Fót, Csömör, and Veresegyház, towards the Great Plain encompassing Isaszeg, Pécel, Ecser, Maglód, Gyömrő, Üllő, and Vecsés, and south to Dunaharaszti and Taksony *(Figure 3).* On the Buda side, the process of agglomeration was more cumbersome at this time, primarily due to unresolved transport issues. The problem of managing municipalities that remained outside the boundaries of Greater Budapest, established in 1950, was not yet addressed.

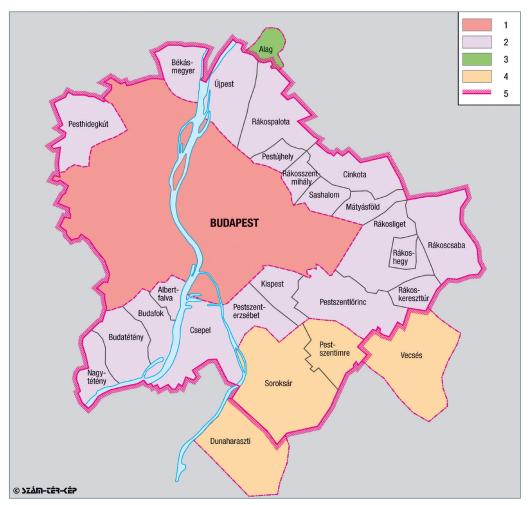


Figure 3: Evolution of the agglomeration ring Source: BELUSZKY 2014: 117

Notes:

- 1 = The area of Budapest between the city unification (1873) and 1950
- 2 = Area of Greater Budapest as planned in 1930; annexed to Budapest in 1950
- 3 = Village included in Greater Budapest in 1930, subsequently merged with Dunakeszi (Alag)
- 4 = Villages added to Greater Budapest by Act VI of 1937, beyond the 1930 plan
- 5 = Budapest's boundary after 1950

In the 1960s, measures were introduced to restrict settlement in Budapest, which caused many people yearning for the capital to move to the surrounding smaller towns, thereby shaping and expanding the agglomeration. At that time, however, the relationship remained one-sided: residents of these smaller towns could find suitable job opportunities only in the capital and could access even the most basic public services exclusively there.

A key document of the era was Decision 1007/1971 (III. 16.) of the Council of Ministers on the National Urban Planning Concept, which was in force between 1971 and 1985. Essentially serving as an urban development framework, the document outlined rigid development strategies based on urban hierarchy, with particular focus on the Budapest agglomeration. Although the concept made efforts at mitigating Budapest-centricity, it did not take into account the unique functions and the central role of each municipality in the district, nor did it set specific development goals for Budapest itself.<sup>58</sup>

The boundaries of the Budapest agglomeration were first established in 1971 by designating 44 municipalities surrounding the capital, with the approval of Government Resolution 1005/1971 (II. 16.) concerning the general planning scheme of Budapest and its surroundings.<sup>59</sup> At that time, the delimitation was based on the extent of commuting, transportation links, and recreational opportunities, however, due to subsequent development, this delimitation soon required revision. In 1997, the Central Statistical Office significantly expanded the agglomeration ring, designating 78 municipalities,<sup>60</sup> which was later extended to 81 municipalities by Act LXIV of 2005 on the Spatial Planning of the Budapest Agglomeration. Appendix 1/1 of this act includes the current state.<sup>61</sup> (For the development, see *Figure 4*, and for the current administrative situation, *Figure 5*.)

The integration of the agglomeration with the municipal administration of the capital remains unresolved to this day. Although the Fundamental Law introduced the mandatory institution of municipal associations and territorial planning is a central element of territorial municipal tasks, the process of managing the agglomeration still does not function effectively within these frameworks.

<sup>&</sup>lt;sup>58</sup> Bibó 1986.

<sup>&</sup>lt;sup>59</sup> Budapesti agglomeráció általános információk [General Information on the Budapest Agglomeration]. [s. a.].

<sup>&</sup>lt;sup>60</sup> This was laid down in Government Decree 89/1997 (V.28.).

<sup>&</sup>lt;sup>61</sup> Act LXIV of 2005 on the Spatial Planning Plan of the Budapest Agglomeration.

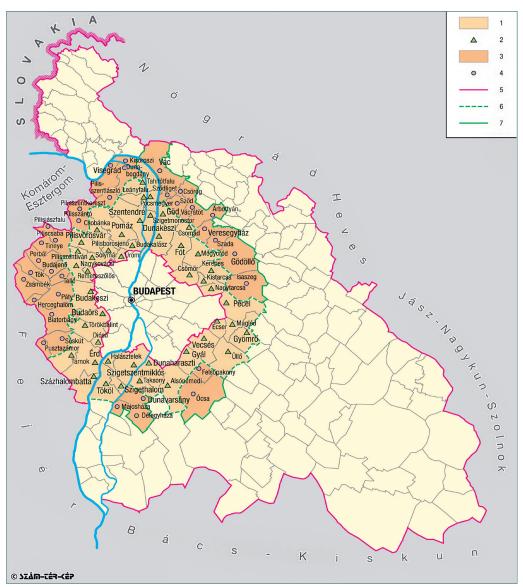


Figure 4: Municipalities in the Budapest agglomeration in 1971 and 1997 Source: Beluszky 2014: 141

Notes:

- 1 = Area of the Budapest agglomeration according to the 1971 classification
- 2 = Municipalities within the agglomeration in 1971
- 3 = Area of the agglomeration after the 1997 modification
- 4 = Municipalities newly included in the agglomeration in 1997
- 5 = Regional boundary
- 6 = Boundary of the agglomeration in 1971
- 7 = Current boundary of the agglomeration

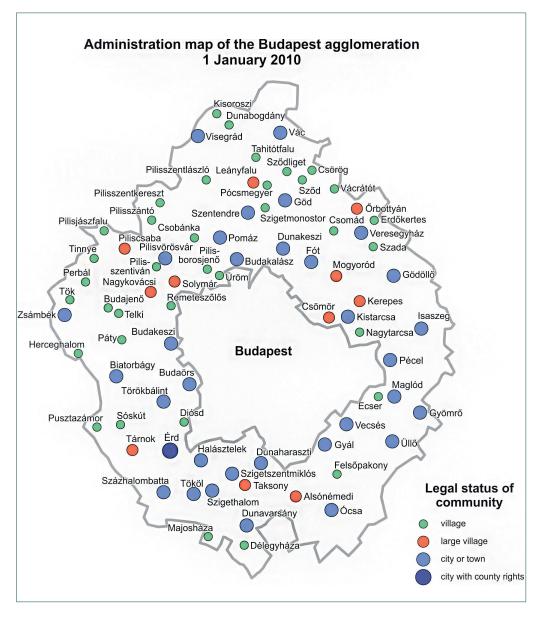


Figure 5: Municipalities in the Budapest agglomeration today, based on administrative classification, in our days

Source: Budapest agglomeration [s. a.]

The issue is compounded by the lack of legal regulations, but it is also essential to highlight the problem that *the spatial structure of the capital and its agglomeration does not align with the current administrative boundaries.*<sup>62</sup> Budapest and its conurbation, while having a ring-like structure,<sup>63</sup> is also radially structured due to the segmentation of major transport routes, and this dual structure defines the sectors of the region. When examining specifically the separation according to municipal functions, the duality is also apparent: while some tasks (such as environmental protection or transportation) require co-ordination across the entire agglomeration, other 'intermediate-level' tasks (such as education or healthcare) assume co-operation among different groups of municipalities.<sup>64</sup>

Closely related to this is the issue of regional organisation. Among the seven statistical regions, the remaining region of Central Hungary is uniquely defined by the special duality of Budapest and Pest County and it also has a different administrative structure compared to other regions. Unlike the other regions, which have three large territorial local government units, Central Hungary has only two: Budapest and Pest County. Within this area, aside from Érd, which has county rights, there are only city and municipal local governments. Various proposals have been put forward to better align the regional level with the municipal level. At the regional level, options include creating a bicameral regional government, either with separate sections for metropolitan and territorial areas or with a combination of directly elected representatives and territorial delegates. Alternatively, a unicameral body could be formed, consisting solely of directly elected list representatives. For the municipal level, there are several possibilities: establishing a unified metropolitan administration led by the Metropolitan Government; or abolishing the Metropolitan Government and transferring its responsibilities to the district governments; or treating the inner districts of the capital as a single entity ('city') with one local government, while organising municipal governments only in the outer districts.<sup>65</sup> However, these proposals aim to find solutions to the current, inherently flawed regional division rather than changing the regional delineation itself. A likely solution would be the establishment of a separate region for the Budapest agglomeration (although this would leave unresolved the status of municipalities in Pest County). In the early 2010s, several plans emerged that analysed the interactions between the capital and its surrounding agglomeration, based on a ring structure with distances of 25, 50, and 100 km. Despite these plans, it remains uncertain, which of the proposed scenarios will actually materialise by the middle of the century. Specifically, it is unclear whether urbanisation or suburbanisation processes will prevail and which direction they will take.66

<sup>&</sup>lt;sup>62</sup> Perger 2004: 215.

<sup>&</sup>lt;sup>63</sup> There is a clear distinction between the city centre, called the 'city', the periphery, the narrow agglomeration and the wider agglomeration.

<sup>&</sup>lt;sup>64</sup> Perger 2004: 223.

<sup>&</sup>lt;sup>65</sup> Perger 2004: 231–240.

<sup>&</sup>lt;sup>66</sup> For more on this, see *Budapest Region Draft Structure Plan. Restructuring the Metropolitan Landscape* 2011.

#### Summary

The problems of the post-regime change administrative structure are rooted in the creation of an overly decentralised system of municipal government as an excessive counterbalance to political influences, resulting in upsetting the balance of the emerging local and territorial administrative system. In contrast to the more integrated metropolitan structures found in Western Europe, the Hungarian system remains fragmented, with a pronounced divide between district municipalities and the surrounding agglomeration of the capital. As a result, coordinating the three levels – district, capital city, and agglomeration – has been an ongoing challenge for over three decades, one that remains unresolved. The two-tiered municipal system of Budapest is unique even by Western standards, and there is no well-functioning model available for comparison. To develop a more effective administrative structure, the capital's system must have distinct characteristics and the general territorial administrative system can keep pace with the specific and rapidly changing problems and complexity of the tasks of the Budapest agglomeration.

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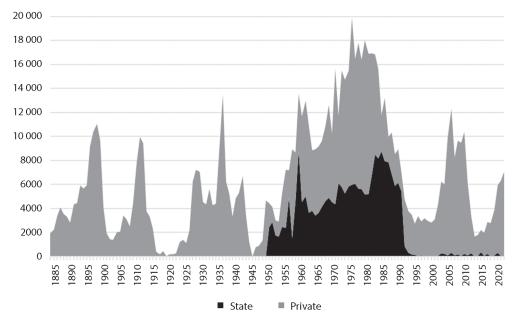
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# Development of the Housing Market in Budapest over One and a Half Centuries

#### Introduction

The spatial extent, population and building stock of Budapest have been constantly expanding and changing over the past one and a half centuries, as a result of which an extraordinarily complex housing stock has been created. This chapter summarises the past and present trends in the housing market. The cyclical nature of housing construction in the Hungarian capital is fairly conspicuous when we look at the number of new dwellings built each year (*Figure 1*). From the unification of the city, four major periods can be distinguished in the history of Budapest regarding the pace of housing construction and the physical growth of the city. This chapter is structured according to these periods. Each cycle of housing construction coincided with the major periods of economic boom in the first place, however, this did not correspond to the demand arising from the changing rhythm of population growth, and it led to serious tensions in the housing market of the capital from time to time.



*Figure 1: Number of newly built dwellings in Budapest by developer, 1885–2020 Source:* compiled by the authors

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## 1. Housing conditions from the city unification to the First World War

There is relatively little data available on the state of housing conditions before the unification of the city, but it can be concluded that the rate of housing construction – as in so many later periods – did not keep pace with the rate of population growth despite the marked boom in housing construction between 1860 and 1873. The population of the city of Pest grew by 50% between 1857 and 1872, but the number of dwellings only increased by 29%. Even though a characteristic feature of the period was the mass appearance of apartment blocks, the proportion of single-storey houses remained high (70%). Pest had predominantly single-storey residential buildings, looking more like the countryside compared with other European cities, as the proportion of single-storey houses was just 5% in Berlin, 8% in Paris and even in the rivalling Vienna, only 17%.

At the time of the city unification, the majority of developers who ordered the construction and paid for it were members of the aristocracy and the elite bourgeoisie (Germans), as well as the wealthy merchants (e.g. Serbs, Jews). There was no sign of the speculations that would become so characteristic by the end of the century, and housing investments were considered long-term but decent capital investments with a slow rate of return. The real estate market was highly concentrated, which is also shown by the fact that in 1873 a quarter of the residential buildings and 40% of all the related rental income, were in the hands of the one thousand largest taxpayers in Pest.

The first dynamic phase of urban growth (the "city explosion") occurred in the last decades of the 19<sup>th</sup> century, when Budapest's development was characterised by explosive population growth, followed by large-scale construction of housing and public utilities.<sup>1</sup> The later urbanisation of the city and the appearance of residential buildings were greatly influenced by the building regulations of the last third of the 19<sup>th</sup> century. The first building regulation, issued in 1870 and amended in 1873, which was limited to the most basic architectural requirements (e.g. building height), was followed by an extended regulation in 1886. The building regulation not only laid down the minimum size of building sites, the height of buildings and the percentage of built-in area for each zone, but also contained a number of social and public health provisions. For example, it banned the construction of additional basement dwellings, set a minimum size for residential rooms, regulated the range of building materials to be used, etc.

All those factors led to a significant change in the image of the city over the three decades following the unification of the city. The former, predominantly countryside character with single-storey houses had disappeared, and in its place a modern, vibrant metropolis was to be found by the contemporary visitor. The city became more and more like Vienna in appearance, expanding rapidly both horizontally and vertically. The proportion of buildings with three or more storeys rose from 8% to 27% in the last three decades of the 19<sup>th</sup> century.

After 1873, the pace of housing construction slowed down, despite the apparently intense building activities. In the year of unification, the total value of construction

<sup>&</sup>lt;sup>1</sup> Beluszky 1999: 161.

amounted to HUF 18.4 million of which housing accounted for HUF 15.3 million (83%). By contrast, between 1875 and 1885, only 59% of the value of construction investments was spent on housing, the rest was assigned to public buildings and other basic infrastructure. The underlying reason for that was the economic recession that hit the country due to which private capital avoided investing in the housing market, as it was considered too risky. However, the city and the state, largely relying on foreign loans, were still able to finance the construction works that were so essential for Budapest to become an international capital. The increasingly dynamic recovery in housing construction restarted in 1880 and, apart from a brief temporary decline (1889–1891), it lasted until the turn of the century.

There were numerous changes occurring in housing construction compared to the previous period. The homeowner class that had earned great prestige among the investors were more and more squeezed out by speculative investors, and the former individual builders were replaced by joint-stock construction companies with increasing capital.<sup>2</sup> The most significant breakthrough, however, came with the financing of housing, with the emergence of the mortgage system. The impact of the introduction of this form of credit was seen by many as comparable to that of the merger of the three cities or the creation of the Public Works Council.

The development of the class structure characteristic of bourgeois societies was accompanied by the expansion of an urban lifestyle, most clearly reflected in the transformation of housing. While in 1881, only 24.9% of residential buildings had piped water supply, in 1901 as many as 81.1% had it. In practice, this meant that almost all the buildings in the inner part of the city (95.1%) had piped water supply. The proportion of basement dwellings fell from 7.6% in 1881 to 1.3% in 1901 as a result of the restrictive measures.

The main comfort indicator of the time was not the bathroom, but the kitchen. The proportion of dwellings without a kitchen was 19.4% in the 1881 census, but by the turn of the century this had decreased to less than 10%. Bathrooms were still an unattainable luxury for many people at this time, so much so that it was only in the 1901 census that they were counted for the first time. At that time, 18% of dwellings had a bathroom, but its rapid spread is signalled by this ratio rising to 25% by the First World War.

In general, we can say that the technical standard of the housing stock improved considerably in the last decades of the 19<sup>th</sup> century. There was also a slight improvement in dwelling density in the last three decades of the century, but the underlying reason was a widening gap between different parts of the city and different classes of dwellings, so there was an increase in segregation occurring.<sup>3</sup>

The widening of the gap between dwelling classes is reflected in the fact that while there was a spectacular increase in the number of 3–4 bedroom or larger flats with maid's rooms and bathrooms, at the other end of the scale, overcrowding was on the rise. From the 1880s onwards, the distressing conditions caused by overcrowding and the phenomena that predominantly accompanied such way of living (e.g. criminality) were increasingly

<sup>2</sup> Gyáni 1992: 42.

<sup>&</sup>lt;sup>3</sup> Csanádi–Ladányi 1992: 45.

voiced in daily politics and became a favourite subject of journalism. A report by Ambrus Neményi, MP, on the housing situation in the capital in 1883, reveals the following:<sup>4</sup> "Just a few steps away from our liveliest streets, from Kerepesi road [Rákóczi út], from the Avenue [Andrássy út], from Váczi road [Bajcsy-Zsilinszky út], we are shocked to meet human figures that surpass all imagination. On 20 July [...] we saw a small wooden shed just a few steps from the People's Theatre in which the policeman who was with us counted 37 individuals. Men, women, children, almost all of them half naked, were lying close together on the bare ground; there were no windows, of course, and the door was firmly closed. These tenants pay 5 or 6 or even 10 krajczars each for a night."

Such immense overcrowding of dwellings and shelters suitable for habitation was due to the emergence of a growing mass of poor people, whose number was increasing as a result of rapid immigration, and due to the lack of cheap, affordable housing. To overcome this shortage, a complex chain of rentals, sublets and bed rents was created throughout the capital, which led to the development of the institutional system of rent usury described in the report. The period from the turn of the century to the First World War saw historically significant phenomena in housing construction, the first appearance of social housing and the first developments of the precursors of housing estates in the capital. The reasons for this were rooted partly in the increasing housing pressure of the lower social strata and the resulting tensions, and partly in the rise to power of the liberal urban policy, which was more sensitive to social issues. This policy was marked by the name of the Lord Mayor of Budapest, István Bárczy. As a matter of fact, the first workers' housing estates built from 1908 onwards (such as the Gyáli Road estate) broke the exclusivity of tenement construction in Budapest, and there was a slow, even if not stormy improvement in the general housing situation of the lower social class.<sup>5</sup>

## 2. Housing between the two world wars

The First World War and the Treaty of Trianon (1920), which ended it, brought a fundamental change in the political geography of Central Europe, and within that of Hungary. The collapse of the war triggered a huge wave of refugees from the annexed parts of Hungary to the smaller homeland. According to contemporary data, between 1918 and 1924, some 350,000 people, mainly middle class civil servants and state employees, arrived in the country, many of whom settled in Budapest in the hope of finding work and a better livelihood.<sup>6</sup> This put further pressure on the already depressed housing market in the capital. The word 'wagon dweller' came to be used as an established statistical term, which is just one of the signs referring to the dramatic shortage of housing. The train meant the mass of refugees arriving in the country, who were often forced to live in railway carriages in different stations for months or even years for lack of suitable

<sup>&</sup>lt;sup>4</sup> Neményi 1971: 38.

<sup>&</sup>lt;sup>5</sup> Beluszky 1999: 164.

<sup>&</sup>lt;sup>6</sup> Beluszky 1999: 370.

accommodation. Another peculiar feature of the housing economy of the period was the emergence of state barracks housing estates, originally intended as temporary housing, mainly in the workers' districts and suburbs (e.g. the housing estates called Mária Valéria, Auguszta, Zita, etc.). The estates proved to be more viable than planned, and by 1932, their number reached eighteen with some 6,400 one-room flats, mostly without any amenities.

Between the two world wars, the rate of population growth in the capital slowed down considerably.<sup>7</sup> Although the capital's demographic growth accelerated slightly in the 1930s, reaching an annual average of 1.6%, following a brief recovery after the Great Depression, it bore very little resemblance to the great population peak at the turn of the century. The primary destination for the inflow of people from the countryside tended to be more and more the agglomeration ring around Budapest. The population of the edge settlements grew by 4.4% a year in the decade following the First World War, which was eerily similar to the explosion in Budapest thirty years earlier.<sup>8</sup> The housing market played a major role in the rapid growth of the settlements on the edge of Budapest, as the capital, despite a chronic housing shortage, saw only a negligible number of dwellings built until 1927, largely due to the incredibly high land prices. In the suburbs, cheaper land prices, less strict building regulations and the advantages of kitchen gardens were also a major attraction.<sup>9</sup>

At the end of the 1920s, the gradual consolidation of the free housing market led to a slight boom in housing construction, which was abruptly halted by the Great Depression of 1929–1932. As a consequence of the recession, the number of dwellings built stagnated at around 4,000 a year for a long period between 1930 and 1935, and only the late 1930s saw a brief recovery, which came to an end with the outbreak of the Second World War. Overcrowding of housing in the capital barely decreased during the period, due to the presence of a large number of tenants and subtenants.

Taking into consideration the period between the two world wars, it can be found that the tenement form of housing construction was in sharp decline compared to the past. Between 1925 and 1939, half of the new houses built in the capital were detached houses, and the proportion of 2–3 apartment condominiums also increased significantly. In the 1930s, condominium construction accounted for nearly 20% of the capital invested in housing construction.

# 3. "Housing market" during the period of state socialism

The main characteristic feature of the post-1945 period, and one that distinguishes it from earlier periods, is that housing, including construction and maintenance, was largely removed from market mechanisms and the state became the main regulator of the housing sector. During the Second World War, from 1941 onwards, a system of fixed housing

<sup>&</sup>lt;sup>7</sup> Kovács–Dövényi 2021: 135.

<sup>&</sup>lt;sup>8</sup> Beluszky 1999: 161.

<sup>&</sup>lt;sup>9</sup> Kovács–Dövényi 2021: 135.

management was introduced, which essentially meant the elimination of the market from the housing supply.

A significant difference compared to the First World War is that in 1944, Budapest became a direct theatre in warfare, which led to the destruction or damage of part of the housing stock. According to contemporary statistics, 86% of Budapest's building stock suffered minor or major damage, 21% of the housing stock was 'severely damaged' and around 7% was completely destroyed. After the end of the war, the focus was on repairing the war damage, which was done relatively quickly with the help of private funding. Three quarters of the approximately 60,000 destroyed or badly damaged dwellings had been restored by the end of 1947.

The housing question was given a completely new perspective in the changed political and social environment, and the People's Democratic State, organised along the lines of Moscow, saw housing as one of the main means of combating social inequalities. Accordingly, housing gradually ceased to be a commodity, the general wage level was adjusted after the stabilisation of the forint to exclude the cost of acquiring housing, and housing (at least in the cities) was transferred directly to the state as a free state service under the scope of the re-distribution of state resources.<sup>10</sup>

There was not much money left for the development of housing and other residential infrastructure with the all-consuming extensive industrialisation until 1953, and as a result, only 3,500 dwellings were built in Budapest in the first three years after the war. Despite all that, the dwelling density had fallen slightly by the end of the period. The reduction in overcrowding was related to the redistribution of the housing of emigrants and those who had died during the Second World War as well as the internal partition and sharing of larger dwellings (Russian-style co-tenancy). This, however, proved to be only a temporary remedy to the problems, because from the late 1940s onwards, due to the population's increased migration, Budapest was again faced with a serious crisis in the housing market. At that time, however, market incentives for housing construction were out of question, as housing policy was completely dominated by Stalinist ideological considerations, culminating in the nationalisation of residential buildings with more than six rooms in 1952. As a result, by 1952, the majority (75%) of the housing stock in the capital had been taken over by the state, creating a dualism in the housing market that essentially lasted throughout the entire period of state socialism.

The post-1945 period also brought significant changes in terms of urban planning, as the emphasis shifted away from individual housing developments to housing estates. Accordingly, between 1956 and 1960, a third of new dwellings was built at housing estates, where the size of dwellings was fairly homogeneous (52% one-room flats), although they represented a clear improvement in terms of comfort compared to the previous period.<sup>11</sup>

The majority of the housing estates of the 1950s were built in traditional workers' districts for demonstrative purposes (e.g. housing estates in Üllői út, Kerepesi út, Béke út, etc.), and with their characteristic three- and four-storey buildings and airy surroundings,

<sup>&</sup>lt;sup>10</sup> Kovács–Székely 2021: 162.

<sup>&</sup>lt;sup>11</sup> Egedy 2001: 148.

they promoted the socialist realist architectural style of the period throughout Budapest. Most of these early housing estates were located in the inner districts or in the immediate vicinity because of their small space requirements, so the share of inner districts in the number of newly handed over dwellings was still quite high (12%) during the period. This share fell to 1.5% by the end of the 1970s, as housing construction shifted increasingly towards the periphery of the city.

Probably the most ambitious undertaking in the history of Budapest after World War II was the 15-year housing programme. Starting in 1960, the programme set a national target of building 1 million dwellings of which 250,000 were assigned to Budapest.<sup>12</sup> The original concept was that 80% of this was to be fulfilled by the state. But the reality was different. Private housing, which was to be cut back, contributed much more than expected (30–40%) to the achievement of the programme, and its share was particularly high in the first five years (63%).

State housing construction, coming under pressure by the extremely dynamic growth of housing demand, aimed at reducing the quantitative housing shortage and focused more and more on housing estates. The first half of the 1960s saw the construction of the József Attila housing estate (7,200 flats) on the site of the former Mária Valéria estate, which was the first truly large housing estate of high-rise blocks of flats in Hungary. It served as a testing ground for the subsequent wave of housing estate construction in many respects. After a while, the spatial requirement of the ever-increasing size of the housing estates could only be met in the undeveloped areas of the periphery of the city, where there was no need for redevelopment, which would have increased costs considerably.

The introduction of the new economic governance mechanism in 1968 and the internal contradictions of the deep subsidy system in the state housing sector forced the Hungarian Government to review its previous housing policy. The new concept was embodied in the housing reform measures of 1971.<sup>13</sup> Among other things, the housing reform recognised the legitimacy of private housing and no longer regarded it as a temporary, necessary evil, and, moreover, recognised that the state alone was not able to solve the housing problem. State housing subsidies were reduced, and the new system distributed central subsidies more fairly and more widely among the poorer strata of society. From the early 1970s, the technology using prefabricated reinforced concrete elements to build high-rise blocks of flats increasingly came to the fore in the housing constructions of the capital.<sup>14</sup> By 1975, four large housing factories were operating in Budapest with an annual capacity of 15,000 dwellings. In the following decade, two thirds of the newly handed over dwellings had prefab walling (*Figure 2*).

This highly concentrated construction industry erected a series of estates of prefab blocks of flats over the decade, which brought a rapid spatial growth similar to the city's expansion at the end of the last century. After all, in the 1970s, nearly twice as many dwellings were built in Budapest as in the previous two decades together, and two out

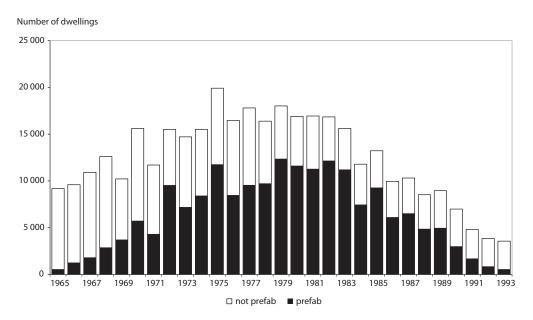
<sup>&</sup>lt;sup>12</sup> Kovács–Székely 2021: 162.

<sup>&</sup>lt;sup>13</sup> Hegedüs 2001: 948.

<sup>&</sup>lt;sup>14</sup> Egedy 2001: 152.

of every three were built by the state. With their standard two-room flats, the dormitory towns built at that time were huge melting pots of socialism. In addition, the 1970s marked a significant step forward in the construction of detached houses and condominiums, not least as a consequence of rising living standards. The scene of these constructions was mainly concentrated in the area of Buda Hills (2<sup>nd</sup> and 12<sup>th</sup> districts) and in the traditional housing areas of Pest (Zugló, Mátyásföld, Pestimre, etc.).

At the beginning of the 1980s, a fundamental shift took place in housing policy.<sup>15</sup> Due to the structural problems of the socialist economy and the worsening economic difficulties (indebtedness), the state gradually withdrew from the housing market, and consequently, the number of newly built dwellings fell sharply from the early 1980s.<sup>16</sup> A combination of rent rises, concessions to the private sector and a sharp cutback of investments were signs of the state's dire economic situation. The number of centrally built dwellings shrank at a rapid pace, while an increase was observed in private construction despite the crisis. The number of newly built dwellings fell by 80% between 1981 and 1995, indicating the dramatic speed of the process. It is also a telling sign of the transformation brought about by the change of regime that in 1995, only 29 state-financed and 12 state-owned company flats were built in Budapest, compared with 15,000 in 1975.



*Figure 2: Share of high-rise prefab block of flats among newly built dwellings in Budapest 1965–1993 Source:* compiled by the authors

<sup>15</sup> Hegedüs 2018: 82.

<sup>16</sup> FARKAS et al. 2004: 24.

## 4. Housing market processes after the regime change

The 1989–1990 regime change brought about radical changes in the housing market. To get rid of the huge costs of maintenance of the rental housing sector, the state embarked on large-scale privatisation, closing down housing factories and terminating state-owned real estate management associations.<sup>17</sup> This marked a new stage in the development of the housing market in Budapest. After decades of state intervention, market mechanisms became predominant in the housing market once again.<sup>18</sup> From the end of the 1990s, housing constructions gathered momentum again due to the combined effect of the establishment of housing market institutions, the emergence of investors, intermediaries and professional contractors, and after 2001 due to the introduction of mortgage lending and state-subsidised housing loans. However, the 12,000 new dwellings built in 2005, which was the 'peak year', was barely half the number built in the 1970s: the average floor area of dwellings built in 1974 was 55 m<sup>2</sup>, rising to 71 m<sup>2</sup> in Budapest in 2004.

In 2004, the state withdrew its support for housing loans, and from then on, the driving force for housing investment was the continuously expanding bank lending registered on a foreign currency basis, which initially seemed to be a good thing. The financial crisis of 2008 was made particularly acute in the domestic housing sector by the widespread expansion of foreign currency lending. After 2008, the number of newly built dwellings started to fall sharply. The bottom was hit in 2012 with 1,648 new dwellings. Based on the previous experience, the new housing recovery starting in the mid-2010s came with stricter control on lending. A characteristic feature of the period was the emergence of small private investors in the housing market. They bought one or a few apartments and rented them out for longer or shorter periods, which triggered a significant recovery and led to price increases, especially in the well-located inner-city areas of Budapest.

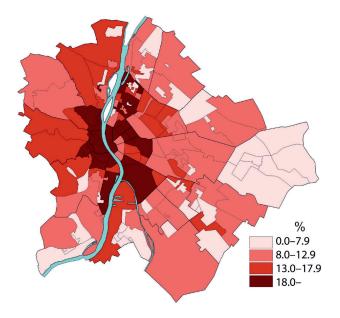
Another phenomenon of the post-change transformation was the emergence of foreign buyers in the Budapest housing market. Numerous buyers came from Germany and the neighbouring countries, but also from outside Europe (China, Vietnam, Israel). Those who came to work in Budapest were mainly looking for a dwelling in the capital, while the retired generation targeted resort areas in the countryside. High-value apartments in the inner districts of Budapest were mainly purchased by Chinese, Vietnamese, Russian and Ukrainian buyers who came for investment purposes. Their arrival contributed significantly to the rise in house prices in the capital. In 2019, purchases by foreigners in Budapest accounted for 9% of all apartments sold and 12% of the total market value. One third of the approximately 2,900 foreign buyers were Chinese and another 12% were Vietnamese. While Hungarians bought dwellings in the capital for an average of HUF 35 million, foreigners did for nearly HUF 50 million. The most expensive buyers were Western European citizens and Vietnamese, with an average spending of close to or even more than HUF 60 million. The Chinese, who were mainly active in the inner city

<sup>&</sup>lt;sup>17</sup> Kovács 1992: 62.

<sup>&</sup>lt;sup>18</sup> Székely 2001: 958.

of Pest and in the 10<sup>th</sup> District, bought dwellings for an average of HUF 50 million. In 2020, with the outbreak of the Covid–19 pandemic, the activity of foreigners, especially that of Asians, declined in the Budapest housing market. The number of Chinese buyers fell by 50%, whereas the number of Vietnamese buyers decreased by 60%, and there were also fewer buyers from Europe.

The housing stock of Budapest is in a constant change just like the population, dwellings constantly cease, and new ones are built. In the 2011 Census, the housing stock of the capital (the total number of dwellings, both occupied and unoccupied, and holiday homes used as dwellings) was 905,000. This was 10% higher than the 821,000 dwellings registered in 2001. The number of occupied dwellings was 787,000, 87% of the total housing stock. 118,000 dwellings were used for other purposes (e.g. offices, surgeries, guest accommodation) or were vacant. The number and share of unoccupied dwellings have been steadily increasing since the change of regime.<sup>19</sup> Nearly 40% of them are concentrated in the inner city and the inner residential belt (*Figure 3*). In these zones, one in five dwellings is not used for its original purpose. Particularly noteworthy is the high share of the Buda side areas close to the Danube (surroundings of Várhegy and Gellérthegy). In contrast, the share of unoccupied dwellings is the lowest in the housing estates (7.9%).



*Figure 3: Proportion of unoccupied dwellings in Budapest, 2011 Source:* compiled by the authors

<sup>19</sup> Kovács–Wiessner 1996: 42.

Between 2001 and 2011, some 82,000 dwellings were built, while 8,000 were terminated. The share of both the terminated and the newly built dwellings was the highest in the inner residential belt (e.g. Középső-Ferencváros, Középső-Józsefváros) and in the rust belt (e.g. Angyalföld or Kelenföld), which underwent urban renewal. The housing market was the most affected here.

The housing stock grew dynamically in the first half of the 2000s, with a continued high rate of construction of between 8,000 and 10,000 dwellings per year until 2009, when the unfolding economic and housing market crisis threw construction back to an extremely low level: the total number of dwellings built between 2012 and 2015 did not even reach 8,000. The prolonged crisis started to come to an end in the second half of the decade, but the new recovery was lagging behind the previous one due to stricter housing loans and more cautious households, despite the newly introduced housing subsidies for young people. The housing market of the capital is dominated by the entrepreneurial sector, whose performance is more sensitive to cyclical effects than that of the owner occupiers, which explains the strong cyclicality of housing construction in Budapest.

#### 5. Characteristics of today's housing stock

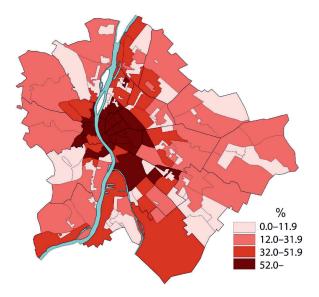
In Budapest, 190,000 dwellings were recorded in the 2011 census, about 7,000 more than in the previous census. Two thirds of the city's dwellings in 2011 were houses with one household (single-family homes), similar to the previous census. The vast majority of single-family homes (85%) were concentrated in an area of detached houses on the edge of the city. A further 10% were located in the residential area of Buda, while the remaining 5% were distributed among the other zones. In Budapest, the different types of the built-up area are the result of the strict zoning regulations originating from the 1870s and 1880s, which sought to achieve higher densities and larger average building sizes in the city centre, therefore it was only possible to have a more airy arrangement of detached houses in the outer parts of the city.

The population of Budapest declined significantly during the great housing boom and then rose again during the crisis. At the same time, the housing stock of the capital was continuously growing, reaching 938,000 by the beginning of 2022, resulting in a steady decline in the dwelling density rate of the capital city, which now stands at 182 people per 100 dwellings in Budapest.

## 5.1. Age of the housing stock

Regarding the age composition of the housing stock in the capital, as a general characteristic, it is found the that the farther away from the city centre, the younger the buildings are *(Figure 4)*. Only the centres of the former suburbs (Újpest, Kispest, Pesterzsébet, etc.) show some exceptions to this trend. Nearly one third of the inhabited dwellings (31.7%) were built before 1945, which is significantly higher than the national average (18.6%) and can be linked to the historical past of Budapest and its turbulent development after the Compromise (1867). The proportion of old housing is highest in the inner city (Belváros) (90.6%), but the average proportion for the inner residential belt is also over 70%. This poses a major challenge for the districts concerned, both from a technical and social point of view. Within the belt, larger numbers of newer dwellings can only be found in the core areas of the post-1990 urban regeneration (Középső-Ferencváros, Középső-Józsefváros, etc.).<sup>20</sup>

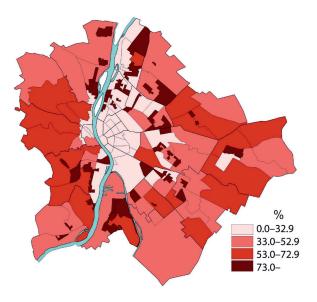
Housing built between 1945 and 1990 accounts for more than half (53.2%) of the housing stock of the capital. Between 1945 and 1960, war damage repairs were overwhelming in Budapest, and new housing was built in larger numbers only from the 1960s onwards. "Socialist" housing construction reached its peak in the 1970s, thanks to the prefabricated housing technology. Accordingly, the spatial focus of housing construction between 1945 and 1990 was on the housing estates of the 1970s and 1980s<sup>21</sup> (*Figure 5*). On the other hand, the construction of detached houses and condominiums also took a step forward due to the rising living standards and the concessions made to the private sector. The main focus of these developments was on the residential areas of Buda (2<sup>nd</sup> and 12<sup>th</sup> districts) and on the traditional detached housing areas on the Pest side (Sashalom, Mátyásföld, Rákoshegy, Pestszentimre, Budafok, etc.).



*Figure 4: Proportion of dwellings built before 1945 in Budapest, 2011 Source:* compiled by the authors

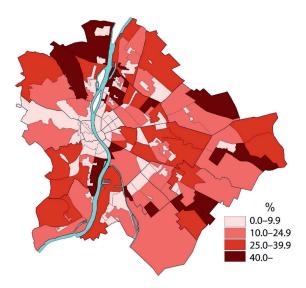
<sup>20</sup> Kovács 2007: 62.

<sup>21</sup> Kovács–Douglas 1996: 105.



*Figure 5: Proportion of dwellings built between 1945 and 1990 in Budapest, 2011 Source:* compiled by the authors

Similarly to the whole country, the housing market in Budapest also underwent a radical change after 1990. The number of dwellings built by the state fell to a fraction of what it had been before, and the private sector was unable to make up for the shortfall. At the same time, people started to move out of the capital to the suburbs (suburbanisation), which significantly reduced the demand for housing in the inner areas of the capital. Between 1990 and 2011, a total of 118,000 new dwellings were built, representing only 43% of the value of the previous two decades. Two main features characterise the spatial distribution of dwellings built after 1990 (Figure 6). On the one hand, most of the new detached houses, condominiums and apartment complexes built in the 1990s were located in the outer areas of the city (Máriaremete, Testvérhegy, Táborhegy, Gloriett-telep, Szent Imre-kertváros, etc.), while on the other hand, the rehabilitation of the inner residential belt (Középső-Ferencváros, Középső-Józsefváros) and the former industrial brown belt (Kelenföld, Angyalföld) accelerated after the turn of the millennium. In areas that underwent reconstruction or lost their former function, more and more new housing was built, often exclusively for the better-off classes. Consequently, the spatial distribution of newly built housing (built after 1990) in Budapest is highly mosaic.



*Figure 6: Proportion of dwellings built after 1990 in Budapest, 2011 Source:* compiled by the authors

Examining Budapest as a whole, the oldest (built before 1919) and the newest (built after 1990) dwellings represent almost the same weight (15–17%) in the housing market of the capital. Looking at their zonal distribution, the majority of earlier built dwellings are still concentrated in the inner city (Belváros) and in the dense, urban inner residential areas. The proportion of new dwellings built since the change of regime is the highest in the Brown Belt, where they account for about one third of the housing stock. This is the consequence of the renovation and functional shift of the former industrial belt. Due to its relatively low prices, land in the brown belt, with good accessibility (e.g. metro lines) and a favourable location (e.g. the Danube bank), has been a major attraction for residential housing investments over the past two decades. The regeneration of the area is expected to continue in the future, partly due to the VAT rebate for investment in the rust belt and partly, on the demand side, due to the housing subsidies supporting the creation of homes.

# 5.2. Composition of housing stock by type of ownership and number of rooms

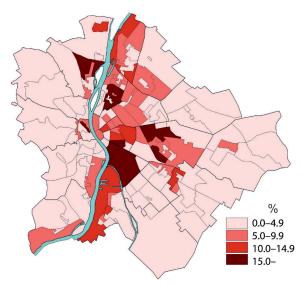
The number of occupied dwellings in Budapest increased by more than 50,000 between 2001 and 2011. The growth was most dynamic in the brown belt (31.5%) and in the outer zone of condominiums (15.2%). In both areas, the growth is linked to urban renewal and the regeneration or functional change of previously run-down areas. In contrast, the range of occupied dwellings in the inner city, the inner residential belt and in the neighbourhood

of housing estates hardly expanded since the turn of the millennium. The demand for the conversion of dwellings (e.g. into offices, private residences) and the merger of smaller dwellings into larger ones was the highest in the inner residential areas.<sup>22</sup>

In 2011, 93.3% of the dwellings in the capital were owned by private individuals, 5.1% by municipalities and 1.6% by other institutions (e.g. MÁV, the Hungarian railway company). Private ownership is predominant in all the districts of Budapest. Its ratio exceeds 96% in the outer districts, which diminishes to 87–88% in the inner districts constituting the core of the city.

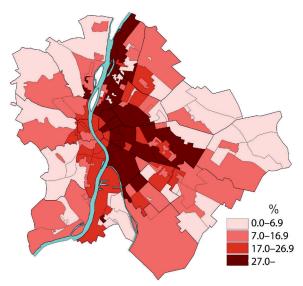
Before 1945, the weight of the state (social) housing sector in Budapest was negligible, but afterwards, due to nationalisations (which largely affected inner residential areas) and the start of state housing construction, the state rental sector expanded dynamically. At the time of the change of regime, 424,000 dwellings, i.e. 53.4% of the housing stock, were owned by the state.

In 1990, state-managed housing was transferred to municipal ownership, and then a large part of it was privatised as privatisation began. In 2001, 64,000 dwellings were still under municipal management, but in 2011, the number fell to 40,000. This is a sadly low figure compared with other major European cities. The spatial distribution of municipally owned housing is very uneven (*Figure 7*). The majority of them are concentrated in the inner residential belt (30.4%) and in the housing estate belt (24.5%) on the Pest side. It is true, however, that their share is the highest in the brown belt, with 13.6%.



*Figure 7: Proportion of municipally owned dwellings in Budapest, 2011 Source:* compiled by the authors

<sup>&</sup>lt;sup>22</sup> Kovács–Wiessner 1996: 42.

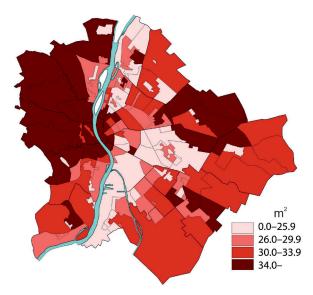


*Figure 8: Proportion of one-room dwellings in Budapest, 2011 Source:* compiled by the authors

After the regime change, but especially after the millennium, the composition of the housing stock in Budapest changed significantly regarding the number of rooms. The number and proportion of occupied one-room dwellings declined over the period. The explanation is that the newly built housing tended to increase the number of larger multi-room dwellings, while the increasing urban regeneration resulted more in the termination of smaller, one-room dwellings. While in 2001, one in five dwellings had only one room in Budapest, their ratio fell to 17.1% by 2011, although this is still almost double the national average. The proportion of one-room dwellings is the highest in the inner residential belt, on the Pest side (in the 7<sup>th</sup> and 8<sup>th</sup> districts) and in the brown belt. The majority of one-room flats are of older construction, have lower comfort rating and lower prestige (*Figure 8*).

# 6. Housing conditions, housing mobility, urban renewal

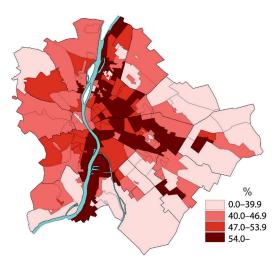
In many ways, the dwelling floor area per person is a measure of how well-off an individual is. The advantage of the Buda side compared to Pest is quite striking in this respect, though the southern part of Buda, where several large housing estates have been built due to the flat terrain (e.g. Őrmező, Kelenföld), is of lower value (*Figure 9*). However, the Pest side is not homogeneous either: the relatively high average floor area of dwellings in the inner districts and the high proportion of one or two-person (elderly) households result in a high floor area per 100 inhabitants, and the same characterises the city-edge zones with detached housing area, especially in the suburbs near the Rákos river (Rákosszentmihály, Rákosfalva). However, in the districts located between the two, especially in the housing estates, there is a much lower floor area per inhabitant.



*Figure 9: Housing floor area per inhabitant in Budapest, 2011 Source:* compiled by the authors

The proportion of residents who moved into their current dwelling after 2001 is indicative of the post-millennium dynamics of residential mobility in the various parts of the city *(Figure 10).* The indicator is high in areas where many new dwellings have been created in the recent period, either through the construction of new dwellings (e.g. apartment complexes, terraced housing) or through the rehabilitation of the existing housing stock. The map shows the parts of the city that have undergone a spectacular value increase, i.e. the areas situated along the Danube axis, which used to belong to the industrial zone, the industrial districts on the Pest side, close to the city centre (e.g. Central Ferencváros) that have been renewed or undergone rapid transformation. Over the last two decades, there have been dynamic regeneration schemes of previously declining, obsolete residential areas with public or private funding resulting in an impressive renewal and population turnover (gentrification) of the neighbourhoods concerned.

The mobility of people living in single-family homes is generally lower than that of the people living in multi-family buildings. The detached house, especially in metropolitan contexts, is a successful end of a family's housing market lifecycle, where they move after having lived in several housing estates and/or condominiums and very few move on from there. This low mobility can be observed in the detached housing neighbourhoods of the outer suburbs. Although the housing market boom until 2008 made it possible for many families with children to buy a family house, they typically moved outside the capital, to the agglomeration.



*Figure 10: Proportion of residents moving into their current dwelling after 2001 in Budapest, 2011 Source:* compiled by the authors

## 6.1. Housing market prices

Before the regime change, the housing market in Budapest was not unified, it did not work as a housing market in its current sense, there were several submarkets, legal and semi-legal housing channels operating side by side. The official way of housing allocation was the state and corporate designation of tenants and buyers, the sale of OTP (National Savings Bank) flats with a state loan, but there were also exchanges of apartments, the sale and inheritance of tenancy rights, and the subletting of dwellings. A few years before the regime change in 1984, 29% of the Budapest households surveyed (40,000 households) were planning to move to a council-owned apartment, 35% (50,000 households) were planning to exchange their apartments (this provided a transition from the private sector to the public sector, as it was legal to exchange such dwellings), and only 20,000 were considering the market solutions still available today: building or buying.

It is not by chance that the monitoring of house prices was not at all a central task assigned to the statistics of the time, since even if prices did appear in transactions, they were usually distorted or illegal. The scattered data found mainly reported the price levels of the state housing construction determined under the conditions of the planned economy, at least in a narrow circle of insiders. At the height of the housing boom in 1976, the database presenting the results of housing construction was still published in numbered copies, marked as 'for official use'. It indicated that it was not only the families trying to get around in the housing sector, but also the authorities who were keen to keep secrets.<sup>23</sup> The booklet shows that in 1961, the cost of building a dwelling was HUF 150,000, rising to 327,000 by 1975. The cost per dwelling of prefabricated housing was

<sup>&</sup>lt;sup>23</sup> Székely 2020: 648.

higher than that of brick housing, which the statisticians of the time attributed to the more expensive high-rise buildings, the increased costs of transport and the higher technical standards of prefabricated housing, such as wall-to-wall carpeting, more modern heating and "higher prices of imported materials". This is a surprising result when one recalls the cost-effectiveness arguments in favour of mass housing.

However, data was also produced on the rental sector even if scattered. In 1984, in the context of a central rent increase, the microcensus examined rents in state-owned rental housing. We know from this that the average rent in Budapest was HUF 250 per month in 1982, rising to an average of HUF 600 in 1988. Obviously, such observations could not have been made about the quite significant sector of subletting and private rented housing.

Regular monitoring of house prices started years after the regime change. After the stagnation of the market in the 1990s, price developments in the housing market first attracted attention at the end of the decade, when prices of second-hand housing in Budapest doubled in two years. Even though there was already a risk of a market bubble, the emergence of subsidised loans after 2001 gave a new impetus to price growth, thus apart from a small setback, house price increases continued until 2008. House prices more than quadrupled over ten years, and although consumer prices doubled during this period, this was probably the first time that people in Budapest had experienced such a rise in the value of their homes. The next housing market cycle, which started with the crisis, also lasted almost for a decade and saw house prices fall. Housing prices also declined nominally: the bottom was hit in 2013 with a square metre price of HUF 225,000. The slow recovery was given a new boost by the family subsidies introduced after 2015, complemented by a number of incentives, ranging from VAT cuts to simplifying building administration. The recovery brought further price rises, which caused the prices in Budapest to move away from both general consumer prices and the growth rate of rural housing markets (Figure 11).



*Figure 11: Development of the price per square metre of second-hand housing in Budapest Source:* compiled by the authors

In 2019, second-hand homes in Budapest cost three times as much as they did at the low point of the crisis. The price rises also rearranged price ratios within the city and led to a relative appreciation of the inner areas. Housing prices in the inner districts of Pest and the elite districts of Buda shifted away from prices in the outer districts in the same way as prices in the entire capital moved away from prices in the countryside. The Covid–19 crisis brought a setback in this respect and, even if not the entire housing market was shaken by the pandemic, it led to a reversal of the rising trend in housing prices in Budapest. The previous dynamic rise slowed down, and regional price ratios shifted in favour of the outer districts. The value of detached housing zones increased, and the trend towards moving out of the capital to the agglomeration resumed.

#### Summary

There are few areas of public policy where the past is as organically linked to the present as in urban and housing policy. It is not possible to understand the current housing situation in Budapest without gaining knowledge of the housing and urban history of the past decades, or rather the past 150 years, since everything that was built in the past is still shaping the image of the city today. This chapter summarises the development of the housing market in Budapest over the past 150 years, highlighting the main features of each period, the dynamics of housing construction, and the role of the underlying political and market factors driving the expansion of the housing stock.

The housing policy decisions of the past decades that were significant in respect of families' housing conditions and their access to housing are still exerting an impact, even if indirectly. It is well-known that, in addition to the extensive state support system, financial support between families and the transfer of assets through inheritance play a significant role in shaping the housing opportunities of Hungarian families. The generation born after the regime change and growing up now has access to completely different housing opportunities from those that were available for their parents and grandparents. Yet, the decisions today's young people make about housing include the inherited traditions, attachments and, not least, opportunities passed down to them from their ancestors.

Budapest's housing market is currently in a transitional phase. The Covid–19 pandemic of recent years has curbed the interest of foreign home buyers, while the Russian–Ukrainian war and the uncertainty and financial deterioration that followed have increased the value of housing as a value-preserving real estate for domestic investors. With the removal of the external hindering factors, we have good reason to believe that the housing market in the capital will continue to expand in the coming decades. New developers are entering the housing market, seeking to adapt to society's rapidly changing housing needs with new housing types. As a result of all that, Budapest's housing stock and the internal operation of the housing market are likely to become even more diverse and complex.

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# The Faces of Well-Being. Health-Related Quality of Life in Budapest

#### Introduction

In 2020, 18% of the Hungarian population lived in the capital city, which is the country's most important economic, educational, cultural and tourist centre. Thus, the living and working conditions of the inhabitants of Budapest have always had and will have an impact on the city's performance and socio-economic position both nationally and internationally, both in the past, present and future. The quality of life of the capital's population, including its health-related quality of life, influences the development potentials of Budapest and ultimately plays a key role in the city's future. Evidently, it is also essential in itself what the inhabitants' quality of life and health status are like, what kind of healthcare services are available and what differences exist within the city, because these are the things that constitute the basis of the population's quality of life in the city. All these factors underline the special importance of overviewing the characteristic features and territorial differences of the quality of life and particularly the health-related quality of life in the capital city.

The health status and health situation of the population of Budapest show a kind of duality. Examining the main morbidity and mortality indicators, it is found that in general, the health status of the Budapest population is better than the national one. In 2020, the average life expectancy at birth exceeded the national average by two years: it meant better life chances in Budapest for men by two and a half years and for women by one year. However, there are significant differences between districts mainly due to local characteristics of the quality of life. There is a difference of six years in life expectancy between the highest values in the 2<sup>nd</sup> and 12<sup>th</sup> districts, and the lowest in the 8<sup>th</sup> and 10<sup>th</sup> districts.<sup>1</sup> This district-level gap was ten years in the mid-1980s, and it has only decreased by half in more than 35 years since then.<sup>2</sup>

More than a third of the medical doctors working in Hungary are concentrated in Budapest. Their number is one and a half times the national average per 10,000 inhabitants. Several national institutes are located here, and the capital city is considered the largest hospital centre in Hungary. Only 4% of the medical doctor posts required for the

<sup>1</sup> KSH 2022.

<sup>2</sup> Józan 1986: 251.

operation of the system were vacant in Budapest in 2019, which was below the national average (5%). At the same time, 8% of all healthcare worker posts in the capital were vacant, which is double the national average.<sup>3</sup>

Health-related quality of life explores socio-economic and spatial inequalities in a complex way, and at the same time it also provides an opportunity to interpret both objective and subjective components. This is the reason why this study on the well-being in Budapest focuses primarily on health-related quality of life, and its purpose is to make an overview of the health status of the population in the capital and outline the main characteristics and spatial aspects of local healthcare services.

In this chapter, after the terms used in connection with quality of life, we review the health status of Budapest inhabitants, both as characterised by statistical indicators (objective health) and as perceived by the individual (subjective health). Looking at recent events, we also present the characteristics of the coronavirus pandemic in Budapest. We then analyse the specific features of healthcare, with particular reference to private healthcare services in the capital. In each case, we position the capital city within Hungary, partly in comparison with counties and partly in comparison with regions. Where possible, we examine the internal spatial processes within Budapest at the geographical scale of districts.

## 1. Quality of life, the concept and characteristics of health-related quality of life

The concept of quality of life is increasingly used in a broader meaning of well-being. This suggests that it is becoming more and more important in the value systems of societies to what extent individuals are able to live a more fulfilling, i.e. higher quality life in their socio-economic environment. The concept reflects a change of approach, as it shifts the focus from economic goals to the individuals' and social groups' quality of life.<sup>4</sup> The question then arises if the economy comes first, or the economy exists for the people.

What is meant by quality life (and thus quality of life) is a matter of interpretation, and there is an extraordinary body of literature on the subject, both internationally and domestically. As a result, there is not a single, universally accepted definition (such as the WHO definition of health), but there are rather approaches. These approaches largely depend on which discipline is investigating it, as the quality-of-life research is multidisciplinary. The disciplines dealing with it include but are not limited to economics, medicine, sociology, geography and psychology.<sup>5</sup> This wide-ranging interest in the subject is not new. It goes back to Aristotle (then understood as happiness), still,

<sup>&</sup>lt;sup>3</sup> KSH 2020: 106.

<sup>&</sup>lt;sup>4</sup> Csébi 2015: 28; Csébi 2016: 51.

<sup>&</sup>lt;sup>5</sup> KOPP–KOVÁCS 2006: 6; MICHALKÓ 2010: 18.

it has come into the centre in the recent decades, in a consumption-oriented world driven by the urge to acquire material goods. Even though there was academic research conducted on the subject in the United States between the two world wars, it was only later, in the 1960s that society and politics began to address the subject. This was also the period when the amount of research started to rise.<sup>6</sup> These studies produced a number of definitions and used various models to demonstrate, which element of the quality of life they considered more emphasised, bearing in mind that quality of life should always be understood as a system of relationships between the individual and his or her environment.<sup>7</sup> Consequently, whichever approach or model serves as the starting point for the definitions, all of them have the common ground that they distinguish the objective and the subjective characteristics of the quality of life: "The quality of life is the joint dimension of the objective factors that determine human existence and their subjective reflection."8 Based on this definition, quality of life has an objective pillar that can be defined as 'welfare', and a subjective pillar that can be understood as 'well-being'.<sup>9</sup> From a different perspective, distinction is made between objective and subjective quality of life, where the objective element is characterised by various statistical indicators and the subjective element is the individual's assessment of his or her own state.<sup>10</sup> It is also important to see in the use of the objective-subjective conceptual pair from which aspect it approaches the quality of life. Health-focused research studies<sup>11</sup> examine factors that refer to health status or the experience of health, while researches that focus on the factors affecting the quality of life,<sup>12</sup> investigate the settlement, the infrastructural and the environmental factors.<sup>13</sup>

Quality of life is influenced by a number of factors, depending on the approach taken: individual characteristics, various socio-economic specificities, health status, and the environment. In our study, we examine, in a narrower sense, health-related quality of life through the objective and subjective characteristics of the health status and through the characteristic features of healthcare. In a broader sense, we define the quality of life in terms of socio-economic, political, environmental, cultural, etc. factors (*Figure 1*).

- <sup>6</sup> MICHALKÓ 2010: 18.
- <sup>7</sup> Izsák et al. 2008: 265.
- <sup>8</sup> Michalkó 2010: 19.
- <sup>9</sup> Michalkó 2010: 21.
- <sup>10</sup> Utasi 2007: 10.
- <sup>11</sup> Kopp–Kovács 2006: 11.
- <sup>12</sup> Egedy 2009: 22.
- <sup>13</sup> MICHALKÓ 2010: 20.

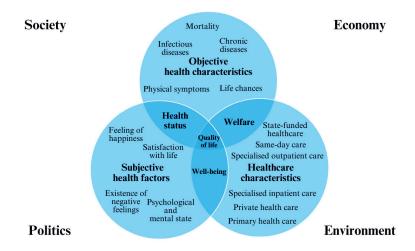


Figure 1: Objective and subjective characteristics of health-related quality of life Source: compiled by the authors

In line with this conceptual framework, research is constantly looking for indicators and measures that can be used to express the quality of life, not specifically applicable for the individual, but for the society and for specific social groups. However, the purpose of indicators is not only to analyse differences between social groups, but also – since society is also spatially differentiated – to show spatial or territorial differences and inequalities.<sup>14</sup> Spatial and social inequalities in the quality of life essentially appear at all geographical scales examined: global, macro-regional (in spatial units larger than nation states, such as the European Union), within countries, and even within city regions or cities – such as Budapest<sup>15</sup> or its agglomeration.<sup>16</sup> Indicators initially focused on welfare, i.e. the living conditions (Swedish model), they were based on objective measures, and gradually, more subjective measuring options related to quality of life and well-being came to the fore.<sup>17</sup>

Although it is difficult to choose just one element from the multidimensional definitions of the quality of life, the most important element of the many approaches is perhaps the health-related quality of life. The reason for this is that health, its context and accessibility to healthcare is one of the foundations of all that is necessary for well-being and for its wholeness. In addition, the first Hungarian research works on quality of life also mostly focused on health-related quality of life. Absence of health or poor health prevents individuals from fulfilling the other dimensions of quality of life.<sup>18</sup> Health-related quality of life first came to be the centre of attention in health sciences. It is closely related to the interpretation of health. The relationship to health is also culturally determined, so what medicine considers health varies in each era and culture. With the development

- <sup>17</sup> BUKODI 2001: 39.
- <sup>18</sup> Kopp–Kovács 2006: 12.

<sup>&</sup>lt;sup>14</sup> PAPP et al. 2017: 642.

<sup>&</sup>lt;sup>15</sup> Csébi 2016: 57.

<sup>&</sup>lt;sup>16</sup> Szirmai 2015: 205.

of modern Western medicine, mortality from infectious diseases has decreased and life expectancy at birth has extended. It has become increasingly important that people can live their longer life as healthily as possible. Thus, whereas previously somebody was considered healthy if they did not have a disease (absence of disease), in the 20<sup>th</sup> century, it also became important to what extent an individual can live a full life beyond his or her physical condition. The former approach is reflected in the biomedical model, which is basically objective and focuses on the human body. The latter approach is represented by the bio-psycho-social model, which considers the mental state and social environment important in addition to the physical condition of the body, and essentially, it expresses the shift towards a quality-of-life approach and that the objectives of modern medicine have changed.<sup>19</sup>

The quality of life of the population living in big cities, including Budapest, is also fundamentally determined by their health. Most European large cities have more favourable health indicators than rural areas, but because of their high complexity, there are also rather big differences, which show close correlation with other quality of life indicators.<sup>20</sup> In view of all this, our study focuses on health-related quality of life.

It is an essential question how to measure health-related quality of life. This involves objective indicators, which are classically measured by mortality and morbidity statistics, but also indicators that represent a subjective assessment of an individual's health condition.<sup>21</sup>

# 2. The aspects of welfare and well-being in Budapest – Objective and subjective elements of quality of life

The measurement of health-related quality of life in a broader sense, and of health status in a narrower sense, is partly based on objective factors and partly on subjective perceptions of health. In the former case, various statistical indicators are available, while in the latter case, population surveys help to assess perceptions of health.

# 2.1. Objective elements of health-related quality of life

Indicators related to the objective aspect of health-related quality of life are based on mortality data and morbidity data available in various health statistics. Most of the conclusions can be drawn from mortality statistics.

The health of Hungary's population began to deteriorate in the 1960s. A so-called 'epidemiological crisis' arose and then it deepened in the mid-1990s. It means that until the 1960s, the situation in Hungary (as in other Eastern and Central European countries)

<sup>&</sup>lt;sup>19</sup> Kopp–Kovács 2006: 11.

<sup>&</sup>lt;sup>20</sup> Csébi 2016: 63.

<sup>&</sup>lt;sup>21</sup> Токал et al. 2011: 771.

was similar to that of developed and moderately developed countries, but afterwards mortality and health status began to deteriorate. The worst indicators in this process were recorded in 1993. Afterwards, there was an improvement in life expectancy, influenced both by changes in lifestyle and the application of new medical advances. However, Hungary was still well below the EU average.<sup>22</sup> During the 2000s, life chances slowly improved, but the gap has remained stable.

The epidemiological crisis also affected Budapest, although to a lesser extent than other areas of the country, as the objective health status of the capital's population is still among the most favourable in Hungary: mortality and morbidity rates are much better – and were also better earlier – than the national average.<sup>23</sup>

However, in the case of Budapest, there are also quite substantial disparities within the agglomeration and within the city. Thus, the city shows two different sides: on the one hand, life chances and some other health indicators are among the best in Hungary for the entire city. On the other hand, there are areas that are the worst in terms of cancer mortality in the city and nationally, and there tend to be large differences between districts.<sup>24</sup> All this is linked to the complexity of the structure of the metropolis,<sup>25</sup> the diversity of its society and its spatial disparities. Some of the internal disparities show stability: there are districts that have long been among the best or worst according to most of the objective health indicators (e.g. the situation of the 2<sup>nd</sup> district has been persistently favourable and that of the 10<sup>th</sup> district has been persistently unfavourable), but over the last decade, there have been perhaps more districts in transition and 'changing positions'. Nevertheless, health indicators show close correlation with other indicators of social position (e.g. education).<sup>26</sup>

The most commonly used indicator of mortality is the crude death rate, which is highly dependent on age composition. As Budapest's ageing index in 2019 was one of the highest in Hungary at 156.8%, as opposed to the national value of 136.6%,<sup>27</sup> the crude death rate was also high. In 2019, the national rate was 13.3%, whereas in Budapest – despite the high proportion of the elderly population – it was 12.0%.<sup>28</sup> It implies that the capital's residents are healthier on the whole. In Budapest, the change in mortality over time has also shown a favourable trend, there has been a steady decline both in the Budapest rate itself and relative to the country as a whole (*Figure 2*). The mortality rate of Budapest was higher than the national average until 2007 after which the rate had a continued sharp decline, and it has been continuously lower since then with the gap steadily widening in the capital's favour. However, Pest County has always had more favourable rates due to the social characteristics of its agglomeration settlements.

The geographical distribution of crude death rates in the districts partly follows the trend of the ageing index, but also diverges from it in several places (*Figure 3*).

<sup>&</sup>lt;sup>22</sup> JÓZAN 1994: 7; JÓZAN 2002: 424; PÁL et al. 2021a: 151.

<sup>&</sup>lt;sup>23</sup> Uzzoli 2008: 357; Uzzoli 2010: 425; Ádány 2012: 6.

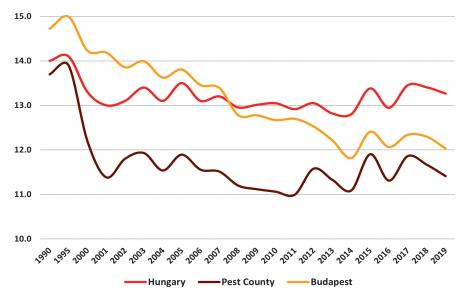
<sup>&</sup>lt;sup>24</sup> Uzzoli 2008: 365; Uzzoli 2010: 424.

<sup>&</sup>lt;sup>25</sup> CSAPÓ–LENNER 2015: 64.

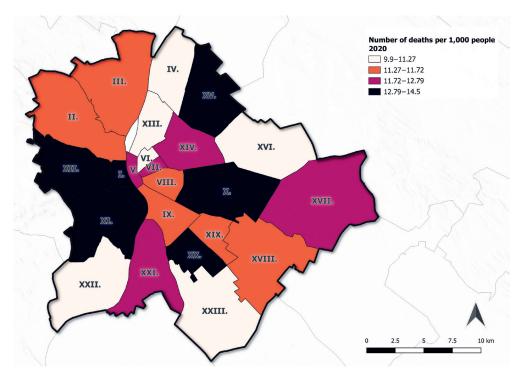
<sup>&</sup>lt;sup>26</sup> Ádány 2012: 22.

<sup>&</sup>lt;sup>27</sup> KSH 2020: 15.

<sup>&</sup>lt;sup>28</sup> KSH 2021a: 28.



*Figure 2: Change over time in the number of deaths per one thousand inhabitants in Hungary and Budapest Source:* compiled by the authors based on KSH 2021a



*Figure 3: Number of deaths per 1,000 inhabitants in the districts of Budapest in 2019 Source:* compiled by the authors based on KSH 2021a

The differences due to age structure are eliminated by the standardised mortality rate. In this regard, Budapest (and its agglomeration) is in one of the most favourable positions in Hungary (2019), and it can be observed that the districts belonging to the agglomeration on the Buda side show better values. Even though Budapest itself is not the first in this respect, if the districts are also taken into account, the 1<sup>st</sup>, 2<sup>nd</sup>, 5<sup>th</sup> and 12<sup>th</sup> districts lead the national list. However, the worst performers nationally include the 23<sup>rd</sup> district of Budapest.<sup>29</sup>

The causes of death in Budapest are similar to the Hungarian average. Almost half of all deaths are caused by cardiovascular diseases and about a quarter by tumour diseases. The difference is that both causes of death account for a slightly higher share of total deaths. The same can be said of deaths from diseases of the respiratory and digestive systems. Yet, deaths from external causes (e.g. accidents, suicide) or from infectious and parasitic diseases account for a smaller proportion of deaths (*Table 1*).

Table 1: Mortality by cause of death in Hungary and Budapest in % of total deaths by leading causes of death in 2019

Causes of death	Budapest (%)	Hungary (%)
Cardiovascular diseases	49.84	49.08
Tumour diseases	26.06	25.18
Respiratory diseases	6.61	6.42
Diseases of the digestive system	5.03	4.90
External causes of morbidity and mortality	3.32	4.17
Infections and parasitic diseases	0.47	0.53
Other reasons	8.68	9.72
Total	100.00	100.00

Source: compiled by the authors based on KSH 2020

Comparing Budapest with the districts of counties, however, greater differences can be seen. The rates of several county districts differ from the national average: for example, the rates of cardiovascular diseases are much lower in the districts of Pécs and Miskolc. It is also instructive for Budapest to see how the rates of the county districts in the neighbourhood evolved in 2019 in this respect. In general, the county districts west of Budapest have a lower share of deaths from cardiovascular diseases in total deaths (lowest in the district of Érd), while the districts located to the east have either a higher share than Budapest or close to it.<sup>30</sup>

The measure that is most frequently calculated on the basis of mortality and presents life chances, thus an indicator of health-related quality of life, which tends to be applied fairly often, is life expectancy at birth. It has increased steadily but moderately for both men and women across the country since the low point in 1993.

<sup>&</sup>lt;sup>29</sup> Pál et al. 2021a: 151.

<sup>&</sup>lt;sup>30</sup> Pál et al. 2021a: 151.

T: 4 : 4/N/	Men			Women			
Territorial unit/Year –	2001	2012	2020	2001	2012	2020	
Budapest	69.28	73.58	74.34	76.52	79.23	79.85	
Bács-Kiskun County	67.41	70.96	71.79	76.73	78.22	78.34	
Baranya County	68.20	70.99	72.45	75.63	78.12	79.14	
Békés County	68.84	71.06	71.21	76.60	77.54	77.87	
Borsod-Abaúj-Zemplén County	66.59	68.95	69.66	76.10	76.76	77.10	
Csongrád-Csanád County	68.68	71.50	73.21	76.56	78.78	79.22	
Fejér County	68.54	71.47	72.38	76.41	78.36	78.42	
Győr-Moson-Sopron County	69.48	71.95	73.08	78.04	78.71	79.44	
Hajdú-Bihar County	68.04	71.83	72.37	76.63	79.23	79.75	
Heves County	66.77	70.78	71.11	76.78	78.03	78.10	
Jász-Nagykun-Szolnok County	67.43	70.55	70.55	76.25	77.62	77.61	
Komárom-Esztergom County	67.95	70.27	70.73	76.25	77.57	78.36	
Nógrád County	67.14	70.47	70.38	75.97	77.71	76.90	
Pest County	68.68	71.94	72.74	76.54	78.22	78.83	
Somogy County	67.28	70.29	71.72	75.39	78.07	78.33	
Szabolcs-Szatmár-Bereg County	65.78	70.05	70.70	75.74	78.26	77.50	
Tolna County	67.96	71.88	72.32	76.57	78.85	78.42	
Vas County	68.84	70.66	71.61	77.12	78.25	79.20	
Veszprém County	69.01	71.70	72.41	76.08	79.11	79.15	
Zala County	68.24	71.84	72.33	76.83	78.96	79.15	
Total country	68.15	71.45	72.21	76.46	78.38	78.74	

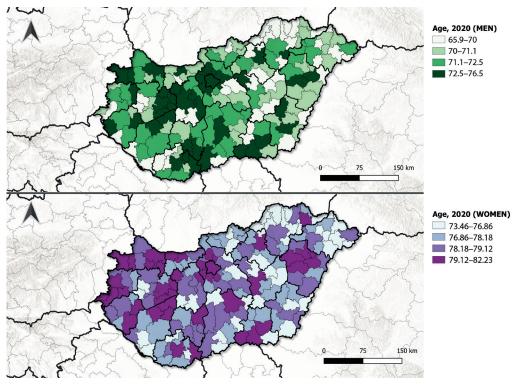
Table 2: Change in average life expectancy at birth over time by sex and county

Source: KSH [s. a.b]

In this respect, Budapest has always ranked among the highest in terms of value for both men and women in comparison with the counties. A man born in Budapest in 2020 could expect to live 74.34 years compared to the national average of 71.45 years. Nógrád County was in the most unfavourable situation (70.38 years), with a difference of 3.96 years. In the same year, life expectancy at birth for women in Budapest was 79.85 years (78.74 years nationally) and the lowest in Nógrád County (similar to men) was 76.9 years, but the difference was smaller than for men (2.95 years) (*Table 2*). When Budapest is ranked among the districts, even larger regional differences emerge, but Budapest is no longer in the lead for either sex, although it is still in the most favourable category (*Figure 4*). It ranked 11<sup>th</sup> for men and 20<sup>th</sup> for women in 2020. (It should be noted that the difference between people's best and worst life chances by district is more than 10 years for men

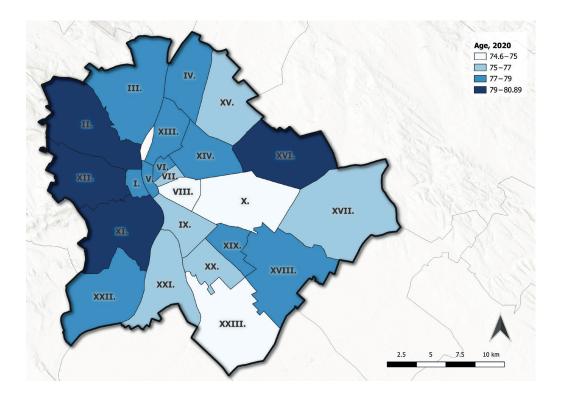
and almost 9 years for women.) The districts belonging to the agglomeration of Budapest also fall into the most favourable category, especially for men *(Figure 4)*. Compared to 2012, the positions of Budapest in life chances have improved with regard to districts for both men and women.

The specificities of the comparison between county districts point to the fact that within Budapest there are also large territorial differences in life chances, which were already found by research in the 1980s.<sup>31</sup> The differences have decreased since then and their spatial patterns have also changed. In 2020, the best life expectancy (in terms of total population) was in the 2<sup>nd</sup> district (80.89 years of age), while the worst was in the 10<sup>th</sup> district (74.6 years of age). For men, the two poles are also the 2<sup>nd</sup> and 10<sup>th</sup> districts, but for women, the most unfavourable situation is in the 23<sup>rd</sup> district, although it is true that the 10<sup>th</sup> district is the last but one. The 2<sup>nd</sup> district also has the best life chances in all respects in a national (county district) comparison (*Figure 5*).



*Figure 4: Average life expectancy at birth for men and women by county district in 2020 Source:* compiled on specific request, edited by the authors based on the tabular data set of KSH 2022

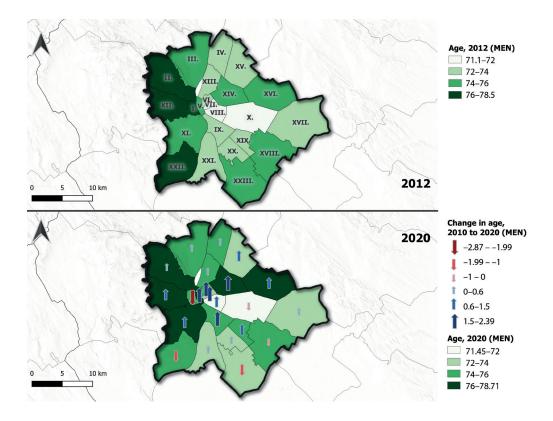
<sup>31</sup> Józan 1986: 199.



*Figure 5: Average life expectancy at birth in the districts of Budapest in 2020 Source:* compiled on specific request, edited by the authors based on the tabular data set of KSH 2022

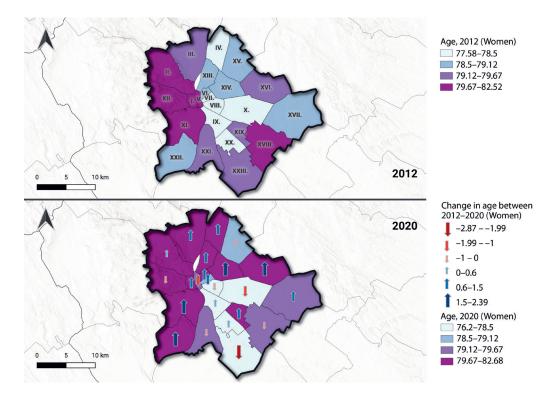
The spatial patterns of life chances traditionally, and also today, show a pattern (more favourable in the districts on the Buda side than on the Pest side), but this has changed in recent years compared to 2012, in parallel with the continuous spatial changes of the metropolis and its society.

In the case of men, the 2<sup>nd</sup> and 12<sup>th</sup> districts maintain their favourable position, what is more, the average life expectancy at birth is rising here. However, there is a strong decrease in the 1<sup>st</sup> district, and also in the 22<sup>nd</sup> and 23<sup>rd</sup> districts. The latter's position, which is traditionally bad, continues to deteriorate, and so does that of the 8<sup>th</sup> district, although the decline is smaller. By contrast, the life chances of the residents in the northern districts of Pest, and in particular in the 14<sup>th</sup> and 16<sup>th</sup> districts, have improved considerably over just the last decade (*Figure 6*).



*Figure 6: Average life expectancy at birth for men in the districts of Budapest in 2012 and 2020 Source:* compiled on specific request, edited by the authors based on the tabular data set of KSH 2022

The spatial pattern of women's life chances within Budapest and its change is in many respects similar to that of men (for example, the deterioration of data in the 1<sup>st</sup>, 10<sup>th</sup> and 23<sup>rd</sup> districts, or the improvement in the 16<sup>th</sup> and 14<sup>th</sup> districts), but here by 2020, the districts in the most favourable categories have expanded, and the Buda districts (with two exceptions) have improved (*Figure 7*).



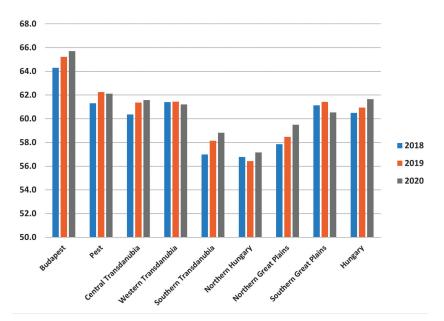
*Figure 7: Average life expectancy at birth of women in the districts of Budapest in 2012 and 2020 Source:* compiled on specific request, edited by the authors based on the tabular data set of KSH 2022

In the case of both sexes, the sharp deterioration in the life chances of the 1<sup>st</sup>, 10<sup>th</sup> and 23<sup>rd</sup> districts and the improvement in the 14<sup>th</sup> and 16<sup>th</sup> districts are significant. These trends may be induced by a variety of factors, including the replacement of urban society, gentrification, urban regeneration and, in combination with this, internal migration and changes in the age composition of the districts.<sup>32</sup>

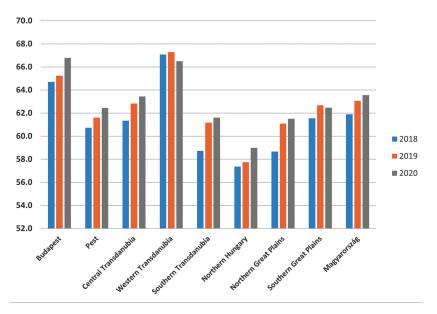
In addition to average life expectancy at birth, healthy life expectancy at birth is a good indicator of health-related quality of life. In a regional comparison, Budapest residents can expect to live the longest healthy life years, as their healthy life expectancy at birth is the highest, and this increased for both men and women between 2018 and 2020 (*Figures 8–9*).

<sup>&</sup>lt;sup>32</sup> Kovács–Dövényi 2021: 135.





*Figure 8: Healthy life expectancy at birth for men, 2018–2020 Source:* compiled by the authors based on KSH [s. a.a]



*Figure 9: Healthy life expectancy at birth for women, 2018–2020 Source:* compiled by the authors based on KSH [s. a.a]

## 2.2. Subjective elements of health-related quality of life

Subjective well-being is of fundamental importance in quality of life, as it provides a lot of information on the individual perceptions of direct and indirect effects of living, housing and working conditions of the population. Self-assessed health, i.e. people's perception of their own health (perceived health), does not necessarily correspond to their actual health status, measured objectively. Subjective health depends on an individual's educational attainment, occupation, income, and place of residence.<sup>33</sup>

Subjective well-being interprets and measures the quality of life experienced, the important parts of which are mental health, the presence/absence of positive emotions and social relationships.<sup>34</sup>

It is true in general that people in better socio-economic situations, people living in urban environments and those who have a better health status assess their health more favourably. They experience positive emotional states more often and have a significantly lower rate of depressive symptoms.<sup>35</sup>

The European Health Interview Survey 2019 (EHIS) included a mental health survey, with a focus on the measuring of happiness. This surveyed the positive emotional states experienced in the two weeks prior to taking the survey – such as being happy, cheerful or calm, relaxed or active, lively, etc. Low levels of positive emotional states were particularly common among people living in Northern Hungary, but Budapest and Pest County were ranked second and third in the results (*Figure 10*). A high level of the same measure is mostly found in the Transdanubia (west of the Danube), while Northern Hungary, Budapest, and Pest County have the worst scores also nationally.

In the previous European Health Interview Survey 2014, negative feelings (such as nervousness, loneliness, unhappiness) were measured, and the results demonstrated that in Budapest, there were significantly more people who were not at all or less affected by negative feelings.<sup>36</sup>

The national health survey also examined mental health by asking about the presence of symptoms used for the diagnosis of depression. Questions were asked about various negative emotional states (lack of interest, sadness, bad feelings about oneself), concentration difficulties, problems with eating, sleeping and exercise experienced during the two weeks prior to taking the survey. In Hungary in 2019, the proportion of people with mild depression was the highest in Northern Hungary (27%), whereas the lowest in Western Transdanubia (16%), 24% in villages, 23% in Budapest, and 18% in the cities with county rights.<sup>37</sup>

- <sup>34</sup> KSH 2021d.
- <sup>35</sup> Pál et al. 2021a: 153; KSH 2021d.
- <sup>36</sup> PÁL et al. 2021a: 153.
- <sup>37</sup> KSH 2021d.

<sup>&</sup>lt;sup>33</sup> Pál et al. 2021a: 153.

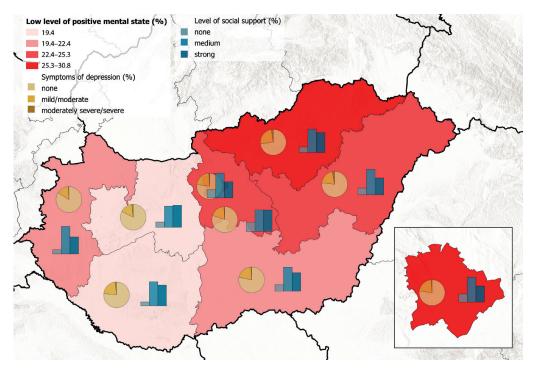


Figure 10: Measurement of subjective well-being and mental health in the framework of the European Health Interview Survey in the regions of Hungary, 2019 Source: compiled by the authors based on KSH 2021d

The EHIS survey, which covers all EU countries, measures the quality of social relations using an aggregate indicator by summing the scores of three questions. These are the following: 1. how interested others are in what happens to us; 2. how many people we can turn to when we have a personal problem; 3. how easy it is to get help from our neighbours when we need it. According to the responses, the proportion of strong social support was high in Central Transdanubia, Pest County and Southern Transdanubia, while weak social support was most common in Budapest and Pest (*Table 3*).

The results of the EHIS 2019 on subjective well-being and mental health highlighted some discrepancies in respect of Budapest. The more favourable socio-economic situation entails better objective health status compared to national average, but subjective well-being is not necessarily the most favourable in the capital. While Budapest residents do not rate their own subjective well-being and social support the most favourably, the proportion of people reporting moderately severe or severe depressive symptoms is the second lowest in the country. Self-assessment of subjective well-being is similar in Budapest and Pest County, while there is some variation between the two areas in the case of the other two indicators. For example, in Pest County slightly more people reported that they had no depressive symptoms, while far more county residents considered their social support to be stronger than in the capital.

	Well-being level (%)		Depressive symptoms (%)			Social support level (%)		
Territorial unit	Low level of positive mental state	High level of positive mental state	None	Mild/ Moderate	Moderate severe	Weak	Medium	Strong
Budapest	26.0	74.0	77.1	22.1	0.8	16.6	50.6	32.8
Pest County	25.3	74.7	80.2	18.8	1.0	18.2	43.9	43.3
Central Transdanubia	19.4	80.6	82.4	15.6	2.0	11.0	43.5	45.5
Western Transdanubia	19.8	80.2	83.9	15.7	0.4	8.7	56.4	34.8
Southern Transdanubia	19.4	80.6	76.7	21.7	1.6	8.1	49.4	42.5
Northern Hungary	30.8	69.2	73.1	24.6	2.3	11.5	47.9	40.7
Northern Great Plains	23.9	76.1	76.8	20.1	3.1	13.6	51.9	34.4
Southern Great Plains	22.4	77.6	78.2	21.0	0.8	13.4	49.0	37.6
Hungary	23.7	76.3	78.4	20.1	1.5	12.5	49.1	38.4

Table 3: Measurement of positive mental health, depressive symptoms and social support in the European Health Interview Survey in the regions of Hungary, 2019

Source: KSH 2021e

The questionnaire of the Hungarostudy 2002, a national representative survey mapping the quality of life and health status of the Hungarian population, already included questions on subjective well-being. Based on the survey, it was possible to identify the situation of Budapest in comparison with the counties in Hungary at the turn of the millennium. Based on the territorial distribution of the four sets of questions examined (well-being index, depression, anxiety and fatigue) it was found that in each case, the level of the capital was better or even much better than the national average.<sup>38</sup> While according to the well-being index broadly defined by the UN World Health Organisation, Budapest was in an average position in the early 2000s, regarding the other three indicators, the values of the capital were among the best in Hungary.<sup>39</sup>

Currently, there are no comprehensive surveys available to know more about the differences in subjective well-being within Budapest. We can draw conclusions about the differences and their causes from the findings of non-representative local studies comparing a few districts. Although the individual questionnaire surveys differ in their interpretation of subjective well-being and in their measurement methodology, their similar experiences outline common features that can be used to interpret and explain differences between districts. The results highlight that the higher level of education, financial status (income) and labour market position influence the higher level of life satisfaction and positive assessment of subjective well-being.<sup>40</sup> The internal division of

<sup>&</sup>lt;sup>38</sup> KOPP et al. 2006: 87.

<sup>&</sup>lt;sup>39</sup> KOPP et al. 2006: 87.

<sup>&</sup>lt;sup>40</sup> Комја́тну 2014: 332.

functional zones also has a significant impact on subjective perceptions of health: for example, a higher percentage of satisfaction is found in the inner city area, the inner residential areas or apartment complexes, it seems to be average in the hilly areas and outer residential areas, whereas negative trends are observed in the zones of apartment blocks.<sup>41</sup>

### 3. The role of Budapest as an infection hotspot during the Covid-19 pandemic

A total of five waves of the Covid–19 pandemic developed in Hungary between the spring of 2020 and the early summer of 2022. The territorial distribution of these can be examined based on the official data release, which was provided at county and capital city level for all confirmed patients and active infected, recovered or deceased cases in Budapest vs. countryside distribution (koronavirus.gov.hu). The public release of epidemiological data for Budapest and the countryside started on a daily basis on 19 May 2020, but after 1 May 2022, this was only done on a weekly basis. For this reason, the data was processed for the period from 19 May 2020 to 1 May 2022.

The role of Budapest and Pest County as a hotspot of infection was primarily detected during the first wave of the pandemic in the spring of 2020.<sup>42</sup> Based on the total number of active cases in the country, more than 40% of all active cases and more than 60% of all deaths occurred in the capital (*Figure 11*). The spatial spread of the epidemic during this period was driven by high contact rates in the two most densely populated areas and by infections in institutional hotspots (hospitals, nursing homes). The established commuting links between Budapest and its agglomeration were also a major factor in the spatial pattern of coronavirus spread during this period.<sup>43</sup>

At the beginning of the second wave, in the autumn of 2020, the capital's share of active infections increased, then steadily decreased: by the end of the second wave to below 20%, and by the end of the third wave, in the spring of 2021, to below 10%. A similar improvement was observed in terms of deaths: by the beginning of the second wave, less than half of the deaths were in Budapest, and this downward trend continued during the third wave. Finally, it fell below 20% by the summer of 2021. Thus, in the first year of the epidemic in Hungary, between the spring of 2020 and the spring of 2021, the proportion of active cases and deaths in the capital was decreasing, and accordingly, the large proportion of recovered cases were in the countryside.

From the second wave onwards, the earlier group infections were replaced by mass infections. Thus, the chains of infection that developed in the country led to a spatial spread at the community level in subsequent waves. Based on the number of confirmed

<sup>&</sup>lt;sup>41</sup> Csébi 2015: 31.

<sup>&</sup>lt;sup>42</sup> Pál et al. 2021a: 154; Kovács–Uzzoli 2020: 159.

<sup>&</sup>lt;sup>43</sup> Lennert 2021: 3.

cases per 100,000 inhabitants, Budapest and Pest County gradually lost their leading role as geographical hotspots in the spatial spread of the epidemic. In terms of the distribution of new infections per population, they were no longer the most infected areas in the order of the counties.<sup>44</sup> As the proportion of total active infected cases in Budapest was lower than the number of infected cases registered in the countryside, a higher proportion of recovered cases was found in areas outside the capital.

The rise of the fourth wave in the autumn of 2021 and the fifth wave in the winter of 2022 increased the share of the capital city in the distribution of active cases in Budapest compared to the rest of the country, but this was only observed in the ascending phase. In early 2022, the proportion of active infection cases registered in the capital city was around 25% of the total number of cases, which means that Budapest was a geographical hotspot for a short period at the beginning of the fifth wave. However, less than 20% of deaths occurred in Budapest during the intensive growth phase of the fourth and fifth waves.

From the autumn of 2020 onwards, the proportion of active cases and deaths was on the rise mainly in areas outside Budapest. Infection hotspots were essentially no longer linked to the capital city or Pest County. The exception to this was the upsurge of the fifth epidemic wave. This is explained by the fact that each wave tended to break out, in terms of the number of new infections, in the most developed parts of the country (e.g. Central and Western Hungary) and at higher levels of the hierarchy of settlements (capital city, city with county rights), and then it spread to the moderately developed areas and to the network of medium and small towns. It also occurred during the downward trend of the epidemic waves that a slow decrease started in the number of new cases nationally after the peak period, while spatial differences between regions increased. This was mainly due to the fact that during this period, in less developed areas, peripheral areas, areas far from cities and hubs, more and more people started to fall ill as a result of the new type of coronavirus infection.<sup>45</sup> For example, from December 2020, - at the time of the second wave - the epidemic plateau on the epidemic curve was due to a stagnation of nationally high case numbers, while in some areas (Budapest), the number of new cases started to decrease, while in others (southern counties) the number of new cases continued to increase. This also means that, from the second wave onwards, it was possible to observe that, although the number of new cases was high everywhere in the country, the peak in the number of cases occurred at different times in the different counties and in the capital city.

<sup>&</sup>lt;sup>44</sup> Uzzoli et al. 2021: 306.

<sup>&</sup>lt;sup>45</sup> Igari 2021.

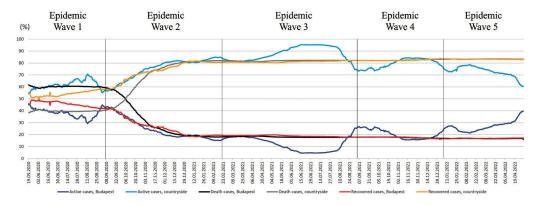


Figure 11: Proportion of all active cases, deaths and recovered cases broken down by Budapest and the countryside (%), 19 May 2020 – 1 May 2022 Source: www.koronavirus.gov.hu

According to the epidemiological data published by the National Centre for Public Health (Nemzeti Népegészségügyi Központ) on its official website, a total of 337,632 infected people were registered in Budapest during the epidemic in Hungary until 1 May 2022, which is 18% of the total number of cases in the country (*Table 4*). The capital city accounted for 17% of all deaths up to 1 May 2022. The mortality rate calculated as the percentage of the total number of infected cases was 2.3% in Budapest, which matched the national average (2.4%). The highest number of new cases per day was registered in the capital on 21 March 2021 during the third epidemic wave (2,271 cases). In mid-January 2022, there was a weekend in Budapest when an average of 2,805 people caught the virus every day during the fifth epidemic wave. The decline of the fifth epidemic wave was steady in Budapest in the spring of 2022, but from the end of June onwards, the number of new cases started to increase slightly both nationally and in the capital.

Indicator	Value of indicator
Total confirmed infected cases (persons)	337,632
Total deaths (persons)	7,780
Total active cases (persons)	19,516
Total recovered cases (persons)	310,336
Total infected cases per 100,000 inhabitants (persons)	19,861
Total deaths per 100,000 inhabitants (persons)	458
Total recovered cases per 100,000 inhabitants (persons)	18,255
Total deaths as a percentage of all infected (%)	2.3

Table 4: Some indicators of the Covid–19 pandemic in Budapest, 1 May 2022

Source: www.koronavirus.gov.hu

Due to the geographically different effects of the Covid–19 pandemic, the question arose even in the case of a small country like Hungary whether there is a need for territorially differentiated measures in epidemiological regulations and, if so, how can these territorial aspects be incorporated into interventions? One of the most important experiences gained from the control of domestic epidemic waves was that, in addition to nationwide restrictions, policy measures applied territorial considerations to different degrees. Most of the current government decrees on epidemiology had a national scope, but some of them were to be applied specifically to a particular area, such as the capital city and Pest County.

The first territorial enforcement of the control was implemented in Budapest and Pest County, the geographical hotspots of the first epidemic wave, by making the use of face masks compulsory for the first time in the country on public transport and in shops. In the declining phase of the first wave, from the beginning of May 2020, the relaxations of restrictions started gradually, which definitely demonstrated a strong territorial approach. This essentially meant that relaxations were introduced in the countryside areas, which were less affected, while partial restrictions remained in place in Budapest and Pest County for a further two weeks.<sup>46</sup> During the subsequent epidemic waves, there were no territorially differentiated epidemiological controls used, as neither Budapest nor Pest County was the sole geographical hotspot for the spread of the epidemic. In the capital, the measure applicable to settlements with a population of more than 10,000 inhabitants was in force, i.e. the local authorities had the competence to decide on the use of masks in public places or on the partial closure of the municipality. Of these, the management of the capital city chose to regulate the use of face masks, for example, at the start of the fourth wave, the wearing of face masks was made mandatory in theatres, cinemas and libraries in Budapest a week before the introduction of a similar measure at national level. From the third wave onwards, national protection became increasingly vaccine-based, and the purpose was to achieve as full as possible immunisation of the population, initially with two, then three or four vaccines. In proportion to the population, Budapest and Pest County had the highest number of vaccinated persons according to the data officially published in December 2021.

# 4. Characteristics and spatial structure of healthcare in Budapest

After its unification in 1873, Budapest started to go through a rapid development. In the period when it was growing into a metropolis, its population continued to increase, and healthcare had to be provided in adequate numbers and quality. Large-scale construction projects were started in the inner districts of the city, including the building of new hospitals: between 1870 and 1900, the number of hospital beds increased by 7,000.<sup>47</sup> Between 1876 and 1908, clinics were built in the outskirts of the city, in the fresh air and

<sup>47</sup> KSH 1995.

<sup>&</sup>lt;sup>46</sup> Kovács et al. 2020: 210.

on the vast areas of former farms in the territory of today's Józsefváros (Joseph city), the 8<sup>th</sup> district of Budapest.<sup>48</sup> Since then, these hospitals have been surrounded by various residential buildings and the green space around them has gradually decreased.<sup>49</sup>

Today, for example, the windows of the wards of Surgery Clinic 1 look out onto the busy Üllői Road. The world has changed a lot since the turn of the century, and it is no longer a criterion to keep healthcare facilities away from the noise of the city. What is more, a part of the healthcare services, such as private healthcare, are located at busy transport junctions with optimal accessibility.

The most optimal conditions for healthcare services aiming to preserve health, prevent diseases, improve health and prevent danger to life have developed in the capital city of the country. A wide range of services are available in the health system, i.e. each type of healthcare: primary, specialised and special care, which are built on each other. These healthcare services are organised into levels of care according to the principle of progressiveness, depending on the specialised professional and technical needs of the treatment, the complexity of the treatment, the nature of the illness and the patient's condition. This means that simpler and more frequent cases are treated in primary care or specialised outpatient care close to the patient's home, while more complex and less frequent cases are treated in centralised hospitals.<sup>50</sup> Therefore, family physician services and specialised outpatient clinics are located in every district, while hospitals are concentrated according to zones within the capital. The number of healthcare jobs per thousand inhabitants required to operate the health system is the highest in Budapest, it was 32 in 2019.<sup>51</sup>

#### 4.1. Primary healthcare

Some elements of the primary healthcare in the capital were already established in the first decades of the 20<sup>th</sup> century. In the 1930s, a healthcare network of school doctors was established. State-owned healthcare institutions provided free care for patients and endemic diseases (e.g. tuberculosis) started to be contained.<sup>52</sup> After the Second World War, universal social security guaranteed equal access to healthcare for all. In parallel with that, primary care was organised through the establishment of a system of district general practitioner services and district GP paediatrician services, and by 1970, there were 274 district GP surgeries in the capital.<sup>53</sup> They were transformed in 1993 into the family physician and family paediatrician care, which still exist today, and have been strengthened since then. For example, pursuant to Government Decree 53/2021 (II. 9.), as of 2021, family physician and family paediatrician services have been allowed to operate

<sup>&</sup>lt;sup>48</sup> Perczel 1992: 29.

<sup>&</sup>lt;sup>49</sup> Csapó–Lenner 2015: 230.

<sup>&</sup>lt;sup>50</sup> Pál et al. 2021b: 174.

<sup>&</sup>lt;sup>51</sup> KSH 2021b: 32.

<sup>&</sup>lt;sup>52</sup> BERZA 1993: 703.

<sup>&</sup>lt;sup>53</sup> Mikola 1998: 158.

in the form of group practices, making the organisation of patient journeys more efficient. Several group practices have been set up, also in the capital, especially in districts where doctors are overloaded or there are vacancies. Professional collaboration can take several forms, such as collegial, integrated, united group practices, or group practice consortia.

Within primary healthcare, family physician and family paediatrician services have the most balanced network in the capital. On the basis of the permanent population of each district of the capital, district municipalities divide their districts into medical zones for family physician and family paediatrician services, with one medical zone having an average of 1,200–1,500 adult inhabitants for family physician care and 600–800 children inhabitants for family paediatrician care. Despite the shrinking population, a large number of family physicians (908) and family paediatricians (291) work in the capital (2019), but their combined number decreased by 11% between 2000 and 2019, which corresponds to the national average.<sup>54</sup> The decrease was 9% for family physicians and 16% for family paediatricians, and the latter was four percentage points above the average national decrease. This means that while there are fewer children under 14 years of age to care for in the capital's family paediatrician services, the workload of existing family paediatricians has also increased in recent years. Many family paediatricians have taken up work in Pest County as the proportion of minors has risen due to young families moving to the agglomeration and municipalities have created new medical zones for family paediatricians. As a result, 8% more family paediatricians were practising in Pest County in 2019 compared to 2000.

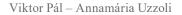
The change in the number of residents per family physician and family paediatrician between 2000 and 2019 shows that doctors have become overburdened in recent years, as they have had to care for an increasing number of patients (*Figure 12*). The proportion of family physician and family paediatrician services, which are provided by substitution is one of the lowest in Budapest, accounting for about a quarter of all services.<sup>55</sup> According to the data released by the National Health Insurance Fund Manager (Nemzeti Egészségbiztosítási Alapkezelő) in June 2022, there were no unfilled family physician or family paediatrician posts in the 1<sup>st</sup>, 12<sup>th</sup> and 23<sup>rd</sup> districts, and only one such service was registered in the 5<sup>th</sup>, 6<sup>th</sup>, 8<sup>th</sup>, 11<sup>th</sup>, 16<sup>th</sup> and 22<sup>nd</sup> districts. There is a significant difference in the number of inhabitants assigned to a medical zone where there is no permanent family physician, ranging from 307 in one district to 3,115 in another. The proportion of the population affected by the unfilled posts of family physicians and family paediatricians is 10% or more of the total district population in the 4<sup>th</sup>, 15<sup>th</sup> and 19<sup>th</sup> districts (*Figure 12*).

However, family physicians and family paediatricians working in primary care in Budapest are responsible for fewer residents on average than their colleagues in Pest County or in other parts of the country.<sup>56</sup> The growth in the number of residents per family physician and family paediatrician has particularly accelerated in the capital since the mid-2010s.

<sup>54</sup> KSH [s. a.c].

<sup>55</sup> KSH 2021e.

<sup>&</sup>lt;sup>56</sup> Balogh–Bezerédj 1999: 21; Berza 1993: 703.



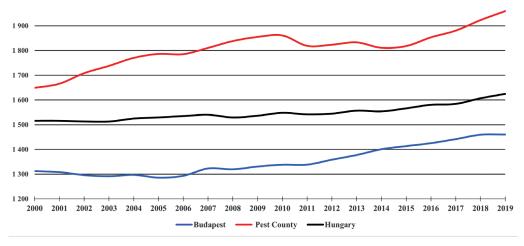


Figure 12: Change in the number of inhabitants per family physician and family paediatrician in Budapest, Pest County and Hungary (persons), 2000–2019

Source: compiled by the authors based on KSH [s. a.c]

All the districts of the capital are provided with family physician and/or family paediatrician services. They are located in a separate building or in the local outpatient clinic. The maintenance and operation of the local outpatient clinics come under the responsibilities of the district municipalities, as is the case for the organisation of family physician and family paediatrician care.

As part of primary healthcare, the district nurse service for mother and child care is an essential institution in women and maternity protection, and in infants and young children care in Hungary. Budapest accounts for 15% of all filled district nurse positions in the country (721 positions in 2019). Of these, there were 41 vacancies in June 2022 in the 2<sup>nd</sup>, 8<sup>th</sup>, 9<sup>th</sup>, 11<sup>th</sup>, 12<sup>th</sup>, 18<sup>th</sup>, 19<sup>th</sup> and 21<sup>st</sup> districts, but most of them are in the socially disadvantaged districts (8<sup>th</sup>, 9<sup>th</sup>, 19<sup>th</sup> and 21<sup>st</sup>).<sup>57</sup>

### 4.2. Specialised outpatient care

The rapid development of specialised outpatient care took place primarily after the establishment of large hospital capacities in Budapest. A major step forward in improving public health was the extension of the use of vaccination in the early 20<sup>th</sup> century and the setting up of the Metropolitan Disinfecting Institute and the Metropolitan Institute of Bacteriology and Public Health.<sup>58</sup> From the 1930s onwards, patients were treated free of charge in local medical practices. After the Second World War, integrated hospital

<sup>&</sup>lt;sup>57</sup> Nemzeti Egészségbiztosítási Alapkezelő [s. a.].

<sup>&</sup>lt;sup>58</sup> Berza 1993: 702.

and outpatient clinic units were established in Budapest. In 1970, 28 council outpatient clinics and 6 specialised outpatient services were providing medical care in Budapest. In parallel with these, a network of care institutions and public health was set up.<sup>59</sup> After the regime change, the ownership of specialised outpatient clinics was taken over by municipalities, and from the mid-2000s, the responsibilities of the clinics were extended to include same-day care. In recent years, the strategic objective has been to renew the infrastructure of outpatient clinics in Budapest and to achieve integrated care, including several kinds of specialty care and/or primary care.<sup>60</sup>

Specialised outpatient care provides patients with higher level and partly specialised services. Relative to population, the capital city has the highest attendance in specialised outpatient care, five-thirds of the national average.<sup>61</sup> Regular use of specialised healthcare services depends on the level of health literacy, the quality of care and its availability. The institutions of specialised healthcare are the outpatient clinics, which can operate either independently or integrated into hospitals as part of their services. In the capital, specialised outpatient clinics are evenly distributed and can be reached by public transport in 20–25 minutes for patients in Budapest. Specialised outpatient clinics, which were independent of hospitals, were previously owned by municipalities, but in 2013, it was possible to transfer their maintenance to the state. Most district municipalities in the capital have agreed to continue to maintain their own specialised outpatient healthcare. For example, Szent Kristóf Újbuda, a specialised clinic and healthcare service provider public benefit company is owned by the Municipality of Újbuda in the 11th district of Budapest. The municipality took over the ownership of the outpatient clinic from the Metropolitan Szent Imre Hospital in July 2003. In addition to the municipal and state-owned specialised outpatient clinics, there are also clinics owned by foundations or the church.

Some specialised outpatient clinics in the outer districts also provide care for the population of neighbouring municipalities outside Budapest in specialised medical service, under a service agreement. Similar cooperation also exists in several districts: for example, the pulmonary medical clinic in the 22<sup>nd</sup> district offers care to the population in the nearby areas of the 11<sup>th</sup> district. Another example is that the specialised outpatient care of the 1<sup>st</sup> district is located in the 12<sup>th</sup> district. Outpatient care has a territorial concentration in the inner districts (6<sup>th</sup>, 8<sup>th</sup>, 9<sup>th</sup>, 13<sup>th</sup> districts), where it is often linked to the activities of the outpatient departments of the Semmelweis University Clinics and Hospitals.

Same-day care is provided not only in hospitals but also in specialised outpatient clinics. Their number has increased 2.7 times since 2010, reaching 345,000 in 2019.<sup>62</sup> The country's first same-day surgery service was opened in June 2007 in the Szegedi Road clinic in the 13<sup>th</sup> district of the capital. Since then, the second highest number of

<sup>&</sup>lt;sup>59</sup> Mikola 1998: 158.

<sup>&</sup>lt;sup>60</sup> Government Decision 1425/2017 (VI. 29.) on the provision of the required resources of 2017 related to the implementation of the Healthy Budapest Programme.

<sup>&</sup>lt;sup>61</sup> KSH 2021b: 39.

<sup>62</sup> KSH 2021b.

same-day interventions (9,158 in 2019) have been performed in this district (*Figure 13*). The highest number of cases of same-day care is provided in the 8<sup>th</sup> district, linked to the activities of the Semmelweis University Clinical Centres (28,768 in 2019).<sup>63</sup>

#### 4.2. Specialised inpatient care

The oldest hospital in Budapest was founded in the Roman era (Valetudinarian of the Second Auxiliary Legion) in the area of today's 3<sup>rd</sup> district.<sup>64</sup> In the Middle Ages, the main task of public healthcare in the territory of present-day Budapest was the treatment of major epidemics (plague, cholera, typhus, smallpox, diphtheria). The first modern hospital for inpatient care, the Rókus Hospital, was built at the end of the 18th century.65 Following the Austro-Hungarian Compromise of 1867 and the unification of Budapest in 1873, the hospitals of the capital already provided several kinds of specialist medical care. In the first half of the 20<sup>th</sup> century, the world wars put a heavy strain on public healthcare, but new hospitals were built during the 'peace years' (e.g. Madarász Street Hospital, Bajcsy-Zsilinszky Hospital). Thus, by the 1930s, the health infrastructure in the capital was much better than in the countryside. In the second half of the 20th century, the expansion of the capital's hospitals and the construction of new ones continued (e.g. Tétényi Road Hospital). From the beginning of the 21st century, firstly, the emphasis within healthcare became less hospital-centred, secondly, chronic and rehabilitation care came to the fore in inpatient institutions, and thirdly, with the spread of same-day surgery, outpatient clinics were able to take over some of the tasks of hospitals.

The Hungarian healthcare system has been characterised by a strong focus on hospitals and Budapest for decades. Significant differences exist in the availability of medical doctors and healthcare workers in different parts of the country, as well as in the capacity of healthcare institutions. In terms of hospital care, the inpatient facilities in the capital also provide care for a significant part of the population of Pest County when required. The coverage areas in respect of certain medical specialisations also extends to certain closer areas of more distant counties, such as Komárom-Esztergom and Nógrád County. The specific number of hospital beds in Budapest is the highest in the country (102).<sup>66</sup>

State hospitals in Budapest have a special role in internal medicine, paediatrics, surgery and orthopaedics among others. Their scope of care extends beyond the administrative boundaries of the capital and also covers Pest County. The capacity of the healthcare institutions in the capital is high by national standards, because they also contribute to the healthcare services of Pest County, and there are also certain specialised medical

<sup>&</sup>lt;sup>63</sup> KSH 2021a: 84.

<sup>&</sup>lt;sup>64</sup> Berza 1993: 702.

<sup>&</sup>lt;sup>65</sup> Mikola 1998: 157.

<sup>&</sup>lt;sup>66</sup> KSH 2021b: 32.

services that the inhabitants of Pest County can only use in Budapest.<sup>67</sup> The national medical institutes in the capital are responsible for the care of the entire population of Hungary. Some of them are the following: the György Gottsegen National Institute of Cardiology, the National Institute of Oncology, the National Institute of Rheumatology and Physiotherapy, the National Korányi Institute of Pulmonology. Some of the sanatorium capacities are located outside the city (pulmonary medicine in Törökbálint) and some are linked to the thermal spas in the capital (Lukács Spa).

The capital city is home to Semmelweis University, the leading higher education institution of Hungary and Central Europe in the area of medicine and health sciences. It is also the largest healthcare institution of the country. University clinics and hospitals are venues of practical teaching, but they also provide the highest quality patient care services in Budapest. This means that they have a national coverage in most specialist areas and are therefore at the forefront in catering for the most serious cases and patients requiring complex treatment.

The vast majority of public hospitals are located in the inner districts of Pest, mainly in the 8<sup>th</sup> and 9<sup>th</sup> districts (Semmelweis University Clinics and Hospitals), but there are also facilities with significant capacity in the 13<sup>th</sup> and 14<sup>th</sup> districts. In Buda, most hospitals are located in the 2<sup>nd</sup> and 12<sup>th</sup> Districts. There are no inpatient facilities in the 1<sup>st</sup> and 5<sup>th</sup> districts and in the outer districts of Pest (the 15<sup>th</sup>, 19<sup>th</sup>, 21<sup>st</sup> and 22<sup>nd</sup> districts). The distribution of hospital beds in use (used for at least 6 months a year) per district shows large hospital capacities (e.g. Szent János Hospital in the 12<sup>th</sup> district) and indicates the districts where concentration of healthcare institutions is identified (e.g. clinics in the 8<sup>th</sup> district) (*Figure 13*).

The state-owned inpatient institutions in the capital come under the management of the National General Administration of Hospitals (Országos Kórházi Főigazgatóság), and there are also hospitals run by the church. These include the Buda Hospital of the Hospitaller Order of Saint John of God (Budai Irgalmasrendi Kórház) (2<sup>nd</sup> district), the Bethesda Children's Hospital of the Hungarian Reformed Church (Magyar Református Egyház Bethesda Gyermekkórháza) (14<sup>th</sup> district), the Jewish Charity Hospital (MAZSIHISZ Szeretetkórház) (14<sup>th</sup> district) and the Szent Ferenc Hospital of Budapest (2<sup>nd</sup> district).

Among the healthcare institutions of the capital, the Budapest Methodological Social Centre and Institutions (Budapesti Módszertani Szociális Központ és Intézményei), are in a special situation. They are a healthcare organisation for homeless people of the Metropolitan Municipality, established in 1993. The sites where they provide healthcare services (hospital care and treatment, 24-hour on-call GP services, mobile medical services, outpatient care) are located in the 10<sup>th</sup> and 13<sup>th</sup> districts.

<sup>&</sup>lt;sup>67</sup> Gárdos 1996: 39.

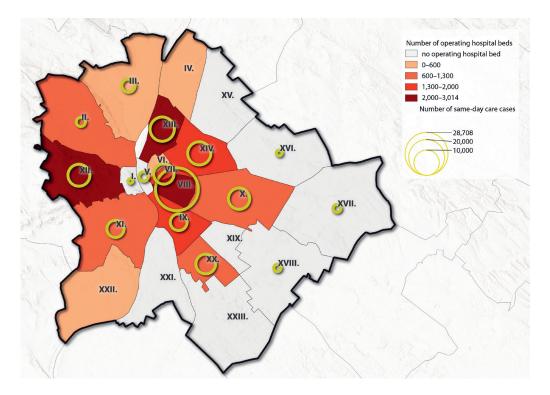


Figure 13: Number of hospital beds in use (number of beds used for more than 6 months a year) and number of same-day care cases (cases) in districts of Budapest, 2019 Source: KSH 2021a

# 4.3. Hospital closures in Budapest

The number of hospital beds in Budapest had increased steadily in the decades before the regime change. In the early 1960s, there were 26,899 hospital beds in the capital, while by the end of the 1980s, the number of hospital beds in use (used for inpatient care for more than 6 months a year) amounted to 31,576.<sup>68</sup> From the early 1990s, one of the major issues in the restructuring of the Hungarian healthcare system was the rationalisation of hospital capacity, with a significant reduction finally taking place in Budapest in the mid-2000s, following a legal provision.

Act CXXXII of 2006 was adopted to improve and restructure the healthcare system with the aim of reducing territorial inequalities. The development of the new hierarchy of inpatient healthcare involved major reorganisation tasks nationwide, but particularly in Budapest and in the region of Central Hungary.<sup>69</sup> The basic principle of the new

<sup>68</sup> Berza 1993: 702.

<sup>&</sup>lt;sup>69</sup> Uzzoli 2010: 431.

structure was to reduce the number of hospital beds in use and adapt them to real needs (reducing active inpatient beds, increasing chronic inpatient beds), and to emphasise the obligations of providing healthcare in the designated administrative area. Under the Hospital Development Act, 8,798 hospital beds were eliminated at the beginning of 2007, with the largest reduction of more than 4,300 beds in the region of Central Hungary, mainly in Budapest, which accounted for almost 50% of the total reduction nationwide.<sup>70</sup> As a matter of fact, the reduction in the number of hospital beds only led to closures of institutions in the capital. This was the fate of the National Institute of Paediatric Allergology, Pulmonology and Developmental Neurology in Svábhegy, the National Institute of Psychiatry and Neurology and the Schöpf-Mérei Ágost Hospital and Maternity Centre, which together represented the termination of 1,200 hospital beds. The latter later continued to operate as a private hospital. The functions of the closed hospitals were taken over by other institutions in the capital. The Institute of Sports Medicine was closed down gradually. The State Medical Centre was established by the merger of the Central Military Hospital of the Hungarian Defence Forces, the Central Hospital and Institutions of the Ministry of the Interior (BM Hospital), the MÁV Hospital and Central Outpatient Clinic and the National Medical Centre (Szabolcs Street Hospital). With the creation of the new Central Hospital, the Szabolcs Street Hospital and the BM Hospital ceased to exist as institutions, and the merger meant that 52% of the capacity of the four former institutions was eliminated by mid-2007. Similar mergers took place earlier by placing the Heim Pál and Madarász Street Children's Hospitals under joint management and later by establishing the Southern Pest Central Hospital and the North Central Buda Centre. While the former involves the integration of Szent István Hospital, Szent László Hospital and Merényi Gusztáv Hospital, the latter is based on the merger of Kútvölgyi Hospital and Szent János Hospital. The National Institute of Accidents and Emergency also became a health institution without a legal successor and was merged into the National Traumatology Institute of Péterfy Sándor Street (under the name of Fiumei Road Accident Centre of Péterfy Hospital and Clinic and Manner Jenő National Traumatology Institute). This merger involved the reduction of 90 active hospital beds and the creation of 30 rehabilitation beds.

# 4.4. Healthcare use

The European health interview survey (EHIS) 2019 also addressed healthcare use. The survey was based on the population's self-reporting, which does not necessarily correspond to institutional statistics, and the data do not provide information on private practices. The most important finding is that the proportion of people using different types of healthcare services in Hungary has not changed significantly since 2014, i.e.

<sup>&</sup>lt;sup>70</sup> Uzzoli 2007: 107.

the previous EHIS.<sup>71</sup> The results only show a notable increase in dental care. A positive change can be seen in the reduction in the length of stay in hospital and, in parallel, in the more frequent consultations with specialists and a growing number of people taking routine screening tests. In general, people are most satisfied with family physician care both nationally and in Budapest.

The most significant inequalities between regions are observed in dental care: while more than half of Budapest residents used dental care in the 12 months prior to taking the survey, only 38% of those living in Northern Hungary did it.<sup>72</sup>

In 2019, musculoskeletal therapists were consulted by a higher proportion of people aged 65 and over, women, those with higher education and higher incomes and those living in Budapest (20% compared to 11% in the Northern Great Plains), partly due to the emergence of these services as a market service.

The use of home care services (nursing care) and home help services (help provided in elderly care, transport of patients or elderly people) did not change significantly between 2014 and 2019. Home care services were used by 1-2% of the population and home help services by 2-3% in 2019. In contrast to home care, the demand for home help is clearly higher in less urbanised settlements. Home help services were provided to one in five elderly people in villages, and only one in 17 elderly people in Budapest.<sup>73</sup>

# 4.5. Private healthcare in Budapest – From private consulting rooms to polyclinics

In Hungary and Budapest, more and more people choose private healthcare providers for treatment, health preservation or disease prevention, so this sector represents an increasing proportion in the domestic healthcare system.<sup>74</sup> Demand has been growing steadily for several years, it was only partially and briefly halted by the coronavirus epidemic.<sup>75</sup>

In Budapest in particular, and in some large Hungarian cities, private medical practice in consulting rooms was already known in the years before the regime change, which initially focused only on a few specialist activities of a consultative nature.<sup>76</sup> However, from the early 1990s onwards, these private medical practices also included more and more medical fields, and by the end of the decade, they were already functioning as 'polyclinics', where several medical specialties formed a group practice. Most of the private laboratory services and diagnostic centres were set up in the country only after

- <sup>71</sup> KSH 2021c.
- <sup>72</sup> KSH 2021c.
- <sup>73</sup> KSH 2021c.
- <sup>74</sup> GKI 2019: 6.
- <sup>75</sup> Csiki 2020.
- <sup>76</sup> Rékassy 2014: 15.

1989, and mainly in the capital.<sup>77</sup> The first private healthcare institution providing complex care, Telki Hospital, was established in the Budapest agglomeration in 1998. Although this private hospital was closed in 2013, private medical centres started to spread widely in the capital and partly in the Budapest agglomeration. In the early 2020s, a new type of institution appeared in the private healthcare in the capital: Doktor24 Multiklinika (multi-clinic), which opened at the western gate to Budapest (11<sup>th</sup> district), at the initial sections of the motorways, with more than 30 adult and paediatric specialties, advanced diagnostic capabilities, an orthopaedic centre, a 30 beds of premium inpatient care and a modern surgical centre, making it the newest and one of the most complex health centres in the country.

Healthcare services provided by private healthcare institutions in the capital have gradually expanded. The private medical consultation rooms already existing before the regime change were specialised mainly in dental, gynaecological and dermatological care. The 1990s saw the emergence of private laboratory and diagnostic service providers and, from the end of the decade onwards, an increasing demand arose for healthcare services of plastic surgery, psychiatry and addiction, rheumatology, orthopaedics and infertility treatment. In the 2000s, private hospitals started to gain ground. Initially they only covered a few specialties (e.g. obstetrics, urology, plastic surgery). The introduction of same-day care in state healthcare also had an impact on the provision of this type of service by private providers from the second half of the decade. Private laboratory service providers expanded their range of services, offering specialised tests that state service providers could not implement. Private diagnostic service providers developed state-of-the-art technology (MRI, PET/CT, UH) and an increasing number of patients from the capital and the surrounding area, and even further afield, chose to use them for preventive purposes or reduce the growing waiting times in state healthcare. It was found that from the 2010s onwards most of the newly established private institutions were operating as private hospitals. They became more and more interested in finding the right medical equipment and human resources to cope with more serious and complicated cases, which required the involvement of big investors in the private health sector in Hungary and in Budapest. The second half of the decade saw a significant rise in solvent demand for a few days' private inpatient interventions, which was partly driven by the growing appreciation of private health insurance and partly, by the pressure of growing problems in state healthcare.

The early 2020s brought a turnaround in the private healthcare market in Budapest. In the first period of the coronavirus pandemic, private healthcare providers were also forced to close down during the period of restrictions introduced in healthcare. Their 'survival' was helped by their switching over to Covid–19 testing: the use of PCR, antigen and antibody tests increased massively, which, for example, resulted in an increase of nearly HUF 5 billion in 2020 compared to 2019 for SYNLAB Hungary,

<sup>&</sup>lt;sup>77</sup> Lantos 2018: 286.

a laboratory diagnostics company.<sup>78</sup> Apart from that, due to the rise in health awareness, which was also related to the epidemic, various screening packages were offered, digital solutions (online consultations) were given priority and modernisation interventions were preferred in investments.<sup>79</sup> At the same time, human resources capacity was increasing in private medical services. It was triggered by a change in legislation on the health-service legal relationship in state-funded healthcare in the spring of 2021. This drove healthcare workers towards private healthcare. It was further enhanced by the lifting of the ban on dismissals in the health sector on 31 May 2022, following the end of the epidemiological emergency. The private healthcare sector was prepared to face the challenge that once the epidemic was over, the difficulties in the use of the state-funded system would make people turn to private healthcare providers in the long term. For this reason, the private sector was determined to continue to expand the capacity and diversity of services in the future. The increase in demand following the epidemic also revealed the patients' need to be able to get access to different health services, from primary care through specialist outpatient services to hospital interventions, all in one place, i.e. within one building.

Private healthcare is still Budapest-centric in Hungary, with the largest players operating here, a total of 29 private healthcare providers. These include Affidea, Doktor24 Group, Dr. Rose, Duna Medical Center, Emineo, FirstMed, Istenhegyi Klinika, Maternity, Medicover, Pozitron-Diagnosztika, RMC, SYNLAB, TritonLife, Wáberer Medical Center, etc. The Primus Association bringing together private healthcare providers was established in 2017.<sup>80</sup>

The geographic location of private healthcare institutions indicates a typical spatial structure in the capital. Most of them are located at major junctions (5<sup>th</sup> district) or in office buildings close to junctions (9<sup>th</sup>, 11<sup>th</sup> districts) and next to busy roads (Váci Road, Grand Boulevard), while others are situated in green areas (11<sup>th</sup>, 14<sup>th</sup> districts) and many of them settled in premium residential areas (2<sup>nd</sup>, 12<sup>th</sup> districts) or newly built residential quarters. The spatial concentration of the private clinic network is well demonstrated by the office building situated at a traffic junction in the 9<sup>th</sup> district that was converted into an integrated outpatient and inpatient healthcare centre with the TritonLife Group and Duna Medical Center services established side by side.

<sup>&</sup>lt;sup>78</sup> Kormos 2021.

<sup>&</sup>lt;sup>79</sup> Csiki 2021.

<sup>&</sup>lt;sup>80</sup> Kincses 2019: 1513.

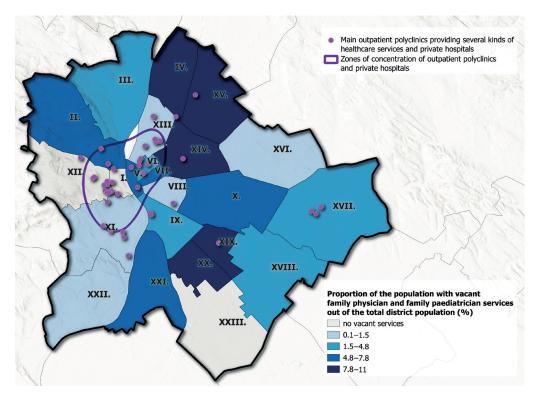


Figure 14: Some spatial characteristics of family physician services and private healthcare institutions in the districts of Budapest, June 2022

*Source:* compiled by the authors based on the data of the National Health Insurance Fund of Hungary, June 2022 and websites of private healthcare providers, June 2022

#### **Summary**

At the national level, favourable conditions have developed in Budapest for health-related quality of life. However, there are significant discrepancies within the capital due to the different characteristics of the socio-economic environment in different city districts.<sup>81</sup> In the course of history, a spatial fragmentation has evolved in Budapest, and it has contributed to the separation of the city's functional residential zones.<sup>82</sup> Over the past 150 years, the capital has developed a distinctive urban structure, which has exerted a significant impact on the population's living and working conditions, housing, living standards and access to various services. The combination of the positive and negative

<sup>81</sup> Csébi 2015: 31.

<sup>82</sup> Kovács–Dövényi 2021: 135.

factors inherited from the past and the new living situations that emerged after the regime change have influenced the current level of health-related quality of life in Budapest and the differences between districts. The current discrepancies in the quality of life have also been fundamentally affected by the urban development in recent decades. One consequence of this is that people of lower social status have become spatially separated within Budapest, occupying more areas but of smaller size and at a smaller scale, whereas those of higher social status have become concentrated in fewer but larger, homogeneous areas.<sup>83</sup>

This is also reflected in the evolution of objective and subjective elements of health-related quality of life. The objective indicators (e.g. mortality, life chances) are still unfavourable by EU standards, but Budapest has traditionally held a favourable position within the country, and this seems to be steadily improving. At the same time, inequalities within the city remain significant, in spite of the considerable changes that have taken place over the last decades, in parallel with the transformation of the metropolitan space.

The 2020–2022 Covid–19 pandemic has shed light on the challenges that the Hungarian health sector has faced in recent years, both nationally and in the capital. The emerging epidemiological emergency has also largely contributed to deepening contradictions and exacerbating problems. A big question for the future is whether it will be possible to tackle the challenges in the short or medium term, solve the problems and gain further advantages from the existing strengths in the long term.

As described above, there is a duality in the health situation in Budapest. The health status of the capital's population is one of the best in the country, two districts in Buda have the best life expectancy in Hungary. However, there are significant discrepancies in the health status of the population living in different districts. These discrepancies are also significant at national level, and some health indicators in the disadvantaged districts are worse than the national average. The socio-territorial differences in health status - health inequalities - are coupled with inconsistencies in the healthcare system. The direct, long-term effects of the Covid–19 pandemic on health and healthcare may be felt even years after the pandemic. During the epidemic emergency, between 11 March 2020 and 31 May 2022, the health system was only partially operational for long months, making access to healthcare difficult in many ways. This may lead to aggravated health problems, deterioration of health and/or avoidable mortality for chronic patients in the future. For example, due to missed screening, cancer diseases may be diagnosed with delay, which may reduce patients' chances of survival. Because of this, the demand for the use of health services may grow in the country and in Budapest in the coming years. Thus, healthcare must be prepared to cope with the constant overload, must be able to offer the required types of care for which it should create optimal operational capacity. People who have had a coronavirus infection may develop side effects and after-effects of the Covid-19 disease in the future. Post-acute or long Covid syndrome can affect anyone infected with the SARS-CoV-2 virus and may require medical care in the future, regardless of the severity of the infection. Since the spring of 2021, there

<sup>83</sup> Csanádi–Ladányi 1992: 132.

have been an increasing number of specialised post-Covid outpatient services, including one at Semmelweis University, but their number will probably need to be increased in the future. One such outpatient clinic was opened specifically for children at Paediatric Centre 1 in Budapest in March 2021.

Indirect effects of the pandemic, psychological and mental disorders, depressive symptom complexes, psychosomatic illnesses may also appear after the epidemic is over. The loneliness caused by the lockdown and confinement, the fear of infection, the anxiety of the new situation, the feeling of tension caused by distance working and distance learning, or post-traumatic stress have greatly contributed to the development and deepening of psychological problems. In the future, greater attention should be paid to ensuring that state healthcare can also provide appropriate psychiatric/psychological services for patients, also on a social security basis. Health Promotion Offices (HPOs), which have a key role in protecting mental health, can give assistance in this area. In 2022, there were 112 HPOs in the country, 6 of which were located in Budapest in the 3<sup>rd</sup>, 4<sup>th</sup>, 11<sup>th</sup>, 12<sup>th</sup>, 14<sup>th</sup> and 20<sup>th</sup> districts. In the agglomeration of Budapest there are HPOs in Biatorbágy, Bicske, Ercsi, Monorierdő, Szentendre, and Vác.

The mental consequences of the pandemic have also severely affected children and young people (because of impersonal education, isolation, new ways of consuming news). A new ward was set up for them in the largest child psychiatric institution in the country, Vadaskert Hospital and Outpatient Clinic (2<sup>nd</sup> district).

A slow and gradual change can start in the healthcare system of Budapest in the near future. This process could essentially be based on the elimination of the duplication of care and on a concentration established according to professional principles and a territorial basis. This transformation model, created at metropolitan level, could serve as a basis for the future reorganisation of the Hungarian health system.<sup>84</sup> The main development directions were already identified and set in Semmelweis Plan 2011, a strategic document for the renewal of the Hungarian national health system. Details of the Budapest-specific elements of the national professional concept were included in the Budapest Health Plan of 2012.

An important part of the national and metropolitan strategic development directions is the use of the territorial principle, which, in practice, can lead to the implementation of institutional concentration. One such concept is that emergency care in Budapest can only be provided in a few centres, which requires the designation of metropolitan institutions that can integrate all the professions involved in emergency care.

The Healthy Budapest Programme is designed to develop the healthcare institutions of the capital and Pest County. Within its framework, the renovation of several national institutions, hospitals and specialised outpatient clinics in the region have been going on since the end of 2010, with a total budget of HUF 700 billion. For example, a new diagnostic block will be built at the National Institute of Oncology, the Szent János Hospital will be renewed and extended, and a total of 32 specialised outpatient clinics will be renovated. The main task of the renewal of outpatient clinics is to develop same-day

<sup>84</sup> Gaál 2013: 10.

care services, which can help relieve the burden on the capital's family physician services already in the coming years. The medium-term objectives also set out the construction of the 1,200-bed South Buda Central Hospital in the 11<sup>th</sup> district, which could extend its healthcare zone beyond Pest County.

As part of primary healthcare, family physician and family paediatrician healthcare services in the capital will continue to set up group medical practices in the future, which will provide an opportunity to focus on preventive activities. General medical care in Budapest is expected to be strengthened already in the short term, which may be helped by the accelerated digitalisation of healthcare driven by the pandemic. An important element of this could be the widespread use of telemedicine in family physicians' and family paediatricians' services. However, alongside these positive developments, it must be taken into account that a large number of family physicians and family paediatricians in the capital are expected to retire in the medium term.

On the whole, the future of the private health sector in the capital may be determined by conflicting factors. The coronavirus pandemic has made many people value their health more, and improving health awareness could increase the demand for the screening packages offered by a wide range of private healthcare providers already in the short term. Increased challenges in state healthcare due to the pandemic – reduced capacity, difficult access, longer waiting lists – could also lead to the appreciation of private healthcare. This could be hampered by the fact that the rising inflation and a deepening economic crisis may lead to the shrinking of the solvent demand already in 2022. Social polarisation could ultimately widen health inequalities: in the future, access to private healthcare services could be a privilege of the few, and the middle class could face an increasing financial burden in using private healthcare.

The demand for private healthcare services has undergone several changes in the context of the epidemic in Hungary and Budapest. It can be assumed that as the epidemic subsides, the number of large-scale new investments in private healthcare will decrease. The broadening of the range of services and the digitalisation that started during the pandemic may also slow down. The general economic environment of the recession will not be favourable for private healthcare providers to expand their services in the countryside. Therefore, a regional concentration of private healthcare enterprises is expected to take place mostly in Budapest in the coming years.

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Viktor Pál – Annamária Uzzoli

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# The Formation, Development, and Changing Spatial Structure of the Budapest Agglomeration

#### Introduction

In common parlance, the term 'agglomeration' refers to a concentration or clustering, and at first glance, it aims to convey something similar in urban geography as well. Clearly, the first question is: What characteristics and peculiarities define a cluster with urban geographical content? In other words, the question can be framed as which factors' concentration creates a cluster that can be referred to as an agglomeration in a specific segment of space. This is also related to the problem of how to delineate the boundaries of an agglomeration, that is, where the concentration integrates into areas with different characteristics.

There are no universally accepted answers to these questions in the literature, making agglomeration research a current critical point in urban geography. The internal structure and delineation of agglomerations are generally determined using density, structural, and relational characteristics. In this approach, several groups of indicators, which are by no means independent of each other, can be developed:

- Demographic indicators for describing population density and the structure of the population. These features are most commonly used for defining agglomerations, as censuses provide easily accessible data for this purpose.
- *Economic indicators* for presenting the occupational structure, the economic structure, the labour market, and the educational level of the population. Data for these indicators can also be drawn from censuses.
- Network indicators for describing the density of the transport network and accessibility. These indicators are frequently used for defining agglomerations as well, though data availability can be more challenging.
- Ecological indicators for presenting environmental conditions.
- Urban planning and morphological indicators for reviewing the characteristics of built-up areas.<sup>1</sup>

Naturally, it is rarely possible to use the full range of relevant indicators when examining an agglomeration. This is also the case in our study: for the long-term analysis of the Budapest agglomeration, we have endeavoured to use the most relevant indicators for each period, without striving for completeness.

<sup>1</sup> GAEBE 1987: 18.

This was necessary partly because the number of usable indicators necessarily decreases as we go further back in time. However, this does not pose a significant problem, as the overview spanning approximately one and a half centuries illustrates the development of the Budapest agglomeration: initially, only the first signs of agglomeration can be detected, in the next phase, we can speak of a developing agglomerated area, and subsequently, the actual agglomeration takes shape. Thus, in this chapter, we attempt to provide a comprehensive presentation of processes and structures.

#### 1. Factors shaping the spatial structure of agglomerations

By 'spatial structure', we refer to the spatial functional arrangement determined by natural and infrastructural landscape elements, including communities, transport corridors, and economic factors. From a spatial structural perspective, Budapest and its agglomeration are undoubtedly among the most complex geographical units in our country. The formation and current spatial structure of the area now known as the Budapest agglomeration is the result of a long historical development, shaped by a combination of natural, political, economic, and social factors.

Among the *natural factors*, the topography and hydrography stand out, with the Danube being the most significant element influencing the spatial structure. Topographically, the agglomeration can be divided into two parts: to the northwest, it meets the mountainous region (including the Buda Hills, Pilis, and Visegrád Mountains), and to the southeast, it connects with the Great Hungarian Plains. The convergence of mountains and plains, along with the river crossing established on the Danube (the Tabán ferry), collectively represented the early situational factors that influenced the city's development.<sup>2</sup>

Among the *political factors*, the region's geopolitical situation, due to its strategic geographical location, is particularly noteworthy. As a central, densely populated area of the Carpathian Basin, it has played a pivotal role in the formation of Hungarian statehood from the outset (even though Esztergom and Székesfehérvár are now located outside of it). Since the 13<sup>th</sup> century, excluding the Ottoman period, the capital functions have largely been concentrated here. The role of politics is evident in the establishment of Budapest in 1873 and the significant expansion of the city's territory in 1950. The highly centralised transport network organised around Budapest and continually supported by politics has also influenced the settlement network and spatial order of the city region.

Among the *economic factors*, the impact of modern industrialisation on spatial structure is foremost. Following the Austro–Hungarian Compromise of 1867, the axis of the River Danube, the railway lines converging here, and the early and rapid urbanisation acted like a magnet, attracting industry and subsequently, the establishment of services. Early-starting capitalist industrialisation led to the clustering ('agglomeration') of various economic actors. Investments during the decades of socialism (new industrial sites, airports, and highways, etc.) further complicated the already intricate spatial structure.

<sup>&</sup>lt;sup>2</sup> Mendöl 1947: 557.

The economic restructuring that began after the regime change also strongly affected the spatial structure of the settlement agglomeration around Budapest. The role of the industrial zone, which hosted traditional industrial activities, diminished, while the new post-Fordist economy increasingly settled in the suburban belt and beyond, along newly built highways and transport hubs.<sup>3</sup> The rise of the post-Fordist economy brought rapid changes to the city's supply belt, which had previously been dominated by agriculture. Areas such as the northern part of Csepel Island and Vecsés saw the emergence of new industrial sites, logistics centres, and office parks.

Perhaps the role of social factors has been most indirectly influential in shaping the spatial structure of the region around the city, although they have been present from early times. After the Ottoman period, partly due to population resettlements, the region became highly diverse, with a mix of Germans, Slovaks, and Serbs. Different peoples brought with them their settlement and economic practices, as well as building traditions, which also influenced the internal structure of the agglomeration. However, the role of social factors only became increasingly prominent with the emergence of urban explosion and modern urbanisation, roughly from the time of the Austro-Hungarian Compromise, primarily due to migration. Since the Austro-Hungarian Compromise, this region has been the primary destination for migration in the Carpathian Basin, where a nearly 3-million strong complex unit of a large city and its closely symbiotic suburbs has developed. This intense movement of concentration towards Budapest, lasting nearly a century, eased by the 1970s and 1980s, first shifting to stagnation and then to migration in the opposite direction from the early 1990s. The construction of a ring of highways and outbound expressways around Budapest led to a significant suburbanisation of the population. As a result, development density around the capital surged, with formerly private gardens and recreational spaces becoming permanently settled, while the proportion of natural areas sharply declined.

By the turn of the millennium, the outflow of affluent populations had even reached more distant, previously untouched rural areas.

# 2. The early history of the agglomeration and its developing spatial structure

The current spatial structure of the Budapest agglomeration is the outcome of extensive historical development. As the central and densely populated region of the Carpathian Basin, this area has been significant since ancient times. Medieval long-distance trade routes converged at the junction of Pest and Buda, and from the mid-19<sup>th</sup> century, railway lines throughout the Carpathian Basin also intersected at this hub. All of this resulted in above-average population density and created the conditions for the development of close connections between communities.

<sup>&</sup>lt;sup>3</sup> Kovács et al. 2001: 191.

#### 2.1. Demographic factors in early agglomeration

In recent decades, the most studied process of population movement between Budapest and its agglomeration has undoubtedly been suburbanisation. This process has seen a significant outflow of population from the capital to the surrounding areas, substantially enhancing the residential function of the agglomeration. However, centrifugal migration processes were not confined to the period in question; during the Austro–Hungarian dual monarchy, deconcentrating migration patterns were already evident in the Budapest metropolitan area.

From the late 18<sup>th</sup> century until the Austro–Hungarian Compromise, the predominant migration pattern was characterised by significant immigration, which was the main driver of population growth in Pest and Buda. As a result, by the late 1860s, nearly two-thirds of the capital's population consisted of immigrants rather than native-born residents. By the time of the Austro–Hungarian Compromise (1867), the combined population of Pest, Buda, and Óbuda, which formed the core of what would later be known as Greater Budapest, had already reached 270,000. The 1872 law that sanctioned the unification of the city effectively recognised the fact of early agglomeration.

This concentration process remained largely unchanged in the quarter-century following the Austro–Hungarian Compromise, with rapid population growth persisting. By 1910, the population of the new capital had tripled, reaching 880,000. At that time, an unusual situation arose where not only the central city of Budapest and the suburban towns annexed in 1950 but also the entire agglomeration experienced significant population growth.

However, the first decade of the 20<sup>th</sup> century saw significant reorganisation among the city's three distinct regions: Greater Budapest, the suburbs, and the agglomeration. Population growth in the suburban areas remained highly dynamic, with a further 80% increase over ten years, reaching 217,000 by 1910. In contrast, the capital itself experienced a slower growth rate of only 20% during the same period. The agglomeration, meanwhile, saw a notable growth rate of 25%.

Since there were no significant differences in natural population growth across the three regions, it is clear that the changes are related to differing patterns of migration. Immigration was most influential in the suburban area regarding population growth: three-quarters of this growth was due to migration gains. In Budapest, this was 55%, while in the surrounding agglomeration it was nearly 45%. Contemporary statistical literature also suggests that communities around Budapest have diverted massive populations from the capital by effectively 'draining' migration.<sup>4</sup>

This observation holds true from two perspectives. On the one hand, the suburban area, and to some extent even the agglomeration, filtered a substantial portion of immigration coming from different parts of the country. On the other hand, it also welcomed a significant number of people migrating from Budapest. This population movement, referred to as 'outflow' by Gusztáv Thirring, represented a non-negligible loss for the capital. Although to a much lesser extent, this "leakage" was also noticeable in the agglomeration (*Figure 1*).<sup>5</sup>

<sup>4</sup> Thirring 1935–1937: 2.

<sup>&</sup>lt;sup>5</sup> Dövényi 2001: 251–264.

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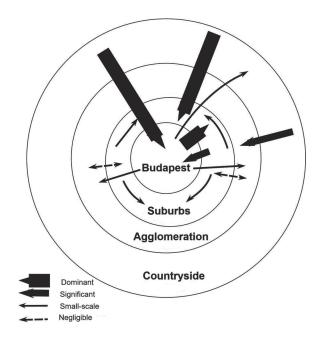


Figure 1: Migration model of Budapest and its surroundings Source: Dövényi 2001: 261

The primary reason behind the outflow of population from Budapest was that living costs in the capital were noticeably higher than in the surrounding areas. Those who could not afford this higher cost of living sought refuge in the suburbs as a form of escape. This migration is better characterised not as modern suburbanisation, but by the German geographical term 'Stadtflucht', which means 'escape from the city'. This is acceptable partly because a significant portion of those moving out belonged to the lower strata of society. For this reason alone, it cannot be considered typical suburbanisation of the time. The largest group of movers consisted of industrial workers, but even before World War I, there was also an 'outflow' of officials and employees. Alongside the general strengthening of residential functions, certain segregation tendencies began to emerge before the Great War, leading to the development of areas of varying residential quality. For example, officials preferred the communities in the Rákos region.

# 2.2. The economic factors of early agglomeration

The expansion of suburban development in the early 20<sup>th</sup> century also involved the relocation of industrial activities beyond the city limits. Economic development in the suburban zone significantly accelerated towards the end of the 19<sup>th</sup> century. By the early 20<sup>th</sup> century, with the establishment of mass transit (such as tram and suburban rail lines), commuting became widespread, and industrial activities rapidly extended

into the agglomeration area, including the municipalities (e.g. Kispest, Erzsébetfalva, Csepel, Budafok, Újpest, Pestújhely). The most intense territorial development occurred in what later became South Pest, with the first communities emerging in Kispest and Erzsébetfalva.<sup>6</sup> By the turn of the century, their populations had multiplied several times over each decade. From the early 1870s, these areas became accessible to workers from Pest and Kőbánya, and the first regular commuters came from here. By the end of the century, industrial communities in Ferencváros also attracted numerous workers. In the suburban zone, Újpest's industry grew so robustly that it began attracting workers from surrounding communities (e.g. Rákospalota). Budafok's industry was also significantly bolstered by the capital's market, with a stable and growing demand for its food industry, winemaking, and brewing products.

The characteristics of the urbanisation process around Budapest in the early 20<sup>th</sup> century remained largely unchanged until the creation of Greater Budapest in 1950.<sup>7</sup> At the turn of the 20<sup>th</sup> century, the northern urbanisation axis experienced the most intense development, extending as far as the Göd communities. The dynamism of the southeastern axis (including Kispest and Pestszentlőrinc) was not much less pronounced; in fact, population growth and territorial expansion there even surpassed that of the northern suburbs of Pest. After the turn of the century, the working class became the majority in suburban communities, partly due to the relocation of less affluent layers from the capital and partly due to job seekers accumulating at the city's borders.

At the turn of the 20<sup>th</sup> century, the growth of industry in the suburbs achieved remarkable increases. In 1900, the industry in the surrounding communities employed about 11,000 people, which increased to 32,000 by 1910, most of whom worked in factories.<sup>8</sup> The concentration of workers in the suburbs and the lower costs of industrial establishment (lower local taxes, cheaper land, utilities, and less stringent building regulations) attracted the factory industry en masse to the agglomeration ring, which by then significantly outstripped local handicrafts in importance. Numerous examples of modern industry relocation can be found, including incandescent lamp manufacturing, pharmaceuticals, machinery, and vehicle industries.

By the turn of the century, four major industrial centres had developed around the capital. Before World War I, Újpest was already the country's fourth largest industrial centre (after Budapest, Bratislava, and Timişoara). It was home to tanneries, timber yards, and furniture factories, and later became a hub for the cotton industry and the most modern industries of the time, including light bulb manufacturing, paint, and pharmaceuticals. In 1900, approximately 4,600 workers were employed in its industrial enterprises. Rákospalota's largest employer was the Istvántelki main repair workshop of the Hungarian State Railways, which employed 1,600 workers.

<sup>&</sup>lt;sup>6</sup> Beluszky 1999: 36.

<sup>&</sup>lt;sup>7</sup> Beluszky 1999: 47.

<sup>&</sup>lt;sup>8</sup> Fónagy 1998: 25.

In Kispest, Pestszentlőrinc, and Erzsébetfalva, the number of workers also exceeded 4,000. In Kispest, machinery manufacturing became significant through the Hofherr-Schrantz Agricultural Machinery Factory (1,900 workers), with other smaller machinery factories following. Later, the textile industry also settled here. In Erzsébetfalva, the jute and hemp industry was predominant.

Among the peripheral communities, Csepel became the second most important industrial centre after Újpest, where the Weiss Manfréd Steel and Metal Works became the second largest military factory in the Austro–Hungarian Monarchy. While in 1900 it still operated with 915 employees, by taking advantage of the wartime boom, it employed 5,000 workers by 1913. Ultimately, Budafok was distinguished from the peripheral communities by its significant food industry.

Despite the difficulties of rocketing growth, by the early 20<sup>th</sup> century, the first signs of the communities' transformation into fully-fledged towns were already apparent. Many of them gained administrative independence before World War I, established their municipal organisations, and created their key institutions. Újpest even received the status of a city with a municipal council. Before World War I, Újpest, Kispest, and Pesterzsébet increasingly adopted the character of industrial suburbs, while Pestszentlőrinc remained more of an uptown with no significant industrial presence at the time. Among the former agricultural communities, a significant transformation took place in Rákospalota, Csepel, Budafok, and Nagytétény, with the first two experiencing a particularly rapid change.

Békásmegyer, Rákoscsaba, and Cinkota lost their agricultural character, and within their borders, residential developments began to emerge. However, no industrial enterprises were established in these areas, and their connections with the capital remained looser. By this time, Budapest's allure had already extended beyond the later boundaries of Greater Budapest: the surrounding villages (such as those along the Galga and Tápió rivers and on the Csepel Island) became part of the city's supply zone, and the effects of labour attraction were beginning to be felt. In numerous municipalities (e.g. Dunakeszi, Csömör, Pécel, Budakalász, and Budakeszi), the proportion of industrial job seekers reached that of agricultural job seekers. This period also saw the relocation of some functions to this zone. For example, the Hungarian State Railways established a workshop in Dunakeszi, surrounded by residential areas of the Hungarian State Railways' employees. This was also when Alag, Alsógöd, and Felsőgöd began to be populated.<sup>9</sup>

By the early 20<sup>th</sup> century, such close connections had developed between Budapest and parts of the suburban area that the idea of creating Greater Budapest was already being considered before World War I. At that time, there were two options envisioned for the unification of the capital with the surrounding socially interconnected municipalities. One was municipal incorporation, where neighbouring municipalities would completely merge into the capital. This was considered particularly suitable for urban communities such as Újpest, Rákospalota, Erzsébetfalva, Albertfalva, and Budafok. The other option was administrative incorporation, where the affected municipalities would leave their

<sup>&</sup>lt;sup>9</sup> Beluszky 1999: 48.

original administrative boundaries and join the administrative framework of the capital. In this case, the municipalities could have retained their autonomy. Preliminary legislative preparations for this option were underway, but then World War I interrupted this issue as well.<sup>10</sup>

## 3. Development in the agglomeration between the two world wars

Following the border demarcation established by the Treaty of Trianon, both the country and Budapest experienced stagnation in their development. However, the suburban area became the fastest-growing group of communities in the country. Between the two world wars, the suburban areas experienced higher growth rates than Budapest in both population and economic development.<sup>11</sup> The establishment of an independent customs area, the liberation from the previous overwhelming dominance of Czech and Austrian textile industries, and the strengthening of the domestic textile industry due to protectionism all created excellent site opportunities in the region. Since there was no significant food industry or construction material production in the suburbs, the post-war recession had little impact on them. Their large heavy industry enterprises adapted more easily to the new conditions. Conversely, the emerging light industry (mainly textiles) found the suburbs to be favourable locations, with an even greater influx of labour compared to the capital itself. As a result of this development, the 1920s saw a shift in focus in the suburban area towards the light industry.

In Újpest, the existing large companies (Egyesült Izzó, Chinoin, Magyar Pamut Rt.) were joined by the textile industry. In Kispest and Pestlőrinc, four new textile factories were established in the 1920s. The industrialisation of Pesterzsébet and Soroksár began at this time, primarily with a focus on textiles. Csepel's character continued to be defined by its heavy industry, but with the establishment of a textile mill and a paper factory, light industry also made its appearance here. Large state projects also supported the development of the suburban economy. The completion of the Csepel Freeport in 1926 accelerated the industrialisation of the southern Pest areas. Alongside the port, warehouses and oil refineries were also constructed.<sup>12</sup>

After the decline following World War I, by 1926, the number of industrial workers in the suburban areas had reached 30,000. By 1938, this number had doubled, and by 1940 it had reached 70,000. By this time, 30% of the workforce living in and around the capital was employed in the suburbs. While in 1926 the industrial output of the peripheral towns and villages accounted for 36% of that of the capital, by 1938, it had risen to 48%.<sup>13</sup>

<sup>&</sup>lt;sup>10</sup> Hencz 1973: 36.

<sup>&</sup>lt;sup>11</sup> Fónagy 1998: 42.

<sup>&</sup>lt;sup>12</sup> Kovács et al. 2001: 196.

<sup>&</sup>lt;sup>13</sup> Berend–Ránki 1961: 558.

The growth of the suburban population significantly surpassed that of Budapest. Between the two world wars, the urbanisation of the suburban areas advanced. As a result, Kispest was granted city status in 1922, Pesterzsébet and Rákospalota in 1923, Budafok in 1926, and Pestszentlőrinc in 1936. Additionally, new communities were granted municipal autonomy (such as Pestszentimre, Rákoshegy, Sashalom, and Rákosliget). The idea of creating Greater Budapest became increasingly prominent during this time, and by 1937, the powers of the Public Works Council had been extended to include 22 suburban municipalities surrounding the capital.

The effects of urban expansion were evident across nearly the entire area of Greater Budapest between the two world wars (perhaps with the exceptions of Soroksár, Rákoscsaba, and Nagytétény). By this time, the focus of development had begun shifting to more distant areas, as evidenced by population growth rates surpassing rural averages, migration gains, rapid occupational restructuring, and increasing daily connections with the capital. Industrial expansion extended beyond what would later become Greater Budapest to include Pomáz, Szentendre, Dunakeszi, and even Vác. During this period, several small to medium-sized industrial enterprises were established, including textile factories in Budakalász, Pomáz, and Kistarcsa, a paper mill in Szentendre, and a canning factory in Dunakeszi. Additionally, World War II saw the establishment of a significant machine industry base, including aircraft manufacturing, in Szigethalom. This industrial development considerably increased the number of locally employed industrial workers.

The most intense development was observed to the north of Újpest, extending all the way to Vác. In this region, worker settlements were established, and in Dunakeszi, for example, a significant amount of industry was established. In the Great Hungarian Plains, the settlement belt extending from Isaszeg to Dunaharaszti, and to the south, Tököl and Taksony exhibited signs of agglomeration. Suburban development was uneven on the Buda side of the Danube. Érd led the development, but the communities in the Buda Hills showed few signs of urban expansion at that time. The effects of urban expansion were evident not only in population growth surpassing rural averages but also in rapid occupational restructuring and increased daily connections with the capital. By the time of the 1949 census, the population of some industrial suburbs (such as Újpest, Kispest, and Pesterzsébet) had already significantly exceeded 50,000.

The significant upturn in urban expansion also led to the resurgence of the Greater Budapest concept in the 1930s. The idea of removing the surrounding area from the administration of Pest County became increasingly compelling. There was, however, no consensus on what to do with the affected communities. By the end of the 1930s, the term 'capital and its surroundings' had become an administrative and legal concept, but the affected communities had not yet been officially separated from Pest County. The area in question included 6 cities and 18 villages, essentially the same circle of places that were actually annexed to the capital in 1950.<sup>14</sup>

<sup>&</sup>lt;sup>14</sup> Hencz 1973: 46.

#### 4. Development in the agglomeration during the period of state socialism

Following the establishment of the communist dictatorship and the dismantling of the market economy after World War II, the development of the capital's agglomeration continued under entirely new conditions. On 1 January 1950, Greater Budapest was created, incorporating 23 communities, including 7 towns and 16 villages.<sup>15</sup> Following the 'decapitation' of the former agglomeration zone, a new agglomeration area gradually developed outside Budapest's administrative boundaries in the 1950s and 1960s. A peculiar feature of the socialist period was the 'forced growth' of the suburbs. In the 1950s, due to the 'residence ban' introduced to prevent migration from the countryside to the capital and the availability of cheaper properties, the population of commuter towns surrounding Budapest (e.g. Vecsés, Gyál, or Érd) increased. People moving from rural areas who were seeking work in the capital settled en masse in the agglomeration zone and became daily commuters. This once again strengthened Budapest's role as a central attraction, as the population concentrated in the suburbs used a significant portion of the capital's services (such as hospital care, secondary and higher education institutions, and retail). From a statistical and planning perspective, the 1971 National Community Network Development Concept officially recognised the existence of the 'new agglomeration' and defined the boundaries of the Budapest agglomeration in 44 suburban towns or villages. However, this zone did not receive any special consideration and had no planning authority. They were treated as rural communities, which caused numerous problems due to the rapid and extensive development (such as underdeveloped infrastructure, and the absence of institutions, etc.).

However, despite the dominance of residential functions, the development of the suburban ring that was 'decapitated' in 1950 also allowed for some emergence of its own economic activity. The aircraft factory established in Szigethalom was replaced by the Csepel Automobile Factory. In 1952, a new bearing factory started operating in Diósd. In the early 1960s, two more massive investments resulted in the creation of the Százhalombatta Oil Refinery and the Thermal Power Plant. One group of industries around the capital settled north and northwest of the capital (Dunakeszi, Szentendre, Budakalász, Pomáz), while the other settled south and southwest (Szigethalom, Százhalombatta, Diósd). On the eastern part of the agglomeration ring, there was only one significant industrial centre: Kistarcsa. The areas to the east of Budapest were directly connected to the distinctly industrial peripheral districts of the capital. In 1957, the industry around Budapest employed 19,000 people; by 1960, this number had risen to 31,700; and in 1967, it reached 43,500. This was still a relatively small part of the total industrial workforce in the agglomeration, though its proportion increased slowly: from 5.3% in 1960 to 6.4% in 1967. In the towns with industrial facilities, the proportion of the industrial workforce consistently exceeded 50%. In communities with industry, the proportion of the industrial population exceeded 50% without exception. The majority

<sup>&</sup>lt;sup>15</sup> Beluszky–Kovács 1998: 110.

of locally employed industrial workers were based in Szigethalom, Dunakeszi, Budaörs, Törökbálint, Szentendre, and Budakalász. However, by the end of the 1960s, the growth of industrial employment in the zone had come to a halt.<sup>16</sup>

During the period of socialism, the economic spatial structure of the Budapest agglomeration was also primarily shaped by economic policy decisions. Between 1949 and 1953, alongside the further development of industrial enterprises established in Budapest, the need for industrial decentralisation also emerged. The industry in Pest County, particularly in the immediate vicinity of the capital, experienced extremely rapid growth between 1949 and 1966.<sup>17</sup>

After 1958, the need for industrial decentralisation gained greater emphasis. Proposals were developed to reduce the concentration of industry in Budapest. The goal was to gradually develop the surrounding towns of Aszód, Gödöllő, Vác, Dorog, Bicske, Ercsi, Dabas, Pilis, and Kiskunlacháza into 'satellite towns' around the capital. During this period, efforts to develop industry were primarily focused not on the industrialisation of more distant regions of the country, but rather on the immediate vicinity of the capital. However, the guiding principle of territorial policy soon changed, as it was recognised that the new industrial ring evolving around Budapest posed certain dangers (strengthening of the role of the capital as a 'hydrocephalus'). Therefore, in 1960, the resolution restricting industry installation was extended to include the 64 communities surrounding Budapest. This affected the administrative districts of Aszód, Buda, Dabas, Gödöllő, Monor, Ráckeve, Szentendre, and Vác in Pest County, as well as the towns of Szentendre and Vác. In Fejér County, it affected the Bicske district, as well as two villages within the district boundaries of Dunaújváros and five villages within the district boundaries of Székesfehérvár. Initially, the territorial scope of the 1960 government resolutions on limiting industrial development applied to the immediate vicinity of Budapest, but it was later extended to more distant areas.

Although the regulation was in place, both investment activity and participation in production remained essentially unchanged until the mid-1960s. Around Budapest, despite the restrictive measures, a new industrial ring began to take shape relatively quickly. In the 1960s, the fastest-growing industries were the manufacturing of electrical machinery and equipment, the chemical and rubber industry, the paper industry, and wood processing. The industrial structure of the zone is illustrated in *Table 1*. The heavy industrial nature of the area is indicated by the fact that 69% of the employed workforce worked in various branches of heavy industry. In 1960, there were 207 industrial sites, and by 1965, there were 241 industrial sites in the agglomeration (44 towns, according to the later 1971 designation of the National Community Network Development Concept). The fastest increase in the number of industrial sites was seen in industries that could be established in relatively smaller units (e.g. metal products industry).

<sup>&</sup>lt;sup>16</sup> Kóródi–Márton 1968: 69.

<sup>&</sup>lt;sup>17</sup> Kovács et al. 2001: 198.

Industry	Employees (%)	Fixed asset value (%)
Manufacture of transport equipment	30.6	26.8
Manufacture of metal bulk products	12.4	10.8
Handicrafts and home industry	11.0	1.5
Textile industry	9.6	8.4
Manufacture of electrical machinery and equipment	5.2	21.0
Mechanical engineering	5.4	6.0
Chemical industry	4.5	13.7

Table 1: Characteristics of the industry in the Budapest agglomeration in the mid-1960s

Source: Kóródi–Márton 1968: 79

From a statistical and planning perspective, the 1971 National Community Development Network Development Concept officially recognised the existence of the new agglomeration, delineating the boundaries of the Budapest agglomeration across 44 suburban communities. Contemporary spatial planning in the 1970s defined the structure of the Budapest agglomeration into four *(ring-shaped)* zones, as interpreted in the 1989 edition of the *National Atlas of Hungary* as follows.<sup>18</sup>

The core of the agglomeration was constituted of the pre-1950 administrative area (Smaller Budapest), which consisted of several functional and land use zones. The city centre (Inner City) was made up of institutions, offices, and the commercial district in the southern part. On the Buda side, the Castle District specialised in tourism and cultural functions. The city centre was not without residential functions either. In the so-called *first workplace zone*, the daytime population was approximately three times larger than the night-time population; more than 90% of the jobs were filled by commuters from outside. The housing stock of the *first residential zone* surrounding the city centre had significantly aged and deteriorated; the population in these areas had been declining since the 1960s. The zone was divided into sections by commercial, service, and institutional areas along the main roads. The second workplace zone emerged on the city's periphery during the initial phase of industrialisation. This zone concentrated 60% of the city's jobs and 70% of industrial jobs at that time. Its area was segmented by various 'large space-demanding institutions' (such as railway stations, cemeteries, green spaces, etc.). The second residential zone represented a transition toward the earlier peripheral districts and suburban areas. The nature of the development was more dispersed, featuring villa and apartment districts (in the Buda hills), family house neighbourhoods, and workers' colonies. From the 1960s onward, large residential estates began to proliferate in these areas.

The *inner agglomeration zone* included the former suburbs and peripheral communities; however, on the Buda side, the zone extended beyond the administrative boundaries of the capital (e.g. Budaörs and Budakeszi). In terms of functions and external appearance, this zone exhibited a highly diverse character: urban-type (e.g. Újpest, Kispest, and

<sup>&</sup>lt;sup>18</sup> Pécsi 1989: 335.

Budafok), predominantly residential (e.g. Sashalom and Rákosliget), transitional (e.g. Mátyásföld and Budatétény), and rural (e.g. Cinkota, Soroksár, and Nagytétény) locations alternated. While the distinct ring structure seen on the Pest side was absent on the Buda side (except for the industrial and transport service areas in Óbuda and southern Buda, as well as some residential estates), the prevailing feature was the villa quarter.

The development of the *central agglomeration zone* accelerated from the 1960s onwards, following the establishment of Greater Budapest and the restrictions that curtailed the city's expansion. It was approximately the same extent as the 'official' agglomeration, although the planning also included and treated several additional communities (e.g. Felsőpakony, Délegyháza, Zsámbék, and Telki) in a similar manner. The zone was functionally regarded as the capital's labour supply and recreational area. This was based on the fact that by this time, more than half of the working-age population was already commuting to Budapest for work.

Finally, by this time, a distinction was already made between the *outer ring of the agglomeration*, which had close commuting links with the capital, and the area that extended 30–50 km further along the main transportation routes.

The strongly monocentric nature of the Budapest agglomeration allowed for a different interpretation of its spatial structure. This is the well-known sector model, which divides the agglomeration into six territorial units with distinct functional areas. The areas designated by the cardinal directions (northern, eastern, southeastern, southern, western, and northwestern) were delineated by spatial planning, and they differ significantly from one another in terms of both their size and population.<sup>19</sup>

By the mid-1970s, out of the 44 municipalities classified within the agglomeration zone, approximately 20 had significant industrial activity. In the industrial plants of these communities, 90% of the employees worked locally, while only 10% commuted. The heavy industry character remained robust. By the mid-1970s, the economic nature and industrial development in the zone diverged from earlier expectations and objectives. Consequently, in 1974, the Council of Ministers reviewed the implementation and effectiveness of the earlier measures and regulations concerning the development of the agglomeration. To further reduce the industrial weight of the Budapest agglomeration, facilitate the implementation of the tasks outlined in the selective and intensive industrial development concept, and ensure the capital's labour supply, the Ministry of Construction and Urban Development issued a decree (No. 9/1975) concerning the establishment and development of industrial plants within the capital's daily labour catchment area. The size of the restricted development areas increased compared to the 1960s regulations. In addition to the 44 agglomeration municipalities, the cities of Gödöllő, Százhalombatta, Szentendre, and Vác, as well as all the villages in the administrative districts of Buda, Dabas, Monor, Ráckeve, and Szentendre, along with 16 villages in Fejér County, were included in the daily labour catchment area of the capital.

<sup>&</sup>lt;sup>19</sup> Kőszegfalvi 2012: 72.

According to the decree, the Minister of Construction and Urban Development's approval was required for the establishment of new industrial plants within the capital's daily labour catchment area or for the development of existing plants exceeding 100 employees over a five-year period. Detailed regulations specified which industrial or industrial-type activities did not require ministerial approval for establishment (e.g. industrial investments serving local daily needs, council budgetary enterprises, plants employing only locally mobilised female labour, agricultural co-operatives' food and wood processing investments based on the existing workforce). The regulations primarily restricted labour-intensive developments and also hindered the establishment of relocated plants from the capital. Relocations within the zone were considered as establishing new plants from the perspective of the receiving area.

The central leadership was prompted to take this drastic step due to the increasing shortage of industrial labour in Budapest. The growth of industry in the countryside and the agglomeration area, as well as the expansion of the service sector in both the capital and the agglomeration zone, significantly narrowed the labour reserves available to the city's industry. The situation was further exacerbated by the dominance of heavy industry in the zone, which primarily employed male workers locally, leading to a decline in the male workforce available for Budapest's industry.

The decree restricted and prevented the natural process by which industry and economic activity could have expanded beyond the city boundaries, potentially leading to a more complex agglomeration with better functional distribution. This measure also affected the capital, as the main potential environment for relocations was lost. As a result, within the capital, the central district's industry was kept in a stage of urbanisation where other functions could have taken precedence. Thus, through regulatory intervention, they prevented industrial suburbanisation, which was already well underway in Western European countries at the time. As a result, the number of locally employed industrial workers in the agglomeration was relatively low, while still exhibiting significant spatial characteristics.

The state of the economic spatial structure of the Budapest agglomeration by the late 1980s was essentially the result of the economic policy measures of socialism. During the decades of socialism, economic development was largely synonymous with industrial development, although there were notable advancements in some sectors of agriculture and services. Agricultural production did not exhibit significant differentiation, although a few communities, such as Gödöllő and Herceghalom, functioned as centres due to specific factors. Certain areas (such as Vecsés and the Danube Bend) were part of the urban supply belt with their specialised production, where the intensity and volume of agricultural production exceeded the regional average. In the distribution of services, the primary organising force was the settlement hierarchy, mainly due to the territorial concentration processes of the 1970s.<sup>20</sup>

<sup>&</sup>lt;sup>20</sup> Kovács et al. 2001: 200.

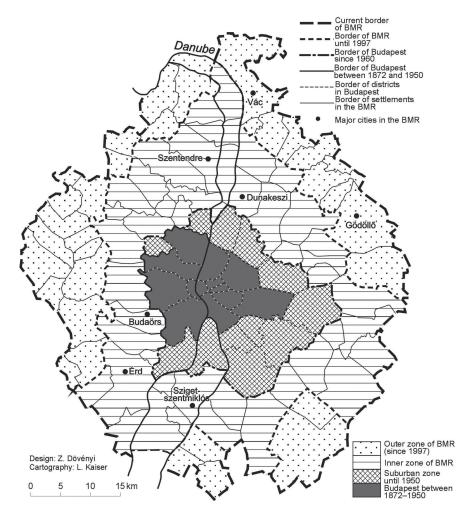
The industrial spatial structure that emerged during the regime change (considering the current agglomeration communities) can be understood based on the number of employees in industry and the gross value of industrial fixed assets. Data from the series of communities clearly show that the industry of the zone was concentrated in the current southern sector (with 31.5% of the employed and 58.4% of the gross value of fixed assets). The only town in the southern sector, Százhalombatta, represented a significant concentration, accounting for half of the zone's fixed assets, embodied by the Danube Oil Refinery and the Thermal Power Plant. The only other sector with a comparable level of concentration was the northern sector represented by the Vác-Dunakeszi urban pair (with 25.8% of employees and 17.4% of the gross value of fixed assets). By 1990, the first signs of economic transformation had appeared, but their consequences were not vet significant enough to notably alter the spatial structure established during the decades of socialism. Although several major factories had been closed by this time (such as the Hungarian Silk Industry Company's Lining Weaving Factory in Vác, the Ganz Danubius Container Factory, the Bakery Company, and the Optical Instruments Factory in Budakeszi), most company closures and transformations occurred between 1991 and 1995.

# 5. The transformation of the agglomeration after the regime change<sup>21</sup>

The nature of the relationships and division of labour between Budapest and its suburbs entered a new phase of development with the regime change, through the restoration of democratic local governance and market economy. The official boundary of the Budapest agglomeration was defined by Government Decree 89/1997, which originally included 78 municipalities; due to subsequent splits of municipalities, this number increased to 80.<sup>22</sup> This completed the zoning system still in use today, which distinguishes between the compact city (essentially Greater Budapest), the peripheral districts (municipalities independent before 1950), the inner agglomeration (the 44 communities defined by the 1971 National Community Network Development Concept), and the outer agglomeration (the 36 communities added to the agglomeration in the 1997 expansion) within the Budapest agglomeration area (*Figure 2*). As a result of the spatial processes initiated by the regime change in 1990, the Budapest agglomeration has now functionally extended well beyond the geographical boundaries defined by the 1997 government decree.

<sup>&</sup>lt;sup>21</sup> This part of the chapter relies on the authors' recently published work: Kovács–Dövényi 2021: 128–139.

<sup>&</sup>lt;sup>22</sup> Beluszky–Kovács 1998: 122.



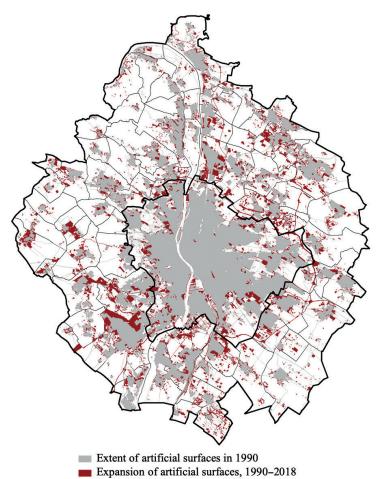
*Figure 2: Zones of the Budapest agglomeration Source:* compiled by the authors

With the creation of a free, unrestricted real estate market, it became possible for younger and wealthier families to move to the suburbs and into their own family homes.<sup>23</sup> As suburbanisation progressed, not only did the population, but also numerous businesses relocated to the suburbs, leading to significant transformations around Budapest due to urban sprawl. Among these changes, the notable aspects are the 'settling' of the natural landscape and the re-zoning and improvement of areas that had previously been used for agricultural purposes or so-called hobby gardens (*Figure 3*). According to our calculations, between 1990 and 2012, the area of artificial surfaces used for residential, economic, and recreational purposes increased by 145 m<sup>2</sup>, more than 20%, across the

<sup>23</sup> Dövényi–Kovács 1999: 33–57.

80 communities of the Budapest agglomeration. To the greatest extent, former arable fields, vineyards, and orchards fell victim to the expansion of artificial surfaces around the capital. This took place despite occasional central or local efforts to limit the expansion of developed areas.

In addition to the spatial reorganisation of the population, by the turn of the millennium, the establishment of productive (industrial) and service functions in the Budapest agglomeration became increasingly prominent. However, the presence of companies in this area is not primarily linked to the 'suburbanisation' of Budapest-based enterprises but rather to investments from outside, often from abroad. A characteristic feature of the agglomeration economy around Budapest is its concentration into functionally specialised areas (*Figure 4*).<sup>24</sup>



*Figure 3: Changes in built-up surfaces in the Budapest agglomeration, 1990–2012 Source:* compiled by the authors

<sup>&</sup>lt;sup>24</sup> Kovács et al. 2001: 214.

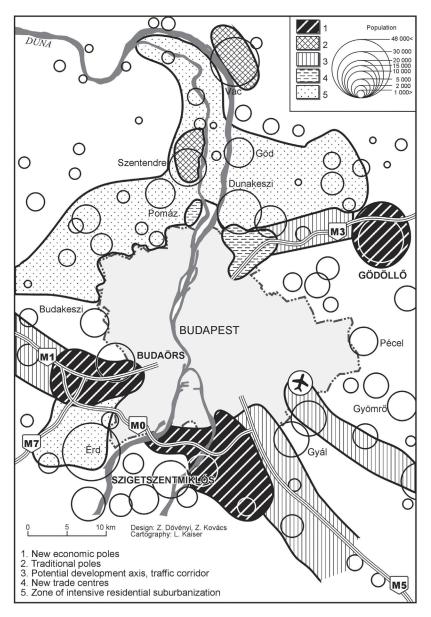


Figure 4: Functional spatial structure of the Budapest agglomeration after 1990 Source: compiled by the authors

First and foremost, the growth pole that developed in the Budaörs–Törökbálint area should be mentioned. At the western gateway of the capital, where three highways intersect, a profound economic transformation took place in the 1990s, which closely resembles the development of American edge cities. This economic growth sometimes also revitalised traditional centres, with Gödöllő being the prime example. A completely new spatial structure type is represented by the logistics zone that developed in the Szigetszent-miklós–Dunaharaszti–Alsónémedi region, specialising in warehousing, distribution, and wholesale. Due to recent logistics investments in municipalities along the M0 motorway, the southern sector of Budapest is on its way to becoming the largest logistics hub in the Carpathian Basin. This hub is already a crucial point in the trade between the western Balkans, Asia, and Western Europe. Similarly, there are no prior municipal precedents for the spatial units defined by new commercial centres (e.g. Budakalász and Fót, the M3 motorway exit from Budapest) or for the new business clusters created through the opening of the eastern section of the M0 motorway and the development of Liszt Ferenc International Airport.

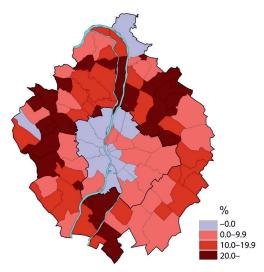
## 5.1. Society in the agglomeration

Considering the 1997 delineation, the population of the agglomeration fluctuated around 2.5 million following the regime change, meaning that one in four of Hungary's residents lived there. This relatively stable population figure emerged as the population of the capital decreased from over 2 million in 1990 to 1.729 million by 2011, partly due to outward migration. Meanwhile, the agglomeration's population increased from 566,000 to 805,000. Consequently, the demographic weight of the suburban zone within the agglomeration grew from 22% to 31.8% between 1990 and 2011.<sup>25</sup>

While the population in most of the capital's districts continuously decreased after the regime change, the agglomeration zone experienced very few instances of declining population (1990–2000: Visegrád; 2001–2011: Vác and Tök) *(Figure 5)*. On the contrary, as a result of suburbanisation, many communities saw a very dynamic increase in population, with ten locations more than doubling their population between 1990 and 2011. For example, Telki experienced a six-fold growth (1990: 629; 2011: 3,661 residents). For originally populous communities, the growth was on the order of tens of thousands (Érd: 20,304; Szigetszentmiklós: 15,336; Dunakeszi: 14,434).

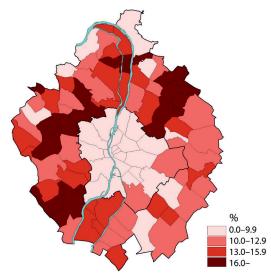
While natural population decline, a characteristic of the majority of the country's communities, also occurs in the agglomeration, the situation overall is more favourable here. As with many other indicators, there are pronounced differences in natural population growth between the capital and the agglomeration zone: Budapest's parameters are noticeably worse. This was particularly evident during the period from 1990 to 2001, when the number of deaths exceeded the number of births by nearly 130,000. Between 2001 and 2011, there was an improvement: the excess of deaths was reduced to just below 75,000, but natural decline continued to affect the population of all municipal districts.

<sup>&</sup>lt;sup>25</sup> Kovács–Dövényi 2021: 137.



*Figure 5: Population change in the Budapest agglomeration, 2001–2011 Source:* compiled by the authors

Between 1990 and 2001, most of the 80 agglomeration communities also experienced natural population decline, but in 21 cases, the number of births already exceeded the number of deaths. The significant improvement in the following decade is indicated by the fact that natural population growth was observed in the majority of communities (47 cases). Concurrently, the rate of natural population growth also increased: between 1990 and 2001, the highest rate was 4.9 per thousand (Százhalombatta), whereas in the following decade it had risen to 8.9 per thousand (Telki).



*Figure 6: Migration balance per 1,000 inhabitants in the Budapest agglomeration, 1990–2011 Source:* compiled by the authors

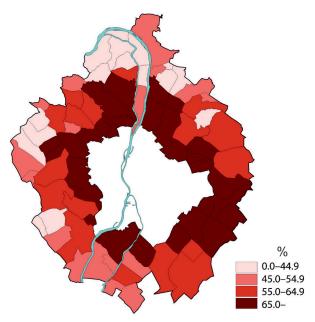
For a long time, Budapest and its surrounding area have been the most important population-attracting region in Hungary, and this remained true in the period following the regime change. However, a significant change compared to the past is that the phase of urbanisation has been replaced by suburbanisation, which brought about a markedly different migration pattern *(Figure 6).* The most important feature of this change was the significant outflow of people from the capital to the agglomeration. This caused substantial population losses primarily in the 1990–2001 period, with only five peripheral districts experiencing modest migration gains. In contrast, within the agglomeration, only one town experienced a migration loss (Százhalombatta –3.5‰), while in 11 cases, the migration gain exceeded 30‰, with Telki recording an exceptionally high value (97.6‰).

In the first decade of the 21<sup>st</sup> century, the migration differences between Budapest and the agglomeration area somewhat eased. This is indicated by the fact that, in terms of total migration volume, the capital had already recorded a gain of approximately 27,000 people, and there were positive migration balances in 14 districts. During this decade, all agglomeration communities had migration gains, with 16 of them showing values above 30‰. The winner of migration between Budapest and the agglomeration area continued to be the latter, as between 2001 and 2011, 265,000 people relocated from Budapest to one of the agglomeration communities, whereas only 156,000 moved in the opposite direction.

The migration patterns following the regime change transformed the composition, housing market needs, and spatial usage of the local society, as mainly younger and more educated families settled in the suburban areas.<sup>26</sup> While the population of the capital has traditionally been highly educated, this is not true for the majority of communities in the agglomeration area. This is also reflected in the fact that the proportion of degree holders exceeded the national average in only 27 communities. However, suburbanisation has notably increased the proportion of degree holders in some communities, with several surpassing 40% (Telki: 55.9%; Remeteszőlős: 48.0%; Nagykovácsi: 46.1%; Budajenő: 40.4%; Üröm: 40.3%).

Commuting data clearly indicate that the spatial movement of the workforce in the Budapest region changed after the regime change, with the work-residence dynamic shifting towards a new spatial structure of polycentric development. An evident sign of this shift was the emergence of new commuting patterns, such as reverse commuting from the capital to agglomeration communities, or cross-commuting between suburban centres (e.g. Budaörs, Törökbálint, and Érd). Despite these changes, the most significant commuting still remains towards the capital (*Figure 7*). In 2011, the 225,000 registered commuters accounted for nearly a quarter of Budapest's workforce, with a substantial proportion coming from the agglomeration area. The proportion of those commuting into Budapest was exceptionally high (around 60%) among all local workers, particularly in smaller communities close to the capital (e.g. Üröm, Pilisborosjenő, and Remeteszőlős) and those with good suburban rail connections (e.g. Budakalász, Csömör, and Nagytarcsa).

<sup>&</sup>lt;sup>26</sup> TIMÁR–VÁRADI 2000: 153–175; Dövényi–Kovács 1999: 33–57.



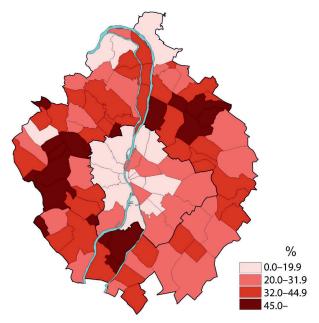
*Figure 7: Proportion of commuters to Budapest among local employees, 2011 Source:* compiled by the authors

At the same time, it can be demonstrated that the number of commuters from the capital to the agglomeration increased much more rapidly, doubling over the 21 years following the regime change. Within the more narrowly defined inner agglomeration zone, the number of people commuting out of the capital grew particularly strongly, surpassing the number of people commuting into Budapest. In 2001, approximately 5,200 people commuting from Budapest (7,847) had exceeded the number of people commuting from Budapest (7,847) had exceeded the number of people commuting from Budaörs to the capital (5,392) by 45%. In addition to Budaörs, other more populated municipalities where the proportion of commuters from Budapest exceeded 40% include Budakalász (48.3%), Pécel (45.4%), Törökbálint (45.3%), Vecsés (43.4%), and Budakeszi (42.2%).

# 5.2. Housing market in the agglomeration

The increasing spatial mobility of the population, changing residential preferences, and the demand-supply-based consolidation of the housing market resulted in significant transformations in the Budapest urban area after the regime change. In the development of the local housing stock, along with external demand, municipal governments also played a crucial role, as they determined the quantity and quality of available building plots. Of the 307,000 occupied homes in the agglomeration, 35.8% were built after 1990 (up to 2011). This proportion is more than twice the value for the capital city (15%), while also showing striking regional differences (*Figure 8*).

The Formation, Development, and Changing Spatial Structure of the Budapest Agglomeration

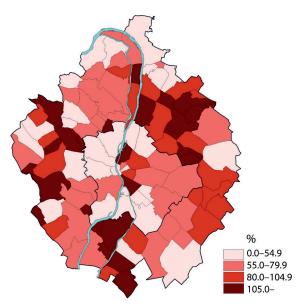


*Figure 8: Proportion of housing built after 1990 in the Budapest agglomeration, 2011 Source:* compiled by the authors

In general, the majority of new housing built after the regime change was concentrated in the hilly and mountainous areas with attractive natural features surrounding the capital to the north, while only a notable group of communities appears at the northern tip of Csepel Island to the south. Among these communities, Telki stands out as the leader, with 80.4% of its 1,186 apartments constructed after 1990. It is closely followed in housing market dynamism by Remeteszőlős (68.3%), Veresegyház (58.8%), Herceghalom (58.8%), and Budajenő (57.5%). In contrast, less than one-fifth of the apartments in Visegrád (14%), Vác (15.7%), Perbál (16.5%), and Dunabogdány (19.4%) were built after the regime change. Thus, the activity of local municipal leadership in terms of selling new plots and attracting new residents significantly varied within the agglomeration area.<sup>27</sup>

The picture is further refined by the number of newly built flats per 1,000 residents after 2001 (see *Figure 9*). At the top of the list is Herceghalom with 198 flats, followed by Csomád (177), Telki (156), Remeteszőlős (154), and Dunakeszi (152). These communities were the main targets for residential mobility in the agglomeration area during the decade following the turn of the millennium. The construction of new flats also often brought about a qualitative transformation, with an increased share of large, multi-room flats. In 2011, the proportion of four-room and larger flats was highest in Telki (72.6%), Remeteszőlős (64.8%), Nagykovácsi (57.1%), and Budajenő (55.8%). These are the most exclusive target settlements in Budapest's suburban zone.

<sup>27</sup> Kovács–Dövényi 2021: 139.



*Figure 9: Proportion of newly built apartments in the Budapest agglomeration after 2001, 2011 Source:* compiled by the authors

Budapest and its surrounding area's housing prices are among the highest in the country. Before the Covid–19 pandemic, in the years 2018–2019, the average price of used apartments was 32.2 million HUF in Budapest and 30 million HUF in its agglomeration. It is evident that today, in terms of housing market prestige, the agglomeration has caught up with the capital. Particularly, municipalities in the western and northern sectors of the agglomeration are characterised by high housing prices, which closely match those of the neighbouring Buda districts. In the decades following the turn of the millennium, most of the new housing was built here, primarily in the form of large-area, exclusive (e.g. with swimming pools) family houses and residential parks. The most expensive municipalities are Remeteszőlős (61.9 million HUF), Nagykovácsi (59.2 million HUF), Üröm (58.1 million HUF), and Telki (56.1 million HUF), which can be compared with the most expensive districts of the capital. On the southeastern side of the agglomeration, however, the average price of used apartments does not reach 20 million HUF, with the cheapest being Csörög at only 10.5 million HUF.

# Summary

One characteristic of the formation and long-term development of the Budapest agglomeration is that the number, area, and population of the associated settlements have all shown an increasing trend. In 1950, this was 'facilitated' by the administrative consolidation of 23 neighbouring towns and villages with the capital. However, this trimmed-down agglomeration continued to grow, and the 1971 official delimitation already included 44 municipalities. A further delimitation of the agglomeration took place 26 years later, in 1997, when a government decree expanded the concept of the Budapest agglomeration to include the capital and 80 surrounding municipalities. This delimitation was incorporated unchanged into Act LXIV of 2005, which governs the Budapest Agglomeration's Zoning Plan. Since then, there have been no government-level changes to the boundaries of the Budapest agglomeration, and this remains the official delimitation.

However, a quarter of a century has passed since the current delimitation of the agglomeration was established, making it unrealistic to assume that no changes have taken place that might warrant a revision of these boundaries. This perspective is supported by professional studies; for example, a 2014 model calculation suggested that 117 municipalities should be included in the Budapest agglomeration. Additionally, the study indicated that six municipalities currently within the existing delimitation would no longer be part of the agglomeration. With the above, we do not intend to say that an expansion of the Budapest agglomeration to this extent is clearly justified, but we agree that it would be worthwhile to thoroughly review the list of municipalities included in the agglomeration and, if necessary, make adjustments.<sup>28</sup>

While we do not claim that such an extensive expansion of the Budapest agglomeration is unequivocally justified, we do believe, it would be worthwhile to thoroughly review the list of municipalities included in the agglomeration and make adjustments if necessary.

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# The Transport Network of Budapest and its Agglomeration: Current Situation and Future Vision

#### 1. Historical introduction: The legacy of decades past

A metropolis and its agglomeration zone are the scene of simultaneous operation of multiple transport sectors, where the most important criteria for the smooth flow of traffic across various networks are safety, continuity, and co-ordination. Throughout the historical processes of Budapest's urban development, the expansion of the transport network also sought to keep pace with the growth of the population and the increase in the city's area. From the 1960s for nearly three decades, the development plans for public and individual transport in the capital and its agglomeration adhered to the so-called socialist urban planning and development principles. Until the 1970s, elements of the transport network that formed the basis of the system were built and expanded according to these principles, complemented by smaller sub-networks (such as trolleybus lines and Danube ferries) and specialised transport modes (such as the cogwheel railway and the Millennium Underground). The passenger connections between the municipalities of the agglomeration and the capital city were served by the Hungarian State Railways lines, as well as light railway lines and local bus services operated by the Volán companies in the surrounding areas.

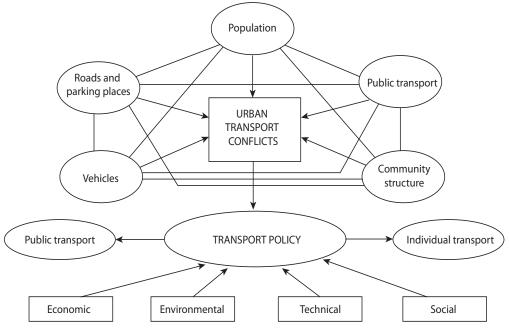
The opening of the first metro line section (the M2 line between Keleti Railway Station and Deák Square in 1970) and its subsequent extensions in several stages resulted in significant changes to the transport network. It marked the beginning of the reduction and fragmentation of previously long surface routes, the relocation of numerous tram and bus terminal stops to metro stations, effectively establishing these services as 'feeders' to the metro. Concurrently, the expansion of the metro network (lines M3 and M4) led to a decrease in the significance of public transport and an increase in the number of road lanes supporting passenger car traffic (Rákóczi Road, Váci Road, Bajcsy-Zsilinszky Road, and Üllői Road). However, the metro network thus created did not become an efficient means of connecting distant urban transport nodes (e.g. Pestszentlőrinc–Békásmegyer or Budafok–Rákospalota), but rather replaced surface transport in the inner areas. Its development was essentially limited to the inner third of Budapest.

Starting in the 1990s, long-term transport development planning adopted similar principles,<sup>1</sup> focusing on transforming metro stations in the capital's transitional zone into key transport hubs for seamless mode changes. From these hubs, commuters arriving from the agglomeration by suburban train, train, bus, or car would continue their journey

<sup>&</sup>lt;sup>1</sup> ARATÓ et al. 1997: 122.

by metro to their workplaces or to commercial and service facilities located in the inner city districts. However, despite being touted as 'passenger-friendly', and incorporating rational transport and traffic technology solutions, this system failed to consider Budapest and its agglomeration as an integrated territorial entity. This meant that it did not aim to plan a comprehensive, multifaceted transport network on the scale of the agglomeration, thus making the development projects based on the aforementioned forced mode changes redundant.

In the last decade of the 20<sup>th</sup> century, Budapest experienced a surge in urban transport conflicts, primarily driven by a sharp increase in private vehicles. This situation necessitated a fundamental shift and renewal in transport policy. To address this, it is crucial to conduct a comprehensive analysis of the factors contributing to traffic conflicts in metropolitan areas, which are becoming more severe due to increasing pressure on the transport network. Understanding these factors and their constraints (*Figure 1*) has proven essential throughout the development of new network planning approaches.



Compelling factors

*Figure 1: Simplified causal model of metropolitan transport conflicts Source:* compiled by the author

At the beginning of the 2000s, there was finally a conceptual shift in the planning of transport development in the Hungarian capital, which had long been lacking according to many transport experts and urban planners. This shift brought sustainability to the forefront,<sup>2</sup> as well as the necessity to expand co-operation with suburban municipalities.<sup>3</sup> This recognition also appeared in the long-term development concept. Specifically, it already included the so-called S-Bahn concept<sup>4</sup> for suburban rail transport, meaning that by connecting the 11 railway lines converging on Budapest through the terminal stations, a railway ring around the capital could gradually be developed. Thus, suburban trains – through their scheduled, timetable-based operation – could become part of the capital's internal transport network, raising the quality of public transport<sup>5</sup> in the Hungarian metropolis.

However, for a long time, Budapest also adhered to the practice of transport development planning typical of major Western European cities, aimed at catering to the growing demand for individual motorisation. This practice led to changes in residential location preferences and transport habits. In the case of the ring-radial urban public transport network, no plans were made to replace the congested downtown sections, as the 1980s projections for the 2000s anticipated traffic volumes significantly smaller than those of today, which were expected to be manageable by increasing the capacity of the roads passing through the city centre. This planning approach has had a major influence on the practice of designing urban spaces and the placement of pedestrian crossings. In the latter area, the emphasis was on the separation of pedestrian and car traffic at the same level, which manifested in the design and construction of an increasing number of underpasses and road overpasses.

The shift in transport planning priorities reflects how the previous approach gradually transformed in the newer transport development plans for Budapest; it shows how the essential transport aspects of the 'liveable city' concept began to be incorporated at a strategic level. The new concepts developed after 2000 emphasised the increase in the number of pedestrian zones, the networking of cycle paths, the creation of zones with reduced motor vehicle traffic, the designation of bus lanes, and the restoration of long bus routes, etc. All of this served to prioritise public transport over the needs of individual objectives and the growing demand for personal vehicle traffic. Simultaneously, Budapest's transport planners were faced with the need to regulate car and lorry traffic in the capital and to set up a public transport tariff community. Despite the positive efforts evident in the changes to planning practice, the transport infrastructure of our capital still retains, in many places, remnants of the previous approach that can be regarded as a negative legacy.

- <sup>2</sup> Tánczos 2000: 10.
- <sup>3</sup> FŐMTERV 2001.
- <sup>4</sup> FŐMTERV 2007.

<sup>&</sup>lt;sup>5</sup> FKT Urb Konzorcium 2008.

## 2. Current transport network issues in Budapest and its suburbs

In the three decades since the political-economic system change, transport development plans for the Hungarian capital and its agglomeration zone have not been able to follow the real urbanistic processes with sufficient flexibility, despite all professional efforts and renewal efforts. This has been a particular problem in the outer districts of the capital and in the agglomeration municipalities, where very intensive changes have taken place during the period (e.g. significant population growth and housing construction), while car use still dominates in the urban areas concerned. This problem, which affects the entire city of Budapest, has led to increased road congestion even in areas well-served by the public transport network. Since Budapest's radial-ring road network has been fully developed in the inner areas only, the consequence of the aforementioned suburban processes has been that the spatial development of Budapest and the expansion of built-up areas have not been accompanied by significant road network development in the outer districts. The appropriately sized and quality diagonal road and rail connections have not been fully established; the existing network elements are incomplete, and in some parts of the city, they are fragmented. There are no continuous, transversal connections between the outer districts of Budapest, either at the level of road or public transport networks, and as a result, an increasing share of road traffic not destined for the city centre is routed through the narrow street network of the inner districts, built almost a century and a half ago, and through the Danube bridges in the city centre.

Until recently, surface routes operating in the inner parts of Budapest – aside from a few cases – had no connections with the lines serving the outer districts. In this respect, the gradual development of the interconnected tram network has brought about positive changes. While the public transport network can handle the demands of the city's size and the travel needs of its population, the fixed-route network suffers from outdated infrastructure, which imposes constraints that lead to longer travel times, reduced schedule reliability, and diminished overall performance.

Up until the mid-2010s, transport development in the capital and its suburbs ignored the increasing popularity and significance of environmentally friendly cycling. Cycling was treated as a nearly 'insignificant' factor, separate from motorised transport. This approach is reflected in the current structure of the city's road network and the fragmentation of the existing cycle path network.

The most pressing transport-related issues in Budapest and its suburbs are largely rooted in urban structural factors, which can be summarised as follows:

*a)* The so-called modernisation urban planning practices, modelled on Western European examples, have led to a network and transport spaces serving the needs of individual car use in the Hungarian capital. The distorted urban structure, sprawling urban functions, and the avoidance of the optimal utilisation of areas previously used for industrial purposes force surface transport into unnecessary excess performance. The increasing use of metropolitan spaces for functions other than their original purposes is leading to mounting tensions, while many developments focus on addressing symptoms

rather than the underlying structural problems. Transport development ideas that do not fit into the system and are extracted from their urban structural context inevitably generate new issues. This situation is perpetuated by planning based solely on projects, lacking well-considered strategic objectives.

*b)* Instead of analysing the diverse and influential factors of transport and their interrelationships affecting urban development, outdated concepts or often foreign models, which are not adaptable due to the unique features of the Hungarian capital, have been implemented (e.g. traffic lane expansions and the planning of parking garages in areas intended for traffic calming). This has led to persistent, long-term issues, particularly exacerbated by the acceleration of suburbanisation processes. Interventions based on outdated models of responses to the challenges of the evolving metropolitan and suburban lifestyle only serve to worsen problems in Budapest and its suburban area, further increasing transport-related environmental impacts.

*c)* The significant structural deficiencies of the transport network at the metropolitan scale are currently largely hindering the development of a more modern traffic management system. The overemphasis on the importance of developments and the praise of expected outcomes have not resulted in the elimination of network deficiencies, which is a comprehensive conceptual problem. In Budapest's transport modernisation plans, radial network development has consistently enjoyed a lasting advantage over diagonal directions, as well as private vehicle transport over public transport. Due to the excessive financing of metro construction, there has been a lack of CapEx projects to support the development of surface public transport.

*d)* The fragmented regulation that hinders comprehensive transport development solutions further impedes the implementation of modern, environmentally friendly developments. Another issue is that the legal, institutional, and regulatory framework, which influences the entire planning environment, does not support rational co-operation. In the case of Budapest, this also manifests in the functional separation of local and interurban (agglomeration) transport development, ultimately leading to the failure of multi-party collaborations due to conflicting interests.

*e)* Another issue is the stubborn persistence of sectoral thinking and the lack of willingness to co-operate among different transport sectors. Both phenomena are evident in the transport system of the Budapest agglomeration, posing a serious obstacle to integrated transport development. Intra-sectoral routines, outdated habits, and practices persistently hinder modern solutions. This includes the exaggeration of technological and operational problems and the prioritisation of the operator's perspective over the service role of transport. The prioritisation of operational considerations over passenger comfort, or the rigid separation of fixed-track systems, both degrade the quality of service; procuring vehicles that only fit the existing network perpetuates these problems for decades to come.

f) Since the mid-2010s, both transport infrastructure and vehicle fleets have been increasingly plagued by a growing backlog of maintenance neglect, resulting from the persistent lack of upkeep and the absence of periodic renewals. This has led to significant technical deterioration that at times threatens the daily operation of the network.

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To address the listed issues, it is necessary to determine the correct directions for transport development. Special attention must therefore be given to sectoral and regional integration, as well as to aligning urban transport policy with other sectoral policies. To this end, raising the level of co-ordination and establishing effective co-operation between sub-sectors must be treated as a priority task. This is in line with the principles of modern mobility planning and the requirements arising from international experiences and the need for an integrated urban development approach. Additionally, integrating vehicle and road and track maintenance, operations, and development is crucial for improving the functioning of Budapest's currently problematic transport system. However, securing and properly monitoring the use of financial resources dedicated to these goals is essential.

In addressing transport issues, it is important not to forget that the sector is a significant city-shaping force, an economic development driver, and an environmental factor, forming an integral part of urban development policy. The development goals aimed at eliminating unfavourable conditions have already reflected the joint interests of Budapest and its agglomeration in the city development concept<sup>6</sup> adopted by the capital in the 2010s, in accordance with valid urban development principles. These principles are intended to ensure that transport measures are not implemented as isolated, ad-hoc interventions, but rather as part of a coordinated, comprehensive context. To achieve this, it is necessary to simultaneously consider the content of various metropolitan and national development documents, as each has comprehensive and sectoral transport development implications (such as national, Pest County, and Budapest area development concepts, and various scales of transport infrastructure development strategies). The developments must align with Budapest's current integrated urban development strategy and the city's spatial structure plan, as well as with various thematic development programs. Additionally, the transport development goals of national and metropolitan environmental protection programs must also be taken into account.

The planning aimed at modernising the agglomeration's transport network is supported by the fact that Budapest and Pest County's area development concepts have also formulated joint proposals for the development of the capital's region, which are prominently addressed in the objectives of the transport development plan.

A key professional requirement is that in Budapest's forward-looking urban development concept up to 2030, and in the capital's zoning regulations, transport conditions should be designed in accordance with the functions of these zones. Accordingly, the city's long-term transport development plan distinguishes between the following three main territorial units:

1. *Inner zone, including the Danube riverside and the central city areas:* Priority must be given to pedestrian, bicycle, and public transport, while personal vehicle traffic and through traffic that can be diverted elsewhere should be reduced. (These are the so-called environmentally sensitive and densely built-up areas.)

<sup>&</sup>lt;sup>6</sup> Municipal Government of Budapest 2013.

2. *Suburban and hilly zone:* In this territorial unit, public transport must provide reliable basic services, but personal vehicle traffic can also be significantly present. (These areas represent the loosely built-up regions.)

3. *Transitional zone:* This is the territorial unit where the coexistence of the two previous mobility preferences can be implemented. In addition to tram and bus lines crossing the area, the infrastructure for intermodal transport and the development of cross-directional connections will also play a role. (These areas can be considered transitional with significant development potential.)

## 3. The future vision of the capital's transport network

## 3.1. Strategic objectives for network development

The future of Budapest's transport network is fundamentally dependent on the vision outlined in the capital's general development concept extending to 2030, which is being pursued with determined effort. According to this vision, in just 10 years, Budapest will become a liveable, attractive European capital with a distinctive character, seamlessly fitting into the modern European city network as an innovative economic and cultural centre for the country and the agglomeration. In my view, to ensure favourable development for Budapest, it is worth pursuing the following transport-specific strategic objectives:

a) Network development to promote a liveable urban environment. The adverse aspects of the capital's transport network, which are attributable to urban structural reasons, as well as the inadequate connections between Budapest and the agglomeration municipalities, need to be transformed through integrated transport development. This involves favourably influencing transport needs and mode choice, reducing the environmental impact, and enhancing equal opportunities. Functional transport spaces must be integrated into urban public areas in a way that meets actual mobility and travel needs as an inherent part of the urban environment, while appropriately adapting to the area's characteristics. To achieve a desirable urban space and mobility, there is a need for transport infrastructure built with environmental consciousness, following the principles of compact city design and balanced urban structural development. Therefore, less environmentally damaging transport options must be made easily accessible, and their networks should be suitably shaped to support the everyday use of pedestrian, bicycle, and public transport.

b) Safe, predictable, and integrated transport networks. To ensure that the travelling public can reach their destinations daily, a safe transport environment and a unified, predictable, and reliable transport network are required. To ensure smooth and predictable operation of both public transport and private vehicle traffic, stable funding for transport must be secured, along with cost-effective development, maintenance, and operational interventions. This includes ensuring the integration of different transport modes, proper network connections, increased co-operation between services and providers, and the environment-specific application of sectoral division of labour. As the declining accident

rates observed in the early 2010s plateaued by the early 2020s, road safety must be given a prominent role in network development. Ensuring equal access to both Budapest's and the agglomeration's transport networks is also a crucial aspect of both network development and operation, as it is fundamental to providing safe and predictable travel for everyone.

c) Establishment of regional connections to deepen co-operation. The implementation of the regional integration of Budapest and its agglomeration cannot be imagined without the development of a transport network that also strengthens economic competitiveness. The Hungarian capital is located at the intersection of European, national, and regional transport networks, which ensures the creation of an economically competitive area on an international level from a transport perspective as well. Our capital and its agglomeration can provide an environment that supports a wide range of activities as a unified urbanised area. However, for properly coordinated economic co-operation, it is essential to organise different levels of transport networks into an integrated system and continuously improve their connections. The presence of macro-regional and international transport networks requires effective connections between incoming rail, road, water, and air networks and the proper linkage of these networks to regional and local networks.<sup>7</sup> To achieve the long-term development goals of the Hungarian capital, priority must be given to the principle – consistent with the aspirations of the European Union – that transport network development strategies should be integrated beyond administrative borders. Therefore, among the strategic objectives, there must be an emphasis on expanding regional transport network connections, establishing interoperable systems, developing intermodal transfer points, and ensuring the appropriate and adequately regulated institutional background for related services.

In the development the transport network of Budapest and its agglomeration area, there are additional supplementary and remedial tasks that need to be addressed. On the one hand, there is a need to provide public transport services that are still lacking in several newly developed urban areas over the past three decades (such as various residential developments on the Buda side). On the other hand, it is necessary to harmonise the current and future public and private transport needs of areas affected by future construction projects. In the outer districts and the agglomeration municipalities they interact with, the deficiencies in diagonal road and rail connections must be addressed. The aim is to prevent vehicle traffic from being routed through the inner Pest districts and across the Danube bridges. Additionally, reducing the fragmentation of the radial structured fixed-track transport network elements and, in the long term, eliminating it entirely is essential. The integrated planning and development of the core public transport network, covering the most important surface and underground connections, is of paramount importance. These high-capacity network elements (such as the metro, the suburban rail, the express bus services, etc.) must ensure high-level accessibility between agglomeration municipalities. To achieve this, a comprehensive approach to public space planning that prioritises the needs of pedestrians and cyclists is also necessary, particularly to enhance the liveability of the capital's public areas.

<sup>&</sup>lt;sup>7</sup> Fleischer 2010: 220.

# 3.2. Realistic operational objectives and the means to achieve them

To enhance the quality of transport infrastructure within the diverse transport network systems, it is necessary for Budapest and its agglomeration to establish operational objectives that: a) integrate public and private transport into the complex urban development process; b) facilitate the integration of various modes of transport; and c) support the regional integration of urban development processes occurring in the agglomeration. To achieve this, the following three main operational objectives can be outlined:

*a) Integrated network development for smart urban connections.* To achieve this objective, the following tasks will arise:

- A qualitative expansion of the network of public transport lines providing direct connections should be implemented, making them more competitive with private car transport. This requires the integration of urban and suburban rail networks.
- The existing fixed-track network lines need modernisation, which involves updating and replacing worn-out elements of both surface and underground track networks. Particularly important in this context is the prompt commissioning of sections of the metro network with high passenger-carrying capacity that are currently under renovation.
- The currently disconnected areas on the Buda and Pest sides must be linked, by creating new Danube crossings and eliminating at-grade railway and road crossings (through the construction of road underpasses and overpasses).
- A unified cycle route network must be established to support the further expansion of this environmentally friendly mode of transport, avoiding travel through traffic lanes on major roads that pose safety risks. To achieve this, the current fragmentation of the cycle route network connecting the districts of Budapest and establishing agglomeration and regional connections must be addressed.
- The network for water transport, which has been inappropriately overlooked and undervalued, needs to be expanded with the construction of suitable ports (particularly in the Danube riverside agglomeration towns), thereby establishing the infrastructural conditions for regional river navigation.

b) The creation of liveable public spaces free from the harmful environmental impacts of transport in Budapest and the agglomeration towns. This second operational goal can be achieved through the implementation of the following network development tasks:

- Developing a versatile system of sidewalks, pedestrian streets, and public space usage that considers urban structural characteristics. This task is fulfilled when safe pedestrian and bicycle traffic can be integrated into a unified network, especially in Budapest's inner city areas, which are overloaded from this perspective.
- Ensuring transport equality for people with various mobility restrictions by increasing the number of accessible pedestrian and passenger facilities (such as replacing stairs with ramps, building elevators, operating low-floor vehicles, etc.), with particular emphasis on the physical accessibility of metro stations and the availability of numerous underpasses in Budapest.

- Network developments that enhance the safety of public and private vehicle traffic, as well as pedestrian traffic, by modernising technical infrastructure elements that contribute to accident prevention.
- Increasing the quantity, length, and area of traffic-calmed or restricted vehicle traffic sections within the inner city road network. This means that, to improve the safety level for pedestrian and bicycle traffic, the system of speed-restricted zones in Budapest should be extended to cover all locally significant elements of the inner zone road network.

c) Development of an interconnected transport network with optimal interchange points. The key to achieving this third operational goal is the execution of the following tasks:

- Increasing the connectivity of different fixed-track network elements. Particularly, the railway sections crossing Budapest need to play a significantly larger role in passenger traffic within the city and between the towns of the agglomeration area. In line with this, the placement of railway stops should also be adapted to the city's traffic needs.
- Expanding and improving the quality of transfer connections that facilitate mode changes within the network. There is a great need to improve such connections at the current intersections of bus, tram, metro, suburban railway, and long-distance railway networks.
- Integrating the national main road network's sections leading to Budapest and bypassing the capital into the internal main road network. Such developments will enable a more rational and territorially balanced load on the road network within the metropolitan agglomeration and reduce or replace the overloading of the secondary road network serving residential areas.
- Expanding and enhancing the quality of the cycle track network in the capital and its agglomeration. The core bicycle route network forms a cohesive system in Budapest and in the Duna riverbank municipalities of the agglomeration that are significant from a tourism perspective. However, further development is needed in the northeastern and southeastern parts of the agglomeration, which have considerable green space potential.
- Integrating passenger shipping into the public transport system of the capital and its agglomeration. Increasing the availability of passenger shipping services in Budapest and the Duna-facing settlements of the agglomeration, as well as utilising the ports as intermodal transfer points, could significantly reduce vehicle traffic in central Budapest and along the embankments, while passenger ships could provide a new, environmentally friendly alternative in the urban transport network.
- Raising the accessibility of Liszt Ferenc International Airport (LFNR) in Budapest to a higher quality level. For this centrally important airport in Central Europe, the rail-based public transport connections to the airport offer a modern alternative to the current expressway. The railway service for LFNR should be efficiently

integrated with the long-distance and suburban transport network through a dedicated railway station.

- Developing intermodal hubs that effectively facilitate passenger transport mode changes. In establishing a unified transport network for the capital and the agglomeration, it is essential to create hubs that offer simple, quick, clear, user-friendly, safe, and comfortable transfers for passengers.
- Building a network of high-capacity Park-and-Ride (P+R) facilities and Bike-and-Ride (B+R) bike storage in Budapest and larger cities within the agglomeration. To create a liveable urban environment, it is important to direct motorised traffic from the agglomeration to the nearest P+R and B+R facilities next to suburban railway stations, thus reducing traffic entering the capital.

# 4. Specific network development programmes to be implemented by 2030

The strategic and operational transport network development goals outlined for Budapest and its surrounding agglomeration are supported by specific programmes. The successful implementation of these programmes will substantiate the vision for the future of transport in the metropolis and the region.<sup>8</sup> These large-scale development projects, implemented under the direction of the Budapest Development Centre and with financial support from the European Union, cover both the administrative area of the capital and the surrounding agglomeration.<sup>9</sup> Their common goal is to ensure the unified and harmonious future development of the transport network in these symbiotic urban areas.

# 4.1. Public transport development projects in the capital

In the next 8–10 years, developments will focus on rail networks, particularly *the modernisation of the tram network* in Budapest. Within this framework, three key development tasks have been highlighted.

*a)* Extension of the 3-line tram ring towards Angyalföld: This extension will create a connection with the tram line running along Lehel Street. The project includes the construction of a new road overpass, as well as the establishment of cycle tracks and sidewalks alongside the tram tracks. This new transport infrastructure will significantly improve rail transport connections between the areas of Angyalföld and Zugló.

*b)* Expansion of the Buda tram network to Budafoki Road: The successful development of the capital's network in recent decades continues southwards along the Danube. The new line will connect the university quarter and the Infopark with the heart of Buda and provide a link to the new residential and office district near the Lágymányosi Bridge.

<sup>&</sup>lt;sup>8</sup> Budapest Közlekedési Központ 2020.

<sup>&</sup>lt;sup>9</sup> Budapest Fejlesztési Központ 2019.

According to the plans, most tram services will connect with several metro stations on the Pest side, while a smaller portion will create a rail link along the Buda embankment towards Batthyány Square, complemented by a cycle track. As a result of the expansion, the northern part of the Lágymányosi area will shift from car-dominated surfaces to areas dominated by pedestrians, cyclists, public transport, and green spaces.

In line with the ongoing expansion concept, a multi-branching, north-south oriented rail axis will be established on the right bank of the Danube. Although the current project only extends the tram line beyond the Rákóczi Bridge, further extensions towards the rapidly growing parts of Újbuda should also be considered.

c) Construction of a new tram line between Kelenföld and outer Ferencváros: This new tram line will cross the new Danube bridges currently under construction in Csepel, the southern part of Budapest. The new public road bridges over the Danube at the northern end of the Csepel Peninsula and the access roads to these bridges will be equipped with tram tracks, providing a new connectivity alternative between the tram networks of Buda and Pest. The new track section will feature accessible stops with transfer options to the suburban railway lines.

## 4.2. Transport projects with a complex urban development impact

A substantial portion of the long-term transport development projects for Budapest will be realised as part of significant urban development activities. Each of these projects will enable a qualitative renewal of metropolitan life and public space use, thereby playing a crucial role in shaping the future vision of Budapest. Among these strategic programmes, the following have a direct impact on the transport network.

a) Renovation of the lower Pest embankment, thereby restoring the connection between the city centre and the Danube. The renovation includes expanding green spaces in the city centre, improving conditions for pedestrians and cyclists, and implementing measures to reduce road traffic. As a result of the project, the Pest embankment will transform into a flexible and representative waterfront area, ideal for hosting larger events. It will also be adaptable into a recreational waterfront area in case of temporary closures to vehicle traffic. By eliminating parking and storage functions on the embankment, a much wider, greened pedestrian promenade will be created. The entire length of the embankment will be made accessible, with road and pedestrian surfaces at the same level and uniform paving. Additional traffic safety and traffic management interventions will significantly enhance the usability of the area. However, the project is not popular among regular car users of the embankment, who would be deprived of an important central route. Their opposition has already been voiced in various press outlets. The Transport Network of Budapest and its Agglomeration: Current Situation and Future Vision



Figure 2: Plan of the future new Danube bridge (Galvani Bridge) to provide a transport link between south Buda and the Csepel Peninsula Source: Nemzeti Közlekedési Központ 2022c

b) Construction of new Danube bridges in the south of Budapest. On the southern 10-km section of the Danube in Budapest, which currently lacks bridges, two new independent Danube bridges will be built, connecting the southern part of Buda to the Pest side via Csepel, with a sophisticated architectural design (*Figure 2*). By connecting the new bridges to the capital's road network, it is estimated that the congestion in the city centre could be reduced by an average of 50,000 vehicles per day (including planned traffic calming measures), as the new infrastructure elements will take over part of the traffic that is forced to use the inner Danube bridges. The aforementioned improvements to the fixed-route transport network will include tramways, wide pavements and cycle paths on bridges, and the associated road network will be enhanced with tree-lined streets and green strips. The two new bridges will improve connections between the southeast and southwest of Budapest and will also help revitalise the former industrial areas. The new bridges will bring tram transport to the island and provide the Csepel district with a direct link to the southern part of Buda.

c) Construction of an intermodal public transport hub in Kelenföld. This development project will allow suburban buses to reach the newly built bus terminal in Kelenföld on the Őrmező side without detours, unlike the current terminus at Etele Square. The hub will also facilitate the creation of a significant number of P+R parking spaces. Passengers will benefit from higher quality services in the new building, while the current terminus area will be freed up for other uses. The project includes the comprehensive functional development of the Kelenföld hub, including ensuring accessibility to the nearby planned South Buda Centre Hospital by tram.

d) Comprehensive reconstruction of road access to Budapest Liszt Ferenc International Airport. Although traffic forecast studies indicate that it is not justified to connect Hungary's primary airport with the city centre by metro line, the current two-lane expressway leading to the airport is no longer suitable for providing road access to this major air traffic hub at a 21<sup>st</sup>-century standard. It is also inadequate for serving as both the M4 motorway and the main route of Road No. 4. The worn-out expressway is hazardous and highly prone to congestion. Reconstruction will involve the construction of a modern urban main road, eliminating at-grade railway crossings, incorporating separate bus lanes on certain sections, pedestrian and cycle connections, and green areas along the road. Modernising the road to the airport is also an important urban development task that will improve transport options for residents of the southern Pest districts and enhance cross connections between neighbouring areas. The project will also place a strong emphasis on prioritising public transport and significantly improving traffic safety in the affected areas.

e) Expansion of the capital's cycle route network towards the suburban municipalities bordering Budapest. During the execution of the development task named 'cycling garden suburbs', residents of municipalities within the inner ring of the agglomeration will be able to safely reach the nearest railway and bus stations, as well as several suburban railway stops by bicycle. An accessible cycling route between Budapest and their locality will be a realistic alternative, as the agglomeration's cycle route network will be seamlessly integrated with the city's network. The infrastructure supporting environmentally friendly cycling will be further developed, including improvements in storage and maintenance conditions (*Figure 3*). The project will not only facilitate a comfortable and easy mode of transport change but will also promote climate protection goals and encourage an active and healthy lifestyle.



Figure 3: Modern covered bicycle storage at the Pilisvörösvár railway station Source: Nemzeti Közlekedési Központ 2022b

*f)* Establishing bus lanes on Budakeszi Road. On Budakeszi Road, where traffic well exceeds its current capacity, bus lanes with intelligent traffic lights at intersections will provide an attractive alternative for daily commuters compared to private cars. Buses moving faster and given priority at intersections will make bus travel more appealing. Parking spaces and bicycle storage at bus terminals will facilitate switching modes of transport. The use of dedicated bus lanes can also address traffic congestion for Budakeszi and neighbouring settlements in the Zsámbék Basin, as it will reduce delays by promoting public transport. Although the Budapest Development Centre supports rail-based public transport wherever possible, there is currently no realistic alternative to constructing dedicated bus lanes towards Budakeszi, mainly due to topographical conditions.

g) Alternative use of unused urban railway stations. Two significant projects in this area stand out as particularly important for promoting comprehensive urban development programs. The first is the redevelopment of the former *Rákosrendező railway yard's* operational area for urban development purposes. The state-owned former sorting yard area located in the transitional zone between the city centre and the outer districts has excellent urban development potential. In the case of Rákosrendező, the exploration of the large area's possibilities and defining its future development will be undertaken in the near future, taking into account sustainability, environmental consciousness, and effective economic development, with the goal of creating a liveable modern urban district and new green spaces on the site of the former railway operational area. Market players need to be involved in the development of this well-prepared area in a regulated manner. Additionally, alongside the development of the Nyugati Railway Station and its connecting lines, the railway traffic needs for the newly functional urban district must also be accommodated.

The second significant project with similar content is the redevelopment of the former *Józsefváros railway station* site. Located along Kőbányai Road, one of Budapest's most important traditional urban axes, the state-owned Józsefváros railway station will be a key site for a comprehensive urban development initiative. Numerous cultural and sports investments in the surrounding area will support the renewal of the former railway station site at its centre. With the transformation of the current railway 'brownfield' site (*Figure 4*), a multifunctional urban district can be created that will include cultural and sports functions, new residential spaces, workplaces, and establish connections between surrounding areas. Ensuring internal accessibility within the area, as well as strengthening pedestrian and cycling connections between neighbouring districts, is also a crucial transport development task.



Figure 4: Aerial view of the former Józsefváros railway station site before its functional transformation Source: Nemzeti Közlekedési Központ 2022a

*h)* Creation of a car-free Városliget. The Budapest Development Centre considers it a key development task to establish a pedestrian- and cyclist-friendly function for Kós Károly Promenade and, secondly, to 'stop' the vehicle traffic arriving in Budapest on the M3 motorway at the P+R parking facilities being built at Mexikói Road. The aim is to encourage drivers to continue their journey into the inner city using public transport. By creating pedestrian connections between surrounding neighbourhoods and large-capacity P+R parking facilities, one of the 'lungs and green islands' of the city will be freed from significant volumes of through traffic after half a century. A car-free Városliget will become an attractive, nationwide significant public park, appealing not only to the residents of Budapest but also to visitors and foreign tourists, becoming a true green oasis on the Pest side, enticing for relaxation, rejuvenation, recreation, and sports.

# 4.3. Railway developments in Budapest and the agglomeration

In the future urban rail transport of our capital city, the modern railway network will play a prominent role, emerging as a key element in shaping the city's development processes over the next decade. The most significant railway developments will extend both to the districts and railway facilities within the administrative area of the capital, as well as to the agglomeration zone and its settlements.

# 4.3.1. Railway development tasks within the administrative area of Budapest

The most significant infrastructure developments related to rail networks in the capital city encompass various types of tasks (such as railway tunnel construction, station reconstructions, capacity expansions on certain line sections, track modernisations, etc.). Among these, the following are the most notable:

*a)* Reconstruction of the Nyugati Railway Station and its surroundings. A 21<sup>st</sup>-century requirement is that Hungary's busiest railway station should be able to accommodate significantly more trains and provide high-quality services suited to contemporary standards. This means that both the Nyugati Railway Station and its surroundings need comprehensive modernisation from technical, passenger comfort, and urbanistic perspectives. The project began in 2021. Included in this initiative is the construction of an underground station beneath and behind the existing hall, which, with its platforms and hidden approach tracks, will increase the station's train reception capacity by approximately 50% compared to the current setup. The reason for the underground construction is that this part of the station will serve as the receiving station for the future Danube river railway tunnel. Thus, the facility will transform into a through station, as a significant portion of the arriving trains will continue towards Buda, i.e. heading towards Széll Kálmán Square, Kelenföld, South Buda, and the western sector of the agglomeration, thereby creating numerous new direct railway connections.

*b)* Expansion of the southern circular railway's transport capacity. The two-track railway section connecting the Kelenföld and Ferencváros stations, which is serviced by the southern connecting railway bridge, is currently a bottleneck in suburban rail traffic. This railway section also handles significant volumes of domestic long-distance and international rail traffic. Therefore, during its development, a third track will be built alongside the existing tracks, and in some sections, a fourth track will be added. This will allow for increased train frequency (suburban trains running every 6–8 minutes). As part of the upgrade to the transport environment, new pedestrian and bicycle green corridor extending from Budaörsi Road to the Danube will be constructed. This project, the first major railway investment in decades within the capital, will improve transport comfort not only for daily commuters to Budapest but also for city residents with its new stops and increased train frequencies.

c) Modernisation of the Kőbánya-Felső – Rákos-Rákosliget railway line section. This project involves the construction of a third railway track between Keleti Railway Station and Kőbánya-Felső station on the shared introductory section of the main lines leading to the towns of Hatvan and Újszász. Additionally, the entire railway section passing through the eastern sector of the agglomeration, between Rákos and Hatvan stations, will be technically renewed. These developments will significantly improve Budapest's railway accessibility from the affected settlements in the metropolitan agglomeration, which will positively impact commuting conditions.

d) Construction of a railway tunnel between Kelenföld and Nyugati Railway Station. Among the various railway network developments in Hungary, this project stands out significantly due to its scale, cost, and technical solutions. The primary reason for its implementation is that the 19<sup>th</sup>-century terminal stations inherited by Budapest are no longer capable of accommodating many more trains daily in the modern era. More trains could only run on the suburban lines entering Budapest if the capacity of the three terminal stations could be significantly increased. Given the current railway technical conditions, this is not feasible, so the optimal solution might be to establish a through station system. This solution would enable the development of a new railway connection within the city, allowing trains arriving from one direction to leave Budapest via another line. The underground connection between Nyugati Railway Station and Kelenföld would not only address the capacity issues by relieving the terminal stations as traffic constraints but also create entirely new connections within the agglomeration zone's transport network. The development of Budapest's railway network is also a crucial urban development task, as the construction of the railway tunnel would free up substantial surface areas currently occupied by railway operations, making these valuable urban spaces available.

e) Development of a modern, accessible passenger centre at Keleti Railway Station. In the spring of 2021, the construction of a new passenger centre began at Budapest's largest railway station, which serves nearly 11 million passengers annually. According to the construction schedule, by the summer of 2022, a newly renovated, multifunctional passenger service facility will be available to travellers. The new centre will offer services for ticket purchases and handling matters related to domestic and international travel all in one location. The station area will be accessible in an accessible format (via escalator or lift) between the underpass level and the platform hall. The accessible, well-designed passenger centre will be developed below the platform level, through a complete redevelopment of the area previously occupied by ticket counters. The spacious passenger service area will include ticket offices and customer service counters, one of which will be accessible.

The railway network infrastructure development tasks within the administrative area of Budapest, as described above, require additional supplementary CapEx projects. These include the construction of missing stops within the city, as the absence of properly located railway stops often prevents transfers from the railway to the metro lines or trams. Even though trains with favourable service frequency will serve densely populated residential areas, residents will be unable to use the railway for their intra-city travel due to the lack of railway stops.

## 4.3.2. Railway line developments affecting suburban municipalities

It is well-recognised among transport professionals that the root of the most pressing urban transport problems in Budapest can be traced to the unhealthy increase in personal vehicle use originating from the suburban municipalities. For decades, the population of suburban municipalities around Budapest has been steadily rising, with the majority of residents working in Budapest. As a result, many people commute between their homes and workplaces on workdays. Two-thirds of daily commuters use their own cars for this purpose, and the traffic generated by these vehicles overwhelms not only the main roads leading into the city but also the much larger-capacity highway entrances. The solution lies in the significant development and modernisation of suburban railway lines and the suburban railway network, which could absorb a substantial portion of the current car commuters. The specific tasks are outlined in a railway development document for the capital's agglomeration, prepared under the direction of the Budapest Development Centre, which covers long-term planning.<sup>10</sup> The railway, particularly in the western, northeastern, and southeastern sectors of the agglomeration, needs to become more competitive with congested roadways as soon as possible. Therefore, the following development tasks are prioritised in the ranking of these tasks.

*a)* Track expansion between Kelenföld and Törökbálint. The section of the Budapest–Győr–Hegyeshalom double-track electrified railway line that runs within the agglomeration area is already so congested that train frequency cannot be increased any further. Since this section will also be part of the high-speed rail route connecting Budapest with the nearest Eastern and Central European capitals (Vienna, Bratislava, Prague, and Warsaw), there is an urgent need for additional tracks. Therefore, planning has begun for the expansion of the railway section between Kelenföld and Törökbálint, with the construction of a 9-kilometer third and fourth track on the most congested inner section of the railway.

b) Increasing the transport capacity of the Budapest–Veresegyháza–Vác railway line. Similar to other suburban lines around Budapest, this railway line also requires significant expansion of its capacity, as it must offer a real alternative to commuting by personal vehicle for the population of the agglomeration municipalities it serves. This requires the construction of a second track, which will allow for increased train frequency and average travel speed. According to model studies of the Budapest Agglomeration Railway Strategy, the planned capacity expansion could triple the number of weekday passengers on this line. Additional developments (such as making stations accessible, covering railway platforms, and providing bicycle storage and car parking facilities) could further enhance the attractiveness of using the railway line.

c) Upgrading of the Budapest–Lajosmizse–Kecskemét diesel railway line. The singletrack suburban railway line running through the southeastern sector of the agglomeration is highly utilised even in its current neglected state, indicating its significant future development potential. Due to outdated track infrastructure, trains can only operate at low speeds and are often overcrowded due to low service frequency. Modernising the line would not only provide a competitive alternative for the affected parts of Budapest (Kispest, Pestszentimre, and Pestszentlőrinc), as well as the neighbouring towns of Gyál and Dabas, but also for numerous other communities along the agglomeration ring.

<sup>&</sup>lt;sup>10</sup> Budapest Development Centre 2022.

4.3.3. Upgrading and integration of the suburban railway lines into a unified network

Traditional railway lines have distinct characteristics, but local railways serving Budapest and its agglomeration, which differ from traditional railways in many aspects, yet share similar technical features with other fixed-track transport systems, play a crucial role in public transport. Due to significant population growth in the municipalities affected by the agglomeration zone, their average daily passenger traffic reaches up to 200,000. The Budapest Agglomeration Railway Strategy rightly focuses on the development of the five suburban railway lines, particularly the Csepel (H7) and Ráckeve (H6) lines. While the Szentendre (H5), Gödöllő (H8), and Csömör (H9) suburban railway lines' termini in Budapest (at Batthyány Square and Örs vezér Square, respectively) are directly connected to the metro network, the termini of the Csepel and Ráckeve lines (Boráros Square and Közvágóhíd) are not. Although the two termini are relatively close to each other (just 1.5 km apart), the lines do not form a continuous network. Therefore, in this project, an important task will be to extend both the H6 and H7 lines from Közvágóhíd terminus through a new railway tunnel to connect directly with the metro network at Kálvin Square. This will enable passengers from Ráckeve and Csepel, as well as intermediate stations, to reach the city centre without transferring and connect directly to metro lines M3 and M4 at Kálvin Square.

Large-scale developments are expected to begin in 2026. The first phase will involve extending the suburban railway line in Csepel southwards to Erdősor Street, where a new terminus will be constructed. Simultaneously, the entire track will undergo technical modernisation. The second phase will involve connecting the Ráckeve and Csepel lines and extending the shared track to Kálvin Square in the form of an 'underground suburban railway line'. The planned start year for this project is 2027. As a result of these developments, fixed-track suburban transport could become competitive with passenger car traffic and help reduce transport-related emissions in the affected urban areas. During the modernisation of the suburban railway lines, track renovations will eliminate current speed restrictions and allow for increased operating speeds. The upgrades will also include the reconstruction and accessibility improvements of stops, enhancement of station environments (including increased green areas), renewal of passenger information systems, and the establishment of P+R and B+R parking facilities.

Long-term development plans include the conversion of the Gödöllő and Csömör suburban railway lines into metro lines. Development plans for the Szentendre suburban railway are still in the pre-planning stage.

The extensive network development for fixed-track transport, which will cover both the capital city and the municipalities in the agglomeration zone, will require additional ancillary developments at approximately 50 railway stations and suburban railway stops. These developments will include the *construction of numerous P*+*R parking spaces and bike storage* facilities. According to surveys by the Budapest Development Centre, it is necessary to expand storage capacity at railway and suburban railway stops in the outer districts of Budapest and the agglomeration municipalities by installing approximately 10,000 car parking spaces and around 8,000 bicycle storage units.

#### **Summary**

In the shaping of Budapest as a metropolis, a key role has been played by the multi-stage development of the capital's transport network. This process, spanning a century and a half, has been characterised by the continuous expansion of the network and the adaptation of its spatial structure to changing travel demands. Concurrently, a significant network development task was the establishment of multifaceted passenger transport connections between the capital and the increasingly expanding municipalities of the agglomeration zone, which required the expansion of various fixed-track and road transport networks.

The future vision for the transport of Budapest and its agglomeration is shaped by the short- and long-term developments of each networks of the transport sector. The process, coordinated and directed by the Budapest Development Centre, is carried out based on strategic and operational development goals, using tools that serve these objectives. The most important of these goals are: 1. Creating a safe, predictable, and integrated urban transport system; 2. Deepening and diversifying cooperation in the transport spatial connections within the agglomeration; 3. Promoting intelligent forms of integrated network development (energy-efficient, non-polluting, and quiet).

Achieving optimum ratios between motor vehicle traffic and pedestrian traffic in the use of public spaces in Budapest, in order to minimise conflict situations.

Expanding and passenger-centred development of intermodal public transport connections. This includes linking Budapest and suburban fixed-track transport networks (tram, suburban railway, and railway lines), integrating the sections of the main road network bypassing Budapest and entering the city with the inner-city road network, incorporating Danube navigation into the capital's and agglomeration's transport, improving access to Budapest Liszt Ferenc International Airport, and expanding the agglomeration connections of the recreational and tourism-oriented bicycle network.

The outcome of long-term network developments will be the realisation of a modern, environmentally friendly, and passenger-friendly transport network in Budapest, offering a wide range of services to travellers, and a highly integrated agglomeration transport network within the capital's transport system. Of course, this requires the continuous provision of all European Union and domestic resources to the capital and agglomeration zone to make such a vision a reality.

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# Tamás Sikos T.

# The Evolution of Retailing in Budapest

#### Introduction

The retail network of the Hungarian capital<sup>1</sup> has undergone significant changes in the last 30 years. This fundamental change can be explained partly by global processes and partly by the specific situation in Hungary and Eastern and Central Europe – i.e. the conditions of the socialist era, influenced by European trends of the time.<sup>2</sup> The system also had its own specificities – as a consequence of the regime change. The changes of the last three decades have significantly transformed retailing in Budapest and the shopping habits of the population. The quality of life and the standard of living have also changed fundamentally. In addition to spread of mobility, new satellite technologies have brought significant changes in the field of commerce.<sup>3</sup> The question today is no longer how close we are to the developed world, but how quickly we have access to the right solutions and basic supplies, and how these supply chains are organised. In our globalised world, we need to create a new harmony between globality and locality.

#### 1. Structural characteristics of commercial zones in Budapest

The creation of the most important commercial areas of the Hungarian capital is closely linked to the development history of the metropolis. In the topographic development of Budapest, among urban planning and urban regulation activities, the most important one was probably the transformation of the city core, which became necessary during the construction of Elisabeth Bridge (Erzsébet híd). Although construction was finished during the First World War, the construction of a city centre suitable for a modern metropolis was only completed after the war. During this period, the *traditional shopping zone of* the capital was developed in the area bounded by Vörösmarty square – Károly Boulevard – Kossuth Lajos Street and the Danube. The zone is still one of the most elegant and exclusive business zones of the capital, and its most expensive shopping area. Regarding its function, it plays the same central role in the life of the city as Kärtner Strasse, the shopping street of Vienna.

A very important step in the transformation of the inner city (Belváros) area was the banning of cars from the commercial district and the conversion of the northern part, Váci Street, into a pedestrian street. This process started in the northern part of the city

<sup>&</sup>lt;sup>1</sup> Sikos T. – Hoffmann 2004a: 380.

<sup>&</sup>lt;sup>2</sup> Sikos T. 2009: 200.

<sup>&</sup>lt;sup>3</sup> Sikos T. – Hoffmann 2004b: 115.

centre in the late 1970s, while in the southern section the construction of pedestrian streets took place only in the second half of the 1990s. The retail characteristics of the northern and southern sections of Váci Street are also different: the northern section is characterised by luxury shopping, while the southern section is more traditional. Presently, the northern and southern sections of Váci Street are clearly separated. The separation is more conspicuous as Szabad sajtó Road and Kossuth Lajos Street splits the area into two parts. In the longer perspective, however, the luxury commercial zone in the north is likely to continue to spread southwards, and over time, a bipolar commercial core may emerge in the inner-city area (*Figure 1*).

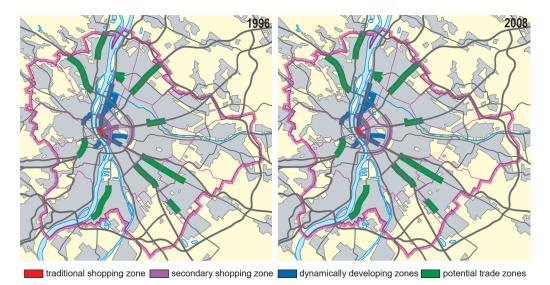


Figure 1: Commercial zones of Budapest in 1996 and 2008 Source: SIKOS T. 2019: 137

After the construction of Elisabeth Bridge, the commercial role of Rákóczi Street became more prominent but remained secondary to the northern section of Váci Street until 1996. Its large department stores (Corvin, Otthon, Verseny, Csillag, etc.) closed down in 2008. The range of goods they sold used to be at the lower end of the market anyway, while Váci Street and its surroundings offered mainly high-quality, up-market products.

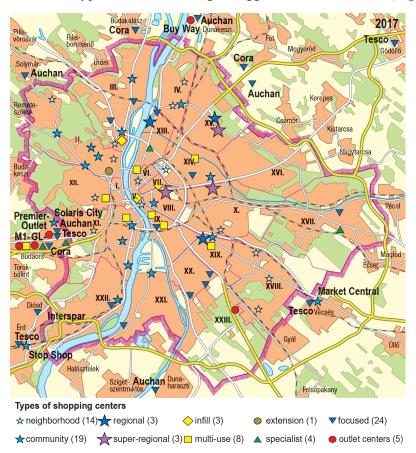
The Grand Boulevard (Nagykörút) between Margaret Bridge and Petőfi Bridge is an organic part of the *secondary shopping zone*. This section is mainly characterised by small shops, often no more than 20–50 m<sup>2</sup> in size, but sometimes much smaller. In total, the shops in the Grand Boulevard represent about 150,000 m<sup>2</sup> floor area. In recent years, retail trade has been developing very dynamically in Váci road as shops with large floor area have moved here from the inner city and the secondary shopping zone due to the high rental fees they had to pay there.

Along the roads leading out of the city, a *new commercial zone* has emerged, with mainly large car dealer companies and yards for used car parts, solid fuel trading and

building materials and supplies, requiring large surface areas. An analysis of the structure of commercial zones in Budapest shows that the trend of development is similar to that of the major cities of Western Europe decades earlier (*Figure 1*).

In Budapest, shopping centres started to be built in the 1970s (Flórián Shopping Centre, Skála Department Store),<sup>4</sup> but their spectacular, explosive development only started in the 1990s.

Currently, there are 38 shopping centres in Budapest, covering around 965,707 m<sup>2</sup>. By 2021, this network increased by one more centre (Etele Plaza) and by 55,000 m<sup>2</sup> retail space. The total number of shops in the shopping centres is 4,531, which means that on average there are around 119 shops per centre. Of course, the number of shops varies considerably between centres, the smallest centre has 10 shops and the largest has 432 shops. The total number of hypermarkets including the agglomeration zone is 24 (*Figure 2*).



*Figure 2: Types of shopping centres in Budapest, 2017 Source:* compiled by the author

<sup>4</sup> At the location of the Skála Department Store, which opened in 1976, the Allee Shopping Centre has been operating since 2009.

However, the transport network development of the capital could hardly keep pace with the rapid emergence of the new types of retail units, the negative effects of which can still be sensed in case of several shopping centres. Until 2008, when the global economic-financial crisis broke out, the retail structure of Budapest and the agglomeration area had been developing dynamically, but then the development process came to a halt. In this situation, ongoing investments were stopped (see the Tó-park project) and no new ones were launched in the market after 2011. Among the projects that were already under way and were started before the economic-financial crisis broke out, the second phase of Allee (2009), Corvin Plaza (2010), Europeum (2011), Hegyvidék Shopping Centre (2012) and Árkád (2013) were completed. The Hungarian population was largely affected by indebtedness in Swiss francs, causing purchasing power in shopping centres to decrease considerably, which negatively impacted further developments. In the context of the crisis, households sought to design special strategies and ways to minimise their losses. The economic-financial crisis led to dramatic changes in the shopping centre market. The potential purchasing power decreased, the conditions for sale became more difficult and increased competition between competitors. The effectiveness of previously attractive marketing methods – advertising, discounts – greatly declined, and this particularly affected badly located centres. The most fundamental issue of the trade: "location, *location, location*" came to the fore, that is the role of the location.<sup>5</sup>

# 2. Competition between 'goliaths' in the shopping centre market, comparison and competition analysis

The battle going on in the shopping centre market is exemplified by the competition between Arena Plaza<sup>6</sup> and Árkád Budapest: both centres are classified as super-regional and were built to become modern centres to meet the requirements of our times.<sup>7</sup> Arena Plaza (66,000 m<sup>2</sup>) was built in 2007, and in response to this, with some extension, Árkád 2 (20,000 m<sup>2</sup>) was built in 2013, thus Árkád Budapest became the largest centre in Hungary with its 68,000 m<sup>2</sup>, and by 2017, the capital had 5 major centres (including the renewed MOM Park, Mammut and WestEnd City Center). One of the secrets of the operation and success of these centres, as we have mentioned before, is the right choice of location, a favourable shop-mix and the morphology of the centres. There are also

<sup>&</sup>lt;sup>5</sup> There is a very strong link between shopping centres and food retail trade, because shopping centres integrate certain members of hypermarket and supermarket chains. Food stores are the dominant shops of shopping centres that attract buyers. Smaller shopping centres may be maintained by a hypermarket or a supermarket. In case of malls, these retail units also play a decisive role in attracting purchasing power, as a significant part of the turnover is realised through them.

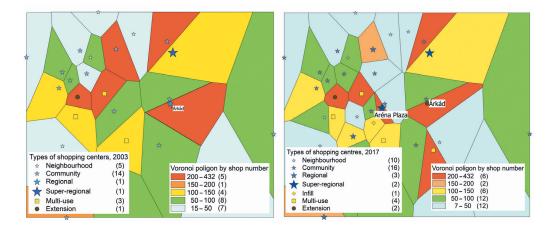
<sup>&</sup>lt;sup>6</sup> During the years of the economic and financial crisis, it was extremely difficult to open Arena Plaza (purchasing power was significantly reduced due to loans provided in Swiss francs).

<sup>&</sup>lt;sup>7</sup> Sikos T. – Hoffmann 2012: 166.

a number of losers in the shopping centre market (Lurdy ház, Rózsadomb Center, Rózsakert, Új Udvar), their failure is due to inappropriate site selection, an unfavourable shop-mix, poor morphology characteristics, or a combination of these.

Shopping centres in the capital are not only in competition with each other for consumers, but also with centres in the agglomeration area (see in detail later). Especially strong is the extraction effect of the retail units located in the western sector of the agglomeration, mainly in Budaörs, Biatorbágy, and Törökbálint.<sup>8</sup> It was partly due to this effect that MOM Park was unable to compete with these retail centres for a long time. It was a hindering factor that it did not have a public transport hub like Mammut in its immediate vicinity, and its situation was made even worse due to the fact that its shop-mix did not serve the needs of the customers in its gravity zone. The rebranding of MOM Park in 2011 helped, when it was expanded and new shops and service provision units with strong attraction effect were added to it, such as the Vapiano restaurant.

In our research, we used the Voronoi diagram to analyse structural change in the trade network (*Figure 3*). The Voronoi diagram can be used for descriptive, predictive, and heuristic purposes. Voronoi's method is a tool for forecasting, but it also helps to select spots where we maximise distance from competing facilities. Voronoi polygons represent the 'ideal market areas', and this way they can be used as units for the systematisation and/or collection of population and consumer information.



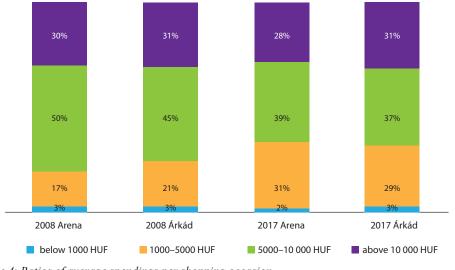
*Figure 3: Changes in the retail structure of the capital city between 2003 and 2017 Source:* compiled by the author based on MBSZ data

<sup>8</sup> Sikos T. 2015: 17.

We took the competitive situation of two of the largest shopping centres as an example, Arena Plaza and Árkád Budapest and examined their development using the above methods. Árkád Budapest (68,000 m<sup>2</sup>) and Arena Plaza (66,518 m<sup>2</sup>) are situated in the rust belt of the 8<sup>th</sup> and 10<sup>th</sup> districts of the capital. The eastern sector of the Budapest agglomeration and the easy accessibility of the more distant communities of Pest County play a significant role in the evolution of the catchment areas of the two centres. In addition, the Gödöllő suburban train (HÉV) should be mentioned for Árkád, and the railway access (from Keleti Railway Station) for Arena Plaza. To achieve success, shopping centres often try to include services with strong attraction effect in their operations, such as cinemas, which are not profitable but are aimed at luring more customers.9 In the case of Árkád Budapest, the cinema is located in Sugár shopping centre, in the immediate neighbourhood of Árkád. The managements of the two centres seek to coordinate their events in the interest of success. When putting together their tenant mix, the shopping centres take great care in mapping the daily shopping behaviour of the people in their immediate neighbourhood, securing the presence of mainstream trends and brands, attracting other multinational chains with their quality products and luring speciality stores.<sup>10</sup> There is a marked difference between the two shopping centres in the spatial pattern of shoppers by place of residence. In both shopping centres, the majority of respondents came from Budapest, but the proportion was 77% in Árkád and only 54% in Arena Plaza. If we include the wider agglomeration zone of the capital, this percentage is higher than 90% in the case of Árkád, while in Arena Plaza it only exceeds two thirds of shoppers. In Árkád, therefore, the majority of shoppers are those who come from the agglomeration zone and those who regularly commute to Budapest from the immediate agglomeration. At the same time, Arena Plaza also attracted a significant proportion of customers from settlements further away from the immediate catchment area of the capital, and potential customers did not only include shoppers from rural areas, but also a large number of foreign customers. Evidently, this can be attributed to the different transport geographies of the two shopping centres. Even though both centres have good transport geography, Arkád has better potentials – it is located at the eastern gateway to the agglomeration of the capital and is easier to reach by public transport than Arena Plaza. Regarding the population's income, in their catchment area, the population belongs to the middle-income category, but there are relatively large differences between the income categories of the districts. The respondents' answers on income also confirmed our findings concerning customers' residence. On the one hand, because there is no more than a difference of 5 percentage points in any of the value categories among the income groups of the shopping centre customers. On the other hand, the shop-mix and demographic composition also suggested that the two shopping centres behaved in a similar way. The most frequent amount of money spent per purchase was between HUF 5,000 and 10,000 in both time periods that we examined. However, from 2008 to 2017, the proportions between individual value categories became much more even. The proportion of those spending above HUF 10,000 and below HUF 5,000 increased, while the proportion of those spending between HUF 5,000-10,000 decreased.

<sup>&</sup>lt;sup>9</sup> The most successful domestic service is the Tropicarium in the Campona Centre.

<sup>&</sup>lt;sup>10</sup> See www.arenamall.hu/hu/uzletek; www.arkadbudapest.hu/szolgaltatasok



*Figure 4: Ratios of average spendings per shopping occasion Source:* compiled by the author based on his own survey (2008, 2017)

When we analyse shopping habits, it is not enough to know how much our customers spend, but it is also essential to find out what their purposes are in coming to the shopping centre, and we can only design our supply, being aware of their purposes. The answers to our questions should be treated with some reservations, as one of the venues for survey sampling was in the lobby at the entrance to Tesco. The number of respondents who came to buy food represented a higher than realistic proportion among the total number of respondents, and the sample was under-represented for the other response options. Nevertheless, it can be noted that both shopping centres had a high proportion of respondents who came without a specific purpose (Arena Plaza 21% and Árkád Budapest 25%). Thus, shopping in a centre as a leisure activity is still significant among buyers, which was likely to be expected knowing that there is a large inactive social stratum (pensioners, students). The possibility offered by the location system<sup>11</sup> developed by Google also provided us with information on the average time spent by potential buyers in Arena Plaza, which ranges from 45 minutes to 2.5 hours (the cinema has a significant role in it), compared with 25 minutes to 1.5 hours in Arkád Budapest. In our analysis, we also examined, which shopping centre is considered the most popular by the respondents, which one they like visiting most. Although we asked specifically about shopping centres, the responses indicate that hypermarkets with a stand-alone site also represent significant competition for some of the stores of the centre that have a strong attraction effect. Based on Google's location system and visitor ratings, we also

<sup>&</sup>lt;sup>11</sup> The Google feature provides the location, address, and opening hours of the relevant shop (among other information), and how the number of customers is changing during each period. This makes it easy to avoid overcrowding and crowds. The system relies on mobile data to try and guess how many people are in a particular place and how busy a particular shop is. This is indicated by the word "LIVE" in the search, and a distinctive colour is used on the timeline to show the time of day.

reviewed the position of competitors *(Table 1)*. Google offers visitors the possibility to rate the malls and among them also the competitors. The ratings show that the average time spent in the shopping centres ranges from 15 minutes to 1.5 hours. The popularity of the Arena is well supported by the fact that visitors spend between 45 minutes and 2.5 hours on average here.

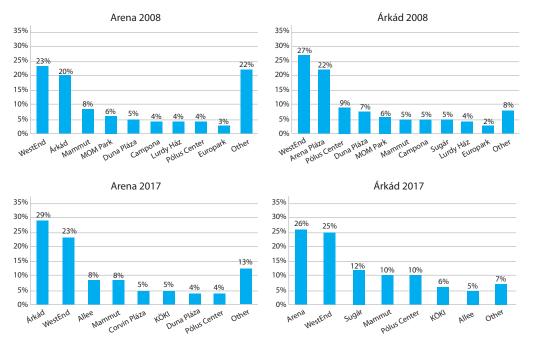
Among individual visitors, three centres had outstanding favourability ratings: Allee 4.5, Arena Plaza 4.4, and Árkád Budapest 4.4, while the other centres were assigned roughly similar ratings. WestEnd City Center and Arena Plaza achieved high favourability ratings among Facebook users. The reliability of Google's scores is guaranteed by the high number of reviewers. Shopping centres try to make optimal use of their opening hours to maximise their profits (see WestEnd City Center, Árkád Budapest).

Name of shopping mall	Google ratings score (1–5 scale)	Number of reviews	Number of people liking the centres on Facebook	Visit planned duration	Opening hours
Árkád Budapest	4.4	3,824	96,015	25 minutes – 1.5 hours	6 h 50 - 22 h 7 h 50 - 20 h (Sunday)
Arena Plaza	4.4	5,115	192,092	45 minutes – 2.5 hours	10 h – 21 h 10 h – 19 h (Sunday)
WestEnd City Center	4.2	7,930	202,866	25 minutes – 1.5 hours	10 h – 23 h
Sugár Shopping Centre	4.1	1,775	21,808	15 minutes – 1.5 hours	9 h – 20 h 10 h – 18 h (Sunday)
Mammut Shopping and Entertainment Centre	4.1	3,847	17,500	20 minutes – 1.5 hours	10 h – 21 h 10 h – 18 h (Sunday)
Allee Shopping Centre	4.5	5,241	1,858	25 minutes – 1.5 hours	10 h – 21 h 10 h – 19 h (Sunday)
Corvin Plaza	4.2	3,329	36,833	20 minutes – 1 hour	10 h – 21 h 10 h – 19 h (Sunday)
Pólus Center	4.3	2,461	40,715	20 minutes – 1.5 hours	10 h – 20 h 10 h – 19 h (Sunday)
KÖKI Terminál	3.9	3,400	31,532	15 minutes – 1 hour	6 h – 22 h

Table 1: Shopping centre ratings, planned visiting times

*Source:* compiled by the author based on Google's location data (7 September 2017) and shopping centre data of Facebook (8 September 2017)

However, we should remark here that the mere fact that the shoppers interviewed also visit another shopping centre does not necessarily mean that they are real competitors for the centres we studied. The questionnaire allowed respondents to name more than one location



simultaneously, and the number of people visiting only one shopping centre was also significant, so the quantity of responses does not reflect the number of respondents (*Figure 5*).

*Figure 5: Shopping centres visited expressed as a percentage of total responses Source:* compiled by the author based on his own survey (2008, 2017)

The analysis shows that the two shopping centres are very significant competitors for each other, as Arena Plaza or Arkád Budapest were the shopping centres mentioned most frequently by those who visited other shopping centres outside the location of the survey. Besides the shopping centre studied, WestEnd City Center stands out as the second most important competitor in terms of strength. Although the other shopping centres represent a much smaller weight, as regards Árkád Budapest, it is important to mention the neighbouring Sugár Centre, Pólus Centre and Mammut Shopping Centre. However, we should stress once again that Sugár and Árkád are complementary to each other rather than real competitors as they attract different types of customers. In the case of Arena Plaza, it is reasonable to highlight Allee and Mammut, as these shopping centres still make up nearly 10% of the market. Our research<sup>12</sup> clearly shows that Arena Plaza is more popular than Árkád Budapest. Árkád lies outside the city centre, so practically it is the first important shopping complex to visit for the peripheral districts and the agglomeration. This partly explains the significant difference between the two commercial centres observed in the other category. On the other hand, Arena Plaza has a more extensive gravity zone, so the number of shopping centres in the zone is much larger than the number of shopping

<sup>12</sup> Kovács – Sikos T. 2018: 215.

centres in the gravity zone of Árkád. We typified the two shopping centres based on their shop-mix and geographical location in several respects, which shows that their commercial characteristics are similar in many points, but that they are each other's serious competitors. Yet, taking all aspects into account, the conclusion is that Arena Plaza can be considered the more successful centre during the period surveyed.<sup>13</sup>

# **3.** The extraction effect of the retail sector in the western gate of the agglomeration of Budapest

The retail units in the western zone of the agglomeration of Budapest produced a significant extraction effect on the shopping centres located on the Buda side of Budapest. The changes in the employment structure in the sub-region of Budaörs substantially affected the three main towns in the area, Budaörs, Biatorbágy, and Törökbálint through the industrial, commercial and logistics firms that settled there. This process primarily started at the turn of the millennium with the job creation role of the industrial and commercial units (BWT, Cora, Tesco, Auchan, etc.). The current shopping network was built up in four phases in the administrative areas of the three towns that we examined. The first phase lasted until 1999. During this period, the most dynamically developing towns were Budaörs and Törökbálint. Both municipalities offered favourable conditions (in terms of location, workforce, etc.) to multinational companies wishing to settle down in the area. The purchasing power of Budaörs was already outstanding in Hungary during this period, and this undoubtedly gave further impetus to the companies and helped their settling down in the area. We should not overlook the fact that both towns have extremely good transport connections with the capital. This is one of the reasons why several large multinational companies had established themselves here before 1999 (Figure 6).

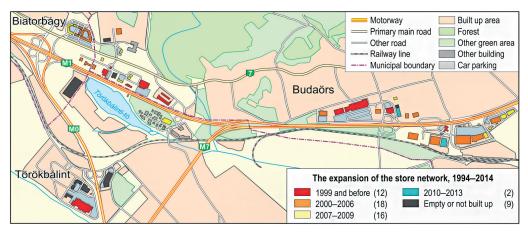
It was then that METRO (1994), Auchan (1998), OBI and Praktiker (1998), Baumax (1999) and IKEA (1999) moved to Budaörs, while CORA (1997), Atlanta Center (1997), Office Depot (1997), Diego (1997), and Bricostore (1998) set up their business in Törökbálint. Obviously, the crisis that started in 2007 and unfolded afterwards fundamentally redrew our map: by 2013, Bricostore had closed,<sup>14</sup> Atlanta Center had gone bankrupt,<sup>15</sup>

<sup>&</sup>lt;sup>13</sup> Arena Plaza has been sold, and the new owner of the shopping centre in the capital is NEPI Rockcastle, a South African investment fund registered in the Isle of Man, which bought it through its subsidiary Arena Property Ltd. See HVG.hu 2017.

<sup>&</sup>lt;sup>14</sup> "According to company information data, the losses of Bricostore Hungária Barkácsáruház Kereskedelmi Kft. have been steadily increasing since 2009: in 2009 it made a loss of more than HUF 740 million, the following year HUF 1.6 billion, and in 2011 it recorded a loss of almost HUF 2.2 billion. According to company info, the company employed 670 people." See Boon 2012.

<sup>&</sup>lt;sup>15</sup> Real estate operating and development company B&V Group has taken over the operation and leasing of the Atlanta Center shopping arcade situated in the area of the SCB Üzletközpont in Törökbálint. "The main tenants of the shopping centre, which has almost 15,000 square metres of lettable space, are Office Depot, Diego, Natuzzi and Hopplá shoes." See Economx 2009.

and Office Depot<sup>16</sup> had also sold its chain. None of the chains were able to make up for the losses caused by the crisis.



*Figure 6: Emergence of the shopping network in the researched towns Source:* compiled by the author

In 2000–2006, in the second construction phase of the network, some 18 retail complexes were built. Among the most successful developments of this period were Tesco with an area of 15,000 m<sup>2</sup> in Budaörs (2000) and Premier Outlet Center established in Biatorbágy (2004). Tesco soon became a significant competitor to the hypermarkets already operating in the market. Competition in the market was further aggravated by the growing crisis, which sealed the fate of CORA. In 2012, Auchan acquired the chain, including its Törökbálint unit. The distance from Budapest and the peripheral location of the Törökbálint unit of CORA also contributed to the loss of its market. The construction of the Premier Outlet Center in Biatorbágy was the other major success of the development of the retail network, the secret of which lies in the favourable business mix. Although the GL Outlet and the Premier Outlet Center opened at the same time, the GL Outlet failed to develop an appropriate shop-mix and therefore its attractiveness to shoppers remained weak. It could not attract potential retailers to the outlet. Premier Outlet Center managed to acquire the key tenants, which ended the competition between the centres, and GL Outlet<sup>17</sup> closed in 2011. *Table 2* clearly demonstrates that the wrong

<sup>&</sup>lt;sup>16</sup> Office Depot was registered in Florida in 1986. It entered the Hungarian market in 1997 and was sold in 2013. Since then, it has been owned by the domestically based Central Fund Kockázati Tőkealap (a venture capital fund).

<sup>&</sup>lt;sup>17</sup> "In the case of GL, there was probably no careful assessment of the situation before construction started [...] Premier, on the other hand, ran an aggressive campaign in all media before and after the opening, so the word outlet was automatically associated with Premier in the minds of buyers. Regarding its location, it is situated next to the road leading out of the town and it is clearly visible from the road, while its competitor is on the less busy section of the M0 motorway, next to a declining shopping centre. [...] Premier even changed the access route to its site, modifying the road of access to attract traffic from the other party." See SIKOS T. 2015: 157–173.

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choice of location and an unfavourable shop-mix can decide the fate of a shopping centre and can even doom an outlet centre to failure (GL Outlet, M1 Outlet).



*Figure 7: Premier Outlet Center and GL Outlet Center Source:* photographed by the author

Table 2: Reasons for the success and failure of outlet centres

	Premier Outlet	GL Outlet	M1 Outlet
Choosing the right site	Х		Х
Good transport connections, easy access	Х		Х
Visibility	Х	Х	
Appropriate marketing strategy	Х	Х	
Attractive tenant mix	Х		
Concept	Х	Х	
Critical mass of customers	Х		Х
Ownership structure	Х		

Source: compiled by the author

*Table 2* shows, which aspects were disregarded and led to the failure of M1 Outlet Center in 2009 and GL Outlet Center in 2011, and as *Figure 8* also demonstrates that inappropriate shop-mix selection and the lack of an anchor store in the business structure led to the failure. There was a CBA supermarket in the M1 Outlet Center when it was opened, which could not compete with the hypermarkets in Budaörs (Tesco and Auchan), either in size or product mix. The investors' incorrect location policy and the wrong business concept made it difficult to remain in competition. The M1 Outlet Center had basically shops designed to satisfy demands for everyday consumer items, but to be successful, it would have needed a significant number of daily shoppers from the capital.



Figure 8: Business mix of the former M1 Outlet Center Source: photographed by the author

Some of the retail units that moved into the western zone of the agglomeration area in the second wave closed as a result of the crisis. This was the fate of Michelfeit<sup>18</sup> in 2009, Electro World<sup>19</sup> in 2011 and Gulliver<sup>20</sup> in 2013.

The third phase (2007–2009) of the emergence of the retail store network in the Budaörs–Biatorbágy–Törökbálint triangle can be linked to the global economic and financial crisis. During this period, even though 16 major retail complexes were built (Intersport 2007, Humanic 2007, Brendon 2007, DM 2007, Mountex 2007, REGIO JÁTÉK 2007, Artvirág 2008, M1 Outlet Center 2008, Max City 2009), what they had in common was that their investments started before the period of the crisis, and even after their opening, they faced great difficulties. This is particularly true for Max City, which is still struggling to develop a successful shop-mix.

<sup>&</sup>lt;sup>18</sup> In 1999, the Kika/Leiner Austrian furniture chain acquired its Austrian competitor, the Michelfeit group, and in 2020, the XXXLutz furniture store acquired Kika in turn.

<sup>&</sup>lt;sup>19</sup> The Electro World store went bankrupt in 2010 with a loss of HUF 1.2 billion. It failed to escape bankruptcy, and the withdrawal of the British Dixons group from its backing also contributed to its failure.

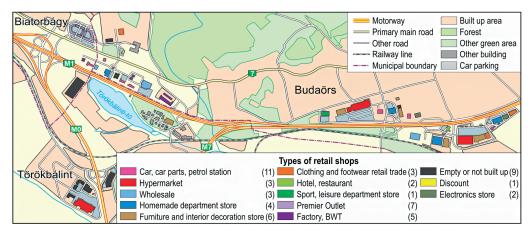
<sup>&</sup>lt;sup>20</sup> The Gulliver toy store chain owed around HUF 3 billion to 148 creditors and was later bought out.



*Figure 9: A group of shops opened between 2007 and 2009 Source:* photographed by the author

Quattro Mobili started its operations in the Kika home furnishing store in 2010 and already closed in September 2014, not because of bankruptcy, but because its owner, the Steinhoff company group, acquired the loss-making Austrian store chain, Kika. This move made one of the companies redundant, and the owners decided to merge the profitable but smaller company into the larger chain. Trendlakás appeared among the home furnishing stores as a newcomer, it brought together home furnishings brands and manufacturers from all over Hungary. As regards its function, it is operating as a thematic shopping centre. The complex currently houses more than 20 different brands, such as Miele, AEG, Siemens and Bosch, Sellaton Design, Billerbeck, Sanotechnik, etc. Therefore, the success of Trendlakás Studio was due to its shop-mix and its thematic character. Many investments were halted by the crisis and have long been forgotten. Among these investments are those planned by Hungarian entrepreneurs, such as Wedding Plaza, which did not go beyond the purchase of land, but also one of the major projects was the one underwritten by American investors such as the Tópark office and apartment complex, which completely failed for lack of financing. The main financier of the project was Eurohypo AG financial institution, which stopped paying its bills after the crisis broke out, so the investor Walker and Williams Ltd. was unable to continue financing the commenced project, and it did not have sufficient resources of its own to implement it. The project is only being completed now with a partial implementation, the entire Tópark project will not be built. The crisis of 2009 hit the Törökbálint area and its retail network most severely, and there are hardly any players left in the area that have remained viable in the long term. Practically, with the exception of the vegetating Auchan and Diego that shrunk to half its size (from 2,000 m<sup>2</sup> to 1,000 m<sup>2</sup>), almost all companies have gone bankrupt or are close to bankruptcy. In the sub-region, 22 centres were established each with an area above  $10,000 \text{ m}^2$  – these centres can be considered the main centres of the agglomeration that act as magnets and attract buyers (Tesco,

Auchan, IKEA, OBI, XXXLutz, etc.). Primarily due to their size, the centres represent the optimum size of the given sector in the Budaörs and Biatorbágy area. The proximity of the consumer market in Budapest played an important role in the site selection policy of the centres examined. In addition to the main centres in the region, the number of other units between 2,500 and 5,000 m<sup>2</sup> can be considered significant. They complement the activities of the larger centres, they almost coexist with them. The vacant commercial establishments are concentrated mainly in Törökbálint. The types of shops in the area include a significant number of network units related to the retail trade in cars and car parts and to service providing activities with more than 10 units. For car dealer companies, used car dealers and car repair shops with a large surface area, the roads leading out of the capital are an attractive location, as they can be operated at lower costs compared to investments implemented at expensive urban sites. The situation is similar in the case of furniture and home furnishing stores: the cost-saving operation was also an important criterion in their site selection.



*Figure 10: Types of stores in the examined area Source:* compiled by the author

It is vital for commercial centres to be aware of and deal with new market trends and tendencies. They also need to be prepared for the fact that buyers are becoming more price sensitive, which often puts shops offering low-priced products in a more favourable position. Today, shops are facing strong competition in cyberspace from e-commerce and e-commerce of second-hand goods. To stay ahead of the competition, it is necessary to expand services and enrich the selection of goods. Those stores that are unable to change will go bankrupt or will be forced to merge, which is why it is crucial for centres to develop a flexible tenant mix that should reflect market needs. It is likely that the life of shopping centres will be even tougher than it is today. Consumers will expect more from retailers, they will be willing to travel further for better conditions or wait for the best moment to buy.

# 4. Customer opinions on shopping centres

It took a relatively short time for Hungarian consumers to accept, learn to like and visit shopping centres. Acceptance, however, does not equal a long-lasting positive approach and favourable attitude. For enterprises, loyal and satisfied customers who return are a valuable asset that they can rely on in the long run.

We conducted research on shopping centres in Budapest with a sample of 163 respondents, which number is considered sufficient to be acceptable. We set out to investigate how customers perceive shopping centres. The opinions of the customers surveyed were more positive than negative, 54.6% of them stated that people either like very much or like these establishments. 42.9% both like and dislike them, while only 0.6% claimed to dislike them. According to these responses, on a scale of 1 to 5, the attitude index is 3.62, indicating that the 'like' rating was predominant. Obviously, this score does not indicate loyalty, support or returning because it shows subjective feeling and generalisations. In these cases, people seemingly make abstractions because researchers ask for general opinions, but respondents always respond with what they think about the object, place, or concept, etc. in question in the rating, what their own opinion is. Therefore, shopping centres had positive ratings, and the answers regarding the reasons also reflected it (*Table 3*).

Finding	Indicator value
I can shop on weekends	4.79
They have a wide selection	4.17
They encourage wasteful spending	3.99
Offers temptation	3.68
They increase prices of goods and services	3.67
I can get everything under one roof	3.65
Good experience	3.64
I can plan shopping in advance	3.54
Shopping is comfortable	3.43
Negatively affects children	3.30
I prefer smaller shops	2.87
Helpful service	2.75
No crowd	2.64

Table 3: Attitude indices expressing the characteristics of Budapest shopping centres

Source: compiled by the author

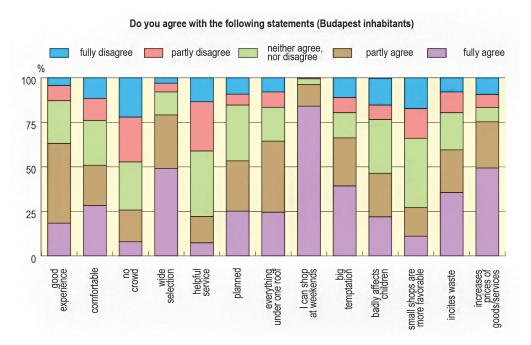
*Notes:* To calculate the attitude index, we multiply the distribution ratios by the weights of 1–5, add them up and divide by 100. The resulting value may range from 1 to 5.

Attitude indices also confirm the previous findings that showed that weekend shopping possibilities (4.79) and wide selection of products (4.17) are the most determinative in the acceptance of shopping centres, therefore, being open on Sundays is important to customers. We must emphasise that customers do not condemn strong temptation offers (3.68) but consider it an acceptable feature of shopping centres. Similarly, the convenience

of buying everything under one roof is also considered a positive feature, without any exaggeration (3.65). At the same time, as it has been revealed in our other studies, the quality of service is regarded as particularly poor (2.75), since the index hardly approaches the average level.<sup>21</sup>

Buyers find shopping centres crowded (2.64), which is not surprising, because it is really hard to move around in most of them, especially in the early evening and on weekends. This opinion is hardly surprising, and businesses cannot really ameliorate this, because the dimensions of the buildings, the corridors, the size of the shops, etc. are set, although they may differ for each shopping centre depending on the planned number and customer intensity.

Adults are unsure when deciding on whether shopping centres positively or negatively affect children. The attitude index clusters around the yes and no answers (3.30), it is not negative. This is a very good argument against the opponents of shopping centres, many of whom formed a negative opinion mainly because of the negative impact shopping centres have on children. Customers agree only partly with the statement that shopping centres encourage wasteful spending (3.99) and offer strong temptation (3.68). The index for temptation could be higher from a marketing point of view, even if respondents partly agree with the statement (around 4).



*Figure 11: Reasons for choosing shopping centres Source:* compiled by the author

<sup>21</sup> Sikos T. – Hoffmann 2004: 380.

It is also favourable that the majority of respondents stated that shopping centres do not encourage wasteful spending, meaning that the centres do not make us buy things that we do not need. Customers are not tempted by the large volume of goods, they can resist the impulse of buying, and this enables them to avoid the unpleasant feeling of cognitive dissonance. Therefore, we state that the customers leaving the shopping centres are mostly satisfied, and feeling regret after buying something is rare. This feeling might also play a role in why Hungarian consumers grew to like retail establishments with large floor areas within a short time (*Figure 11*).

The respondents' opinions suggest that the majority (55%) find prices in shopping centres higher than average, while the overwhelming majority (72%) rate quality as average. This situation cannot be viewed as favourable, because it indicates a shift in the price-quality ratio and the probability that customers will return decreases. In other words, the customers' perception is that shops and service providers in shopping centres charge higher prices than would be proportional with quality. The attitude indices (*Table 4*) indicate the weight of these findings.

Buyer sample	Price	Quality
Total sample	3.53	3.21
White-collar worker	3.48	4.12
Higher education degree	2.75	2.62
Inhabitant of Budapest	4.61	4.61
21–30 age group	2.75	4.61

Table 4: Opinion of customers on prices and quality of goods in shopping centres

*Source:* compiled by the author *Note:* maximum value = 5

The opinion of respondents holding higher education degrees and the 21–30 age group is significantly different from the average. Prices are considered high by those living in the capital and young people judge them favourably. The survey showed similar differences of opinion for quality. Among the buyers of shopping centres young white-collar workers, mainly women, are more likely to be shoppers in shopping centres, and they apparently consider prices close to average and quality better than average. In contrast with that, the entire sample judges quality to be the same as anywhere else. People with higher education degrees view both prices and quality as average, and therefore they very rarely shop in a shopping centre. In this segment, the negative attitude that is typical of environmentally conscious social groups can be detected.

Young intellectual workers are overrepresented in the sample (43-44%), thus the findings of the survey can be generalised to this segment. This situation is favourable for stores in shopping centers because the most frequent customers view prices as reasonable and regard the quality as good. They also consider the operation of the centres important.

#### Summary

Our surveys show that since the change of regime, customers have grown to like new retail units such as shopping centres, hypermarkets, supermarkets, etc. In the transformed retail sector, online sales channels have emerged alongside traditional offline forms, and they became particularly popular during the Covid–19 pandemic. The pandemic also greatly affected how the retail sector evolved: if we want to extrapolate this over time, we could state that there has certainly been a jump of at least 5–10 years in the development of retailing. Several other areas also developed dynamically because more stringent hygiene conditions had to be observed in order to overcome the pandemic. To achieve this goal, companies introduced new technologies such as robot technology. A major advance took place in particular in the production of disinfection robots, and picking and transport robots became increasingly successful.

Unfortunately, the current crisis situation caused by the Russian war in Ukraine has generated both local and global crises. In Ukraine, it is increasingly difficult to secure food supplies and logistical lines because of the war, which has led to an imbalance in the global supply chain. Today, it is too early and too difficult to give a clear answer to the question of what kind of shortfalls are caused in global chains by the Russo–Ukrainian war.

Humanity must face the issue of exhaustible natural resources, and in particular, the issue of how to use food resources rationally, as a lot of products end up as waste after their purchase, while more than two billion people cannot have access to food on a regular basis, and 11% of humanity is starving. At the same time, the ecological footprint of a minority of the population will exceed the present carrying capacity of the Earth if current trends continue. It will be an important criterion for food retail companies to comply with and follow the UN sustainability guidelines: efforts have been launched to go into this direction and we can witness them already today.

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# Spatial Dynamics of Good Places in the Urban Development of Budapest<sup>1</sup>

#### Introduction

The unification of Pest, Buda, Obuda, and Margaret Island, decided in 1872<sup>2</sup> and implemented in 1873,<sup>3</sup> was not only driven by immediate political reasons but also by a number of socio-economic arguments that justified the merger as a means of strengthening the capital of the Hungarian state.<sup>4</sup> Among these were, explicitly or implicitly, the improvement of the inhabitants' quality of life, the raising of the level of infrastructure for receiving visitors interested in Budapest and, last but not least, the promotion of the city's position in the competition with Vienna, the Austrian capital.<sup>5</sup> In this law and in its explanatory memorandum declaring Budapest a single unit of jurisdiction, the word 'beautiful' is the only word that suggests that it was the legislators' political will to create better living conditions. However, the mere fact that at the birth of Budapest as the capital of the Kingdom of Hungary, the General Assembly was given the power to 'beautify' Budapest is an indication of that. Furthermore, the leading officials of the Astro-Hungarian Monarchy emphasised the 'public entertainment' function of Margaret Island, owned by Archduke Joseph of Austria, and recognised the added value of the considerable private income spent on its beautification. Thus, it can be considered unquestionable that the well-being of society was one of the responsibilities assumed by Budapest's 'founding fathers' in terms of public law. The matter of liveability is not a new concept. As early as 1870,<sup>6</sup> the legal basis for the later creation of the Budapest Public Works Council was provided by a law in which "the maintenance and spreading of public parks and tree plantations" and "the building in and lighting of roads, streets, squares, and entertainment areas, [...]" were among the high-priority tasks that were

<sup>&</sup>lt;sup>1</sup> The exploratory research reported in this study was carried out with the support of OTKA project K134877.

 $<sup>^2</sup>$   $\,$  Act XXXVI of 1872 on the establishment and regulation of the Buda-Pest metropolitan legislative authority.

<sup>&</sup>lt;sup>3</sup> The recorded "banquet" of the newly elected representatives of the Budapest City Council took place on 17 November 1873 in the Vigadó in Pest, a day that historians consider to be the "birthday" of Budapest, despite the fact that the Council first met on 25 October 1873.

<sup>&</sup>lt;sup>4</sup> The so-called April Acts of 1848 named Pest-Buda as the seat of the Hungarian government (Act III of 1848 on the formation of an independent Hungarian responsible ministry).

<sup>&</sup>lt;sup>5</sup> RÁTH 1873: 521–522. See also Vasárnapi Újság 1873: 569–570.

<sup>&</sup>lt;sup>6</sup> Paragraph 17 of Act X of 1870 on the regulation of the Danube River near the capital and on the coverage of the costs of other public works to be established in Buda-Pest for the purpose of traffic and public communication, and on the means of implementing these public works.

intended to improve the well-being of locals. Budapest began its spectacular after the merger of the three cities a century and a half ago. The city leaders considered that the spaces of leisure time – somewhere in the common realm of the quality of life and liveability, expanding into the organic part of our way of living – namely the 'good places' would be the legacy of development. Thus, following the example of Paris and Vienna, the city leaders' decision created a sound basis for the framework of a balanced urban development in which the shaping of spaces for production and consumption, for work and leisure served the quality of life for both the local society and visitors coming to the Hungarian capital for shorter or longer periods, even if the process was not always smooth.

Our analysis of the impact of leisure spaces on the urban development of Budapest is partly based on Oldenburg's 'third place' theory, which claims that in addition to your home (first place) and workplace (second place), the informal spaces for pursuing community life make up the fabric of modern settlements that offer quality life.<sup>7</sup> We also rely on Michalkó's concept of 'good place', which takes into account not only the needs of the local society in leisure time activities, but also the consumer behaviour of visitors to a given locality and their reflections on their experiences of that space.<sup>8</sup> In the regions that Wallerstein<sup>9</sup> referred to as the core, the unwanted effects of urbanisation (e.g. public health problems, overcrowding, crime) were already evident in the first half of the 19th century.<sup>10</sup> Therefore, in the peripheral (semi-peripheral) areas urbanisation being decades late in development learnt from the mistakes made by London and Paris, or at least attempts were made to remedy them.<sup>11</sup> In Budapest, the deliberate creation of leisure spaces and facilities started with the preservation of green spaces and the intention to build wide roads/streets that let in sunlight and air.<sup>12</sup> Budapest grew from a city of 400,000 to a metropolis of 2 million in scarcely a hundred years, and most of the basic functions of a settlement as defined by Partsch were used over time to serve the spending of quality leisure time.<sup>13</sup>

In the urban development of Budapest from 1873 to the present day, the venues of leisure pursuits have been shaped by conscious planning and development on the one hand, and by spontaneous, often community processes on the other. Their dynamism is reflected in both their geographical extent and their improving quality. Budapest's leisure spaces gained their position, which are largely kept still today, due to their geographical location (e.g. near the Danube, in the Buda Hills), their historical heritage (e.g. Margaret Island, the City Park) or the logic of the metropolitan zoning.

However, urban development also created good places preferred by locals and tourists in line with the dynamically changing demand trends. In the range of good places, an outstanding role is taken by hotels and catering establishments and various leisure

<sup>9</sup> WALLERSTEIN 1983: 782.

<sup>&</sup>lt;sup>7</sup> Oldenburg 1999: 269.

<sup>&</sup>lt;sup>8</sup> MICHALKÓ 2007: 81–87; MICHALKÓ 2010: 64–66; MICHALKÓ 2022: Chapter 5.3.

<sup>&</sup>lt;sup>10</sup> Landes 1986: 114–198.

<sup>&</sup>lt;sup>11</sup> Gyáni–Kövér 1998: 356; Beluszky 2003: 568.

<sup>&</sup>lt;sup>12</sup> Gyáni 1992: 213; Gyáni 1998: 216.

<sup>&</sup>lt;sup>13</sup> Berényi 1992: 164.

facilities, which are attributes of the leisure industry, including tourism, and indicate the spatial dynamics of the examined function like signal buoys. This study seeks to explore how the leisure industry's signal buoys highlight spatial points interpreted as good places in Budapest's past, present, and future. In our analysis, apart from processing the technical literature, we will also give an overview of the works on the history of Budapest as well as the works that help introduce the dynamics of leisure and tourist spaces. We use photographs from the Fortepan open access photo database and maps made by ourselves as illustrations of the spatial processes of the capital's good places.

#### 1. Good place – Better life

Good places are suitable for spending individual and social leisure time, pursuing active or passive recreational activities, and experiencing moments of joy and happiness.<sup>14</sup> One of the essential components of a good place is that people who have visited it, talk about it. They share their experiences of it with their immediate or wider environment, and spread the information about its existence, value and accessibility, orally, through postcards, letters, newspaper columns, on the radio and television and on a wide variety of Internet platforms.<sup>15</sup> A good place is basically a reduced axiological approach to all the qualities of the relevant facility that make it worth visiting, i.e. instead of a very detailed description of the numerous values (what it is good for and why), the communication is based on a simple but informative statement of facts.<sup>16</sup> A good place is typically a facility outside the private sphere of the individual, but it is also possible that an inherently private space (property) may be used temporarily or even permanently for public purposes (e.g. as a festival venue, an apartment restaurant or an Airbnb accommodation).<sup>17</sup> Communication on social media platforms contribute to making a good place commodified based on subjective value judgements. For example, on Instagram, one of the most popular photo-sharing platforms, there are thousands of hashtags with the term "good place", and if we search for *#goodplace*, our hits will reach the magnitude of hundreds of thousands, so the combination of words expressing the core of the concept of a good place is by no means a specifically Hungarian characteristic, a 'Hungaricum'.

The 'good place' is a tourism interpretation of the third place concept introduced by Oldenburg. Oldenburg himself used the term 'great good place' to refer to informal spaces beyond the realms of home and work that provide a possibility for living a community life.<sup>18</sup> According to the theory of the American urban sociologist, it helps relieve the stress generated by the big city if people find a balance of everyday life, catalysed by the experience of living in the social sphere beyond the private and productive spaces as if being on a holiday. As Oldenburg puts it, third places are neutral gathering

<sup>&</sup>lt;sup>14</sup> MICHALKÓ 2007: 85; MICHALKÓ 2010: 65.

<sup>&</sup>lt;sup>15</sup> MICHALKÓ 2022: Chapter 5.3.

<sup>&</sup>lt;sup>16</sup> FARKAS et al. 2022.

<sup>&</sup>lt;sup>17</sup> IRIMIÁS 2016: 330; NÉMET–JUHÁSZ 2016: 168; DUDÁS et al. 2019: 10.

<sup>&</sup>lt;sup>18</sup> Oldenburg 1999: 17.

places where individuals are free to come and go, they give the comfort of home, are predictable and equalising, free people from roles and obligations, offer inclusiveness, and give relief through conversation. The core of Oldenburg's theory lies in the social interactions combined with a change of the environment, which are essentially realised in the cafés, bars, bookshops and hair salons of the neighbourhood, most of which are also able to meet the needs of visitors arriving at the locality in addition to those of the locals. A noteworthy link is the effort of tourist accommodation establishments to expand their customer base by involving local people (by providing them with leisure services), a tradition that has been observed since the dawn of tourism and dates back even further in the traditional catering industry.<sup>19</sup> People escaping from the drudgery of commuting between their home and workplace find the impulses in leisure spaces that can satisfy both their basic needs (e.g. food, belonging to somewhere) and their needs for growth (e.g. recognition, self-fulfilment), as well as being able to promote their personal development.<sup>20</sup> As Csíkszentmihályi describes it, "to make our lives better, we must make our experiences better", an idea that points to the increasing social appreciation of the role of engaging spaces that generate experiences.<sup>21</sup>

The special features of the metropolitan environment urge people to leave their everyday spatial routes and spend as much time as possible in spaces outside their homes.<sup>22</sup> Most city dwellers find their space of relaxation in another city and visit facilities and use services for their leisure that were originally designed for the people who live there.<sup>23</sup> With the massive urbanisation that unfolded with the industrial revolution, one of the great tasks was to ensure that the labour force that flocked to cities could spend its leisure time there.<sup>24</sup> In the large European cities that today's tourists like, the second half of the 19<sup>th</sup> century and the first half of the 20<sup>th</sup> century saw the creation and development of most of the parks, spas, museums, places of entertainment, theatres, cinemas, amusement parks, zoos, cafés, various sports facilities, elegant department stores, shopping quarters, exhibition halls, places of excursions with good access by suburban railway, etc. These catered for the needs of the exploding number of inhabitants for quality recreation (beyond the world of drinking saloons and brothels). While the catering establishments rapidly growing in number primarily targeted the locals, the hotels providing night accommodation, which were initially concentrated around railway stations, served the needs of tourists who set out on their journey to enjoy the experience offered by big cities. Over time, the leisure function of big cities, in addition to enhancing the quality of life of locals, became an important instrument for boosting the economy, thus the government and the local authorities shared the responsibility for ensuring that their beloved capital was perceived by the public as a good place.

- <sup>21</sup> Csíkszentmihályi 2001: 77.
- <sup>22</sup> PAGE 1995: 36.
- <sup>23</sup> MICHALKÓ 1999: 168.
- <sup>24</sup> Edginton-Chen 2014: 203.

<sup>&</sup>lt;sup>19</sup> Juhász-Dóra 2022: 19.

<sup>&</sup>lt;sup>20</sup> Maslow 2003: 376.

# 2. The good places of Budapest: A historical outlook

Taking a closer look at leisure-related good places in Budapest, there are different trends of the different periods. Leisure habits basically depend on the individual motivation, status, way of life, and the amount and division of their leisure time, while the framework is also influenced by economic and social conditions.

In Budapest, three main periods can be distinguished. During these periods good places do not only differ in their location and character, but also in the extent to which the preferences of locals and tourists coincide.

- In the period from the end of the 19<sup>th</sup> century to the Second World War, the most popular places were those considered good in a classical sense related to promenading, cultural consumption, excursions –, which were partly created at that time and started their journey towards gaining popularity. Tourism was not dominant, so those places tended to be attractive that were primarily favoured by city dwellers, but which offered different opportunities in time, space and form of activity, depending on wealth and status.
- In the decades after the Second World War, the spaces of leisure came to be split as the leisure time controlled by the political system resulted in formal and informal places of leisure. Years later, with the increase of living standards and the emergence of tourism, the preferred places of city dwellers and visitors to the city became separated in their character and location.
- The period from the regime change to the present has been marked by the blurring of boundaries both in space and time, and increasingly in terms of use and users.

# 2.1. Good places from the late 19th century to the Second World War

The main features of the period were:

- rapid socio-economic development
- the level of literacy and general knowledge rose steadily because of the development of primary, secondary and tertiary education
- in big cities, work and leisure were separated from each other, whereas work continued to be dominant in the lives of traditional agricultural communities
- different social groups spent their leisure time separately from each other
- entertainment opportunities included a mixture of elements of the modern metropolis (theatres, cinemas, music halls) and the countryside (saint's days, festivals)

At the end of the 19<sup>th</sup> and beginning of the 20<sup>th</sup> century, work and non-work time gradually became separated, even if at different rates and to different degrees in individual social groups. Because of the considerable differences in wealth and income, different social groups' way of living – thus the patterns of leisure time use – differed greatly, and different strata of society were also spatially separated in their leisure time.<sup>25</sup>

In Budapest, at the end of the 19<sup>th</sup> century, similar to other industrial cities, time spent at work dominated the everyday life of the lower social classes that made up the majority of society.<sup>26</sup> During this period, physical workers and employees worked 10 to 12 hours a day, while workers in the printing houses of Budapest and the shipyard in Óbuda worked 60 hours a week or more, and Sunday as holiday was not generally accepted. In Hungary, Sunday has been a weekly holiday for workers since 1891, and St Stephen's Day was also declared a public holiday around that time. In the 1920s and 1930s, working hours were reduced to 8 hours a day, and a few days of paid summer holidays were introduced. The resulting leisure time brought new opportunities and significantly transformed the daily lives of the masses: in this period, leisure became the counterbalance of work, and it was increasingly intended to give time to people to regain their energy.

There was rarely a chance to relax during the week in a big city for the masses, and leisure time was mainly embodied in the Sunday rest day. Until the First World War, the primary entertainment for the masses in Budapest was provided by the funfairs in the City Park and the People's Park and the zoo, which were visited by tens of thousands of people on a summer day. These leisure activities were themselves made up of a mixture of urban and rural elements: at the funfairs, the whole family "dressed up to spend their savings, looking for the thrills, the colourful and scary attractions, just as they did at the village saint's days".<sup>27</sup> After the First World War, the cinema became the number one place of entertainment for the masses, and in the 1920s, almost 90 cinemas attracted 13 million visitors a year in Budapest.<sup>28</sup> During this period, in addition to the usual leisure activities of going to cheap theatres, cinemas and music halls, reading became an increasingly popular leisure activity in parallel with the rising level of education.

Following the introduction of the Sunday as holiday, excursions – mainly to destinations in the vicinity of the capital – came to be a popular hobby for workers in Budapest.<sup>29</sup> By the 1930s, a few days' recreation and weekend leisure activities had also spread among the less well-off urban classes.

- <sup>26</sup> Erzsébet Ifjúsági Alap [s. a.]: 4.
- <sup>27</sup> Erzsébet Ifjúsági Alap [s. a.]: 4.
- <sup>28</sup> Borsos 2009: 23.
- <sup>29</sup> CSATLÓS 2021: 106.

<sup>&</sup>lt;sup>25</sup> CSATLÓS 2021: 106.



Figure 1: Crowds on the Danube Promenade (Dunakorzó) at Vigadó Square, 1940 Source: Fortepan. Image no. 151632. Donated by Gali

The development and dynamic growth of the entertainment industry also contributed to the changes in the use of leisure described above. Technological advances, the emergence of cinemas<sup>30</sup> and the radio, the expansion of opportunities for mass sports, and improving mobility opportunities, which play a fundamental role in tourism, brought about a radical lifestyle change, which comprised the elements of both modern metropolitan life (theatre, cinema, music halls) and rural life (saint's days, festivals).

In the second half of the 19<sup>th</sup> century and the early 20<sup>th</sup> century, the upper middle classes and the aristocracy, who made up a minority of society, had plenty of leisure time and pursued a wide variety of leisure activities. One of the favourite pastimes of the citizens of Pest was taking some afternoon coffee and snacks in a café in Budapest. Some of the cafés that were operating at the turn of the century are still in operation today. One of the most important forms of entertainment among the middle class was strolling the promenade (Korzó), which also provided an opportunity for socialising. Especially in bourgeois and aristocratic families, strolling the promenade was often followed by a form of evening entertainment (*Figure 1*). "Doctors, lawyers, soldiers, having a lot of free time, placed great emphasis on educating themselves in addition to entertainment."<sup>31</sup> Apart from giving big dinners at home, they often went to the opera. They were also the first to be attracted to the radio in the same way as they came to like reading books. At the turn of the century, one of the most popular activities for the middle and upper classes was horse racing.<sup>32</sup>

<sup>30</sup> Borsos 2009: 16–39.

- <sup>31</sup> Erzsébet Ifjúsági Alap [s. a.]: 5.
- <sup>32</sup> TULI 2004: 375.

In the summer, the bourgeoisie and aristocracy often travelled to the countryside, to spa resorts and to the seaside. Domestic tourism flourished after the Trianon peace treaty, which drastically reduced the country's territory, and by the 1930s, tourism had reached the magnitude of millions.<sup>33</sup> The most popular destinations for longer summer holidays and leisure activities were the coastal areas of Lake Balaton and the towns around the capital, Szentendre, Gödöllő, and Göd. In autumn and winter, they went hunting, while a popular pastime activity during the carnival season was attending balls.

At the beginning of the period, sport was practised by relatively few people but by the Horthy era, it had become a mass recreation, partly as a result of the incorporation of physical education into the education system. "The most popular sport was football, which could be played both on the unbuilt plots of land in the outskirts of the city and in the pastures at the edge of villages. It was then that the Vasas and Textiles sports clubs were founded."<sup>34</sup> In Hungary, scouting spread mainly among secondary school boys after the First World War.

Even though we cannot speak of a significant volume of tourism in this period, neither in terms of inbound nor domestic tourism, but the period from the Austro-Hungarian Compromise of 1867 (which established the Dual Monarchy of Austria-Hungary) to the end of the Second World War saw the development of the infrastructure (e.g. the Millennium Underground Railway) and the setting up of the institutions (e.g. tourism organisations and committees, IBUSZ travel agency) that laid the foundations for Budapest's present-day primacy.<sup>35</sup> After Trianon, Hungary became practically equal to Budapest on the map of inbound tourism. The expansion of domestic tourism was fundamentally hampered by traditional farming activities: peasant communities were confined to their place of living due to their 10-12 hour working days that lasted from early dawn until late at night, which was common at almost all times of the year. In these communities, modern leisure time - understood as one of the essential elements of tourism – did not exist, and the free time available on Sundays and public holidays was typically spent going to church, and less often going to balls, village fairs, markets, and weddings. Summer holiday and travelling were unknown concepts for them. Once in a while, when they took the train or bus, they travelled to a nearby town and "admired the moving and talking pictures projected on the wall",<sup>36</sup> which was a real event. The only event of the period that attracted large crowds from the countryside to the capital was the Millennium Celebrations of 1896.

Places of the period:

- primarily the city dwellers' good places as domestic visitors from the countryside also looked for places visited by the locals
- leisure opportunities within good places differed in time, space, and activity according to wealth and status

<sup>&</sup>lt;sup>33</sup> Erzsébet Ifjúsági Alap [s. a.]: 5.

<sup>&</sup>lt;sup>34</sup> Erzsébet Ifjúsági Alap [s. a.]: 6.

<sup>&</sup>lt;sup>35</sup> RUBOVSZKY et al. 2009: 206.

<sup>&</sup>lt;sup>36</sup> Erzsébet Ifjúsági Alap [s. a.]: 6.

- the classic good places were popular, which were mostly established at this time, i.e.
  - the promenade, walking areas, cafés (the Danube Promenade, boulevards, Andrássy Avenue, Thököly Road)
  - the Opera House, theatres, music halls in the inner-city of Pest
  - the venues of the Millennium Celebrations of 1896
  - entertainment areas (Amusement Park, Mutatványos Square (Jugglers' Square), "Constantinople" (Konstantinápoly)
  - urban parks (City Park), Margaret Island, Városmajor
  - excursion sites in and around the city (Buda Hills, Palota Forest a holiday resort for the well-off, a day trip for the masses from the city)
  - riverbanks, lakesides, baths/barge beaches, water sports and boathouses on the banks of the Danube at the Roman Beach (Római part), People's Island (Népsziget) and the district of Pesterzsébet

It was an important communal and social activity of urban life to visit the promenades and the walking areas. On Sunday, families would dress up in their Sunday best for the stroll. It was also the time when Budapest's café culture flourished. Cafés had elegant interiors and their large terraces faced the promenades and boulevards.<sup>37</sup>

The theatres and music halls were also a major attraction for both residents and visitors. Visitors were primarily interested in the sights of Budapest built around that period (Andrássy Avenue with the Opera House, the elegant apartment blocks of the Grand Boulevard, the hotel rows on the Danube bank, etc.). The area around the railway stations played a distinguished role in opening up towards the national and international scene.<sup>38</sup> This idea was symbolically reinforced by the view of the magnificent main building of the Keleti railway station, which forms an arch of triumph at the end of the city promenade leading to the station (Rákóczi Road).

The total number of visitors to the Millennium Celebrations was 5.8 million, according to the *Révai lexicon*, which, even if it seems somewhat exaggerated, shows its importance for the capital. Built in 1896 as one of the largest entertainment districts in Europe at the time, "Constantinople" (Konstantinápoly) lasted only two seasons, it could accommodate 40,000 people at a time.<sup>39</sup>

From the Hungarian reform era onwards, the urban way of life gradually developed the need for city dwellers to spend summers, or at least Sundays, as they could afford it, in the green, leafy areas. For the urban masses, workers and servants, leisure was a holiday, which was mainly limited to Sundays and public holidays. Because of the shorter duration, leisure time was mainly spent in the city parks, therefore, the destinations that were within walking distance such as the City Park, People's Park, Margaret Island, and Városmajor were extremely popular. The need for and the possibility of leaving one's

<sup>&</sup>lt;sup>37</sup> NAGY–TRENCSÉNYI 2012: 100.

<sup>&</sup>lt;sup>38</sup> Bán 2011: 52.

<sup>&</sup>lt;sup>39</sup> Berza 1993: 700.

place of residence was linked to the amount of leisure time. Before the introduction of rail transport, long-distance travel was rare, and only the privileged aristocracy or those who had to travel for work travelled further from their place of birth. Hence spaces for spending leisure time were confined to the general area of residence for a long time. However, efficient and accessible public transport made travel possible, even if limited in time, to widen the range of opportunities of journeying away from home to explore the neighbourhood.

From the Ottoman period until the end of the 19<sup>th</sup> century, viticulture was common in most parts of the Buda hills, and it only diminished after the great philoxera epidemic. However, in addition to agricultural production, a new function of the area appeared from the middle of the century. The hills and forests of Buda were initially accessible only to the upper classes, but with the growth of leisure and the development of urban transport, one-day trips in the neighbourhood of the city became a popular destination for the masses. This is supported by the fact that, although restaurants were concentrated mainly in the inner-city area and along the main roads leading to the city centre, a large number of them were opened in places such as the forests of Buda.<sup>40</sup>

The destination that was the easiest to reach on foot was Városmajor, but the cogwheel railway built in 1874 opened the way to the forested Svábhegy, and from 1890 to Széchenyi Hill. Zugliget had become a popular place for outings by then. Buda's first horse-drawn railway line, the Chain Bridge – Zugliget line led here from 1868.<sup>41</sup> The attraction of the area is indicated by the large number of 'summer restaurants' that opened here from the very beginning, especially near the stations. The end stations of the Buda tram lines, unlike those in Pest, were not located in residential areas, but ran to excursion sites in forests, which shows that the users were not the local residents but those who came for excursions.<sup>42</sup>

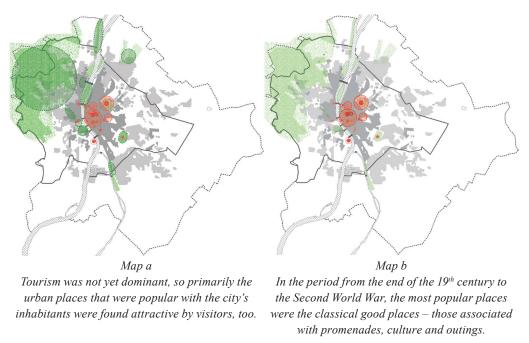
The Buda hills, on the other hand, attracted people not only as excursion places, but also as places for leisure and holidays. The Fácános Restaurant in Zugliget was a popular summer entertainment place and ballroom, and it also had a 30-room hotel, so it was suitable for staying for longer periods. In addition to their city apartments, wealthier people built summer houses in the area, and villas to rent for the whole summer were also popular. Mór Jókai bought the plot of his famous villa and garden from the fee he received for one of his novels in 1853. It can be visited today as a study trail.<sup>43</sup> The residential function of the buildings, originally built as summer houses, became more permanent over time, attracting more and more inhabitants to the increasingly expensive area, which has now become one of Buda's most attractive and prestigious residential areas.

<sup>&</sup>lt;sup>40</sup> Illyefalvi 1933: 123.

<sup>&</sup>lt;sup>41</sup> Berza 1993: 441.

<sup>&</sup>lt;sup>42</sup> Illyefalvi 1933: 147.

<sup>&</sup>lt;sup>43</sup> Berza 1993: 617.



*Figure 2: Location of the good places of the period in Budapest Source:* compiled by the authors

Along the Pest–Vác railway line, excursion and holiday resorts appeared on the Pest side. The proximity of the railway station made the Palota Forest one of those popular places and a restaurant known today as Brunovsky was soon opened there. A residential area was built on either side of the railway, originally for seasonal use as holiday homes and summer houses, but later also for permanent residential use. The villas were built by wealthy lawyers, doctors, and artists, and included villas for Bishop Mihály Horváth, violinist Ede Reményi, and actress Lujza Blaha.<sup>44</sup>

The waterfront became particularly popular in the 1920s because of rowing sports. In the 1930s, there were already 20 boathouses on the Roman Beach (Római part) from the railway bridge to the lower end of Szentendre Island, 6 on the opposite side of Újpest and 14 on the People's Island (Népsziget).<sup>45</sup>

2.2. Good places to visit in the decades after the Second World War

The main features of the period were as follows:

 1948–1956: new state order, scarce financial resources, dynamic growth in the number of college and university students, cultural re-education

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<sup>44</sup> BUZA 1995: 49.
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<sup>45</sup> Kovács 1988: 10.

- 1956–1989: retaliation, opening up, rising living standards
- increasing amount of leisure time, collective and individual mobility (airplane, private car)
- not differentiated by status equal access for all
- different offers for Hungarians and foreigners

After the Second World War, the establishment of the new state system – the introduction of Marxism–Leninism as the state ideology, the centralisation of the political field of force, the creation of a one-party system, the introduction of planned economy – radically transformed the lives of the inhabitants of the capital, thus also their use of leisure time. Education, culture (including theatre, cinema, radio, and books) and other areas of leisure (such as sports) became the main arena for the cultural re-education of society and the dissemination of communist ideology.

In the first decade of the period, cinema became a form of mass entertainment.<sup>46</sup> The prominent role played by cinema in reaching the masses is borne out by the fact that the number of cinemas quadrupled between 1948 and 1956. "Radio had a spectacular career similar to that of cinema. The government significantly increased the number of libraries and community centres. The number of people who read books more or less regularly increased, but the books published were heavily censored. The tools of political education included book reading evenings, ideologised educational programmes combined with propaganda in the culture centres, or the compulsory 'Free People's Half Hours' at the workplace.'<sup>447</sup> The formerly popular coffee houses were closed down, while the typical hospitality establishments of the period, the 'espresso cafés', were very popular. The scarce financial resources characteristic of the period, especially among young people, led to the emergence of house parties.

The system promoted both mass and elite sport, so that "alongside the highly ideologised cultural selection, attending sporting events was a refreshing experience among the poor recreational opportunities".<sup>48</sup>

After the 1956 revolution, the Kádár regime applied severe repression, but gradually relaxed its economic and social policies, and stated that the main aim was to raise the living standards of the population. Under 'goulash communism', the working week was reduced from 48 to 42 hours, and every other Saturday became a day off, which led to a significant increase in people's leisure time. The rising incomes were spent on consumption rather than savings.<sup>49</sup>

The improving living conditions, increasing leisure and discretionary income also affected the area of cultural consumption. By the 1980s, virtually all the society had

<sup>&</sup>lt;sup>46</sup> Borsos 2009: 47–49.

<sup>&</sup>lt;sup>47</sup> Erzsébet Ifjúsági Alap [s. a.]: 6.

<sup>&</sup>lt;sup>48</sup> Erzsébet Ifjúsági Alap [s. a.]: 7.

<sup>&</sup>lt;sup>49</sup> Erzsébet Ifjúsági Alap [s. a.]: 7.

become consumers of culture to some degree: cinema, theatre and books were cheap and easily accessible, providing a broad range of people with meaningful leisure activities. Since the 1970s, watching television has dominated the use of leisure time.

Cheap books by foreign writers – previously unknown or banned in Hungarian translation – were available to all, but besides buying books, going to the library was also popular. The role of radio was transformed, it gradually became a part of everyday life, and television took over its role of entertainment and recreation. "At first, people watched TV in culture houses, factory clubs, offices of agricultural cooperatives, in friends' and neighbours' flats, but by 1982, there were more than 100 sets per 100 households. As the number of sets increased, there was also a sharp rise in the transmission time. The spread of television significantly changed people's entertainment habits. Social forms of leisure were pushed into the background by television."<sup>50</sup> With the generalisation of television, interest in cinema declined, but in the 1980s, American adventure and action films gave cinema-going a new impetus. Substantial public subsidies for cinemas and theatres made it possible for everyone to buy tickets. Audiences were most interested in musical comedies, operettas, musicals, and cabarets.

Sport has lost its former privileged role, and new sports kept emerging alongside mass sports.

Tourism, both inbound and outbound as well as domestic underwent significant changes.<sup>51</sup> Hungary established itself on the map of international tourism, and for the locals, travel – mainly to cheap company or trade union holiday resorts or to the plot of land to cultivate it at the weekends as a hobby – came to be an integral part of the way of life for the Hungarian population. Hungary, often referred to as 'the happiest barracks', and Budapest and Lake Balaton in particular, became the number one destination for foreigners visiting the socialist bloc. While other socialist countries severely restricted visits by foreigners, Hungary opened its doors to visitors coming from outside the socialist bloc after 1956, mainly to satisfy its foreign exchange needs.

The liberalisation of foreign travel was gradual, and Hungarians were initially allowed to travel only to the countries of the 'Soviet camp', and later to Yugoslavia, with significant restrictions. From the mid-1980s, shopping tourism to Austria flourished,<sup>52</sup> with the primary aim of buying products (such as certain foodstuffs, household appliances, clothing, and cosmetics) that were not yet available in Hungary at the time.<sup>53</sup> In the second half of the period, thanks to the post-1956 measures and rise in living standards, going on holiday within Hungary became general, although Budapest was more of a departure than a receiving area with regard to domestic holidays. The most popular destinations for the inhabitants of Budapest were the outstanding resort areas of the Danube Bend, Lake Balaton, Lake Velence, the Mátra hill, etc. Spending holidays in company and trade union holiday resorts fulfilled an important role in domestic tourism. Urbanisation,

<sup>&</sup>lt;sup>50</sup> Erzsébet Ifjúsági Alap [s. a.]: 7.

<sup>&</sup>lt;sup>51</sup> LENGYEL 2004: 51–53; RUBOVSZKY et al. 2009: 222–237.

<sup>&</sup>lt;sup>52</sup> Sári 2019: 72–77.

<sup>&</sup>lt;sup>53</sup> MICHALKÓ 2001: 256.

with the mushrooming of urban housing estates increased the popularity of building a holiday home of your own or buying or renting a small plot of land in the green area to do gardening. These became a new, active form of recreation for a wide range of people living in the capital.

Good places of the period:

- efforts to control leisure time and leisure activities
- formal "good places" (district and company culture centres, library network) created for the above purpose on a large scale and made accessible to all
- informal good places (sports facilities, liqueur shop bars, 'espresso' bars) emerged alongside formal places
- with the emergence of tourism, the perception of a good place became sharply divided between locals and tourists and it fundamentally differed
- main tourist sites (e.g., Heroes' Square, Váci Street) were often avoided by locals
- "going to one's plot of land for gardening" became a common form of active leisure in the outer suburbs of Budapest and in its agglomeration
- waterfronts were particularly popular, apart from the Roman Beach, the banks of the branching Danube in Soroksár and the sides of urban lakes were also found to be attractive

During this period, leisure spaces developed in two sharply different directions in parallel with each other. Recreational spaces can be divided into formal and informal spaces in terms of their use, and into spaces used by city dwellers or visitors to the city in terms of their users. In the post-war period, the aim was to re-educate society culturally, therefore, cultural institutions were characterised by wide and equal accessibility. Under socialism, alongside the strict control of working hours in the context of full employment, leisure time was controlled by the regime, as were all areas of life.<sup>54</sup> Formal leisure spaces were created, evenly distributed in space to offer easy access to everybody. These included the so-called 'culture centres', which were not only located in all districts but were also attached to larger factories and organisations. There were also libraries and cinemas, which hosted cinematographic works of great importance to the system, which also covered the capital evenly, district by district. With the creation of Greater Budapest (Nagy-Budapest) in 1950, the Szabó Ervin Library, for example, had to take on the task of serving the annexed towns and villages (23 branch libraries were set up in the outer districts within six years).<sup>55</sup>

<sup>&</sup>lt;sup>54</sup> Fekete 2018: 43.

<sup>&</sup>lt;sup>55</sup> Berza 1993: 468.



*Figure 3: The popular Hullám buffet on the bank of the Danube in Ráckeve (Soroksár), 1959 Source:* Fortepan. Image no. 114104. Donated by Sándor Bauer

Traditionally, theatres in Budapest were built mainly in the city centre, however, decentralisation was also introduced in this sphere: district culture centres brought culture closer to the inhabitants of the outer districts by hosting performances of the permanent theatres. A good example of this process is that of the present-day József Attila Theatre, which was built as a culture centre in 1953, but from 1956 it became an independent theatre, targeting the residents of the workers' estates in Angyalföld.<sup>56</sup> In comparison to formal and controlled cultural spaces, however, informal spaces of leisure, such as sports facilities or liqueur shop bars, which also contributed to strengthening social relationships, played a much greater role in everyday life. A particular subculture of water sports was emerging. There were boathouses along the banks of the Danube at the Roman Beach and in Soroksár. They offered holiday accommodation in their cheaply rented rooms while the residents moved out for the summer (*Figure 3*).

After 1956, due to the rise in living standards, the amount of leisure time and the opportunities for spending it greatly changed. Increasing leisure time and relative prosperity also created the need and opportunity for a change of location. Due to restrictions on foreign travel, this need was mainly satisfied within Hungary: gardening at weekend plots and holiday-making emerged as leisure activities, the latter mainly in the form of company or trade union holidays.<sup>57</sup>

Most of the companies in Budapest had their own holiday resorts, mainly on the banks of the Danube and in the Buda Hills. The Ministry of Metallurgy and Machinery had a holiday resort on the Roman Beach, which is now known colloquially as the "Sajtház"

<sup>&</sup>lt;sup>56</sup> Berza 1993: 619.

<sup>&</sup>lt;sup>57</sup> Nagy–Trencsényi 2012: 101.

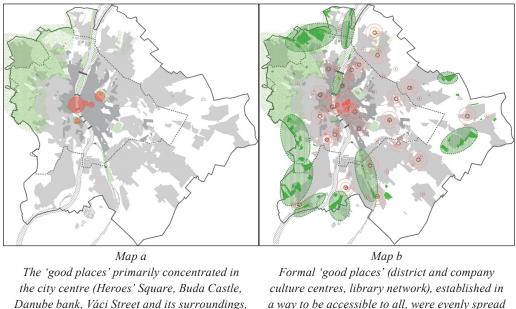
(the Cheese House), named after the cellular structure of the building. It had a fountain and a playground in the garden. A pioneer town was built for children in Csillebérc in the Buda Hills, but several districts also had their own pioneer camps, for example, the camp of the 13<sup>th</sup> district used to be held on the People's Island (Népsziget).

Originally, weekend plots were often so-called "enclosed gardens", which were created from areas unsuitable for large-scale agricultural use, by parcelling them up into small plots under the 1968 decree of the Ministry of Construction and Urban Development (ÉVM).<sup>58</sup> The opportunity was particularly attractive for city dwellers who had rural roots and had moved to multi-storey housing estates without gardens, because gardening in the small plots of land offered them the chance to improve the household budget and enjoy active recreation. These areas were mainly located in the outer parts of Budapest, and those were particularly popular that were on the banks of the Danube (Horgásztelep, Soroksár, Molnársziget) and in the hills (Ezüsthegy, Aranyhegy, Ürömhegy, Csúcshegy), which were traditional recreational areas. The plots that were typically used as holiday homes rather than for agricultural purposes often became permanent residences later.<sup>59</sup>

Until the regime change, international tourism that started after 1956 was mainly operated in organised group travels: visitors were shown the main sights of interest that were the regular components of the fixed programmes. The exposed 'good places', which were concentrated mainly in the city centre (Heroes' Square, Buda Castle, Danube bank, Váci Street and its surroundings, museums) and in the main panoramic points (Citadel, Fisherman's Bastion), were often avoided by locals in their everyday lives, so there was a sharp division between the places considered good by visitors and the city dwellers. Foreign groups were not only provided with a kind of showcase regarding the sights, but they were also given priority catering services, in a controlled manner, instead of an otherwise more limited range of goods.<sup>60</sup> There were also destinations that were equally attractive for both city dwellers and domestic tourists visiting the city mainly from the countryside, such as the Zoo, the Amusement Park and the Buda Castle.

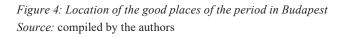
<sup>&</sup>lt;sup>58</sup> ÉVM-MÉM Joint Decree 18/1968 (of the Ministry of Construction and Urban Development and the Ministry of Agriculture and Food) on the sale or lease of certain state-owned land in unincorporated areas. <sup>59</sup> CSORDÁS 2021: 89.

<sup>&</sup>lt;sup>60</sup> "And the foreigner's coupon. Capitalist visitors who came to see their relatives had to buy restaurant coupons, which could be used in a few selected elegant restaurants, mainly in Budapest", writes Péter Esterházy on page 697 of his novel entitled *Celestial Harmonies (Harmonia cælestis)*.



museums) and the main panoramic sites (Citadel, Fisherman's Bastion) were often avoided by locals in their daily lives.

Formal 'good places' (district and company culture centres, library network), established in a way to be accessible to all, were evenly spread across the city. Going to weekend plots of land became a widespread form of active leisure in the outer districts of Budapest and in its agglomeration.



# 2.3. From regime change to today: Whose good place is it, after all?

The key characteristic features of the era were the following:

- the change of regime brought fundamental socio-economic changes
- the boundaries between working time, other time spent on social commitments and leisure time became blurred
- the "city" came into fashion: blogs, street food, thematic routes, map design, 'A Day in the City', 'Urbanista'
- tourism became one of the most important drivers of the economy
- between 1990–2000, rapid privatisation in tourism, the era of organised mass tourism
- from 2000 to the present, dynamic growth of individual tourism and the number of city sight-seeing tours of a couple of days, low-cost airlines, cheap flights, the boom in private accommodation (Airbnb), the spread of the use of internet and social media, review sites (such as Tripadvisor)
- micro-trends, the emergence of niche markets

The change of regime brought fundamental changes in the socio-economic structure: a market economy was established, incomes fell sharply, unemployment became visible, social and income inequalities manifested themselves and then became more pronounced. The struggle to make a living led to a radical decline in the demand for consumption, including leisure goods, especially cultural goods and travel.<sup>61</sup> The proportion of young people in education increased, the overall share of the intelligentsia rose, while the number of people working in agriculture fell. Among employees, the number of managers increased, while among entrepreneurs, the separation of working time and leisure time was impaired.<sup>62</sup> In addition to changes in the economic environment, demographic changes also had an impact on leisure consumption.<sup>63</sup>

The reduction of the support provided to the cultural sector led to a massive increase in the price of books and the closure of theatres, cultural institutions, culture centres, libraries, and cinemas. The funding of sports clubs was restructured, and sponsorship was introduced. "Books, newspapers, theatre, and cinema were replaced by multichannel cable TV and video. Video rental stores proliferated, and video became the entertainment of choice for a significant proportion of families. The leisure activity of 'playing on the computer', using a game program, first appeared in urban families, and quickly became very popular, then it was followed by the rapid spread of the internet." <sup>64</sup>

In the three and half decades since the regime change, it can be observed that apart from a decline in the amount of time spent reading, there has been an increase in the amount of time spent in front of the television and screens.<sup>65</sup> Today, the screen gives the framework of young people's lives, "their leisure time is pervaded by screentime activities, and being present on the internet is also a major field of self-representation".<sup>66</sup> The time spent in social activities with family, friends, and acquaintances, as well as in cultural activities outside home (going to the theatre, cinema, visiting events), has decreased. The time spent in physical activity, walking, hiking, or other physical activities has been reduced to a minimum.<sup>67</sup>

Since the turn of the millennium, new trends have evolved on the supply and demand side of the leisure industry. After a low point in 1996 for attendance at cultural institutions and events (cinema, theatre, museum, concerts, etc.), demand has now risen, forming a U-shaped curve.<sup>68</sup> In parallel, new cultural institutions, high quality concerts, international festivals, events, museum exhibitions, cinema complexes, escape rooms<sup>69</sup> have emerged on the supply side of the cultural scene.

Overall, as the amount of leisure time increases at the societal level, polarisation in the amount and use of leisure time is also becoming more pronounced. In this process,

- <sup>63</sup> Szabó 2020: 65–68.
- <sup>64</sup> Erzsébet Ifjúsági Alap [s. a.]: 8.
- <sup>65</sup> KSH 2013: 5.
- 66 BOCSI-KOVÁCS 2018: 68.
- <sup>67</sup> KSH 2013: 6.
- <sup>68</sup> Erzsébet Ifjúsági Alap [s. a.]: 8.
- <sup>69</sup> Ретуко́ et al. 2020: 37–39.

<sup>&</sup>lt;sup>61</sup> Fekete 2018: 93.

<sup>&</sup>lt;sup>62</sup> TIBORI 2002: 64.

the capital city acts as a kind of flagship, the key driving force of which are the city dwellers and the tourists visiting Hungary mainly from the affluent societies, the mature "experience societies".<sup>70</sup>

The Hungarian capital is also becoming increasingly attractive to foreign tourists. Budapest's attractiveness was growing steadily from the 2000s until the outbreak of the Covid–19 pandemic, thanks to improving transport links, the rise in popularity of less globally known and popular cities and owing to the good value for money by international standards. In some areas of the capital, this has devolved into "overtourism", which deteriorates both the quality of life of locals in the area and the quality of the experience unacceptably.<sup>71</sup> For domestic tourists, visits to Budapest take the form of day trips or trips of a few days as they often find accommodation at friends' or relatives' homes.<sup>72</sup>

Good places of the era:

- different processes are occurring in parallel with each other, there is a simultaneous demand for places that are quick to consume, can be ticked off or put on a list, and for authentic, special experiences and places that are also considered good places by locals
- due to "overtourism", the characteristic features are the overuse of public spaces in the inner city, and the critical deterioration of the quality of public spaces, particularly in the centre, in the party district and in the "Jewish Quarter"
- the Island Festival (Sziget Fesztivál) and the party district attract young foreign tourists most strongly
- due to the search for an authentic local experience, the places considered good by Spatial Dynamics of Good Places in the Urban Development of Budapest, the city's residents and tourists alike tend to converge, e.g. both young people from the city and from abroad come to the party district for fun
- the Danube and urban waters are in a contradictory situation the Danube is inaccessible in the city centre, while the natural, outer water banks and small watercourses are increasingly valued
- grassroots civic initiatives and communities shape the use of public space through finding new functions
- white-collar and creative workplaces seek proximity to good places, the boundaries between different activities, especially work and leisure, become blurred
- during and after the pandemic, outdoor entertainment and entertaining guests became more valued

Since the regime change, there has been a significant shift in what is perceived as good places by residents and visitors to the city. The renewal of public spaces and buildings of the inner-city area has more and more increased the value of the city centre, but instead

<sup>&</sup>lt;sup>70</sup> Kovács 2014: 47.

<sup>&</sup>lt;sup>71</sup> PINKE-SZIVA et al. 2019: 13.

<sup>&</sup>lt;sup>72</sup> HALASSY 2010: 26; MICHALKÓ et al. 2014: 6–7.

of its residential function, the renewed historic quarter has become more attractive for institutional, economic, cultural, and tourist purposes.

Since the 2000s, as a consequence of cheap flights and the spread of booking portals and booking applications (Booking.com, Airbnb), the organised group trips have been overwhelmingly replaced by individual tourists coming for a few days' sightseeing trip. A number of simultaneous trends can be observed with regard to tourists arriving in large numbers but as individuals. Partly, there is a rapid 'consumption' of attractions, which is enhanced by various 'Top 10' lists and consumer review sites (such as Tripadvisor). In addition, an increasing demand has emerged to discover unique, special, "hidden" places. Finally, as a combination of the two, some companies have found a niche market, and they are specialising in mass-produced, industrialised 'unique experiences' by offering escape rooms and beer bikes. These simultaneous and contradictory demands have played a major role in the transformation of the inner part of Erzsébetváros (Elizabeth Town) into a party district. It is well illustrated by how the originally truly authentic and unique ruin pubs have been turned into a real industry. However, the density of functions and the central location in the city centre continue to make the area attractive not only to foreigners but also to city dwellers, at least for entertainment purposes.

Such processes have been set in motion that are contradictory also from an urbanistic point of view: value increase and vacancy due to overuse simultaneously manifest themselves in the inner area. Inner city places, previously more popular with locals, have become a special authentic experience for tourists, but the more visitors arrive, the more overuse erodes the experience and causes conflict in the use of the inner districts. The large tourist traffic makes residential function impossible, and the resulting mass vacancy of apartments leads to short-term rentals, which is a further source of conflict, causing more people to move out of the neighbourhoods concerned.



Figure 5: The empty Szimpla Garden during the Covid pandemic, 2021 Source: photo by Gábor Michalkó

This process is directly observable in some of the changing places that become fashionable for a while. In the mid-1990s, Ráday Street, which was thematically renewed with cultural and catering functions, began to gentrify, and the price of residential property increased significantly. The street attracted not only locals but also a large number of foreign tourists, especially in the area closer to the city centre. However, the bustling street life caused considerable environmental pollution, which was not only extremely disturbing for the residents, but also significantly diminished the visitor experience, and the place lost its former popularity. It seems that over-popular places have a 'life cycle' and their warranty 'expires' after a while. The process then repeats itself in new places. City dwellers discover previously less popular places, which are then 'put on the map', and after a while they are also discovered by tourists, and the cycle restarts again. However, the process is likely to become more balanced, the further away the location is from the city centre.

Open spaces, particularly green spaces and waterfronts are outstandingly attractive for residents of densely built-up urban areas. The value of outdoor entertainment and catering particularly grew during and after the pandemic. Nevertheless, the perception and use of the Danube is still controversial. The Danube bank in the inner-city is inaccessible due to traffic on the lower embankment. Its direct use is blocked by a series of hotel and event boats occupying the waterfront view, so tourists visiting the World Heritage Site look for a connection to the riverbank in vain. As regards Budapest's inhabitants, the riverfront is almost completely absent from their mental map of the city.

In recent years, grassroots community initiatives have been launched to make temporary use of the Danube bank, and they have also changed the trend of seasonal catering, seeking out the outer spaces of the Roman Beach, the People's Island or the southern parts of the city, instead of the overcrowded, inaccessible inner-city Danube bank. Temporary use of public spaces is an important part of the cityscape both in its image-forming and community-oriented roles, expanding the public space use.<sup>73</sup> By supporting the economic prosperity of the adjacent areas, it also serves tourism purposes besides giving satisfaction to the city's residents.<sup>74</sup>

In the 2018 Venice Biennale programme, Valyo's "Szabihíd" (nickname from the name of Liberty Bridge) project entered the international scene. The project was originally inspired by a spontaneous 'occupation' of the bridge by young foreign tourists during the closure of the Freedom Bridge (Szabadság híd) in 2016. Similar experimental projects included the temporary utilisation of the construction site on the Danube bank (Harbour), the free bathing opportunity in the Danube (Roman Beach) or the Árasztó-part recreational project on the side of the unused embankment of the Danube. These micro-scale, community developments next to the Danube are not only of local significance: an increasing proportion of city residents and visitors to the city are showing interest in unique attractions that are popular with locals and go beyond sightseeing. Therefore, the revitalisation of the outer areas is also an opportunity to ease the concentration of

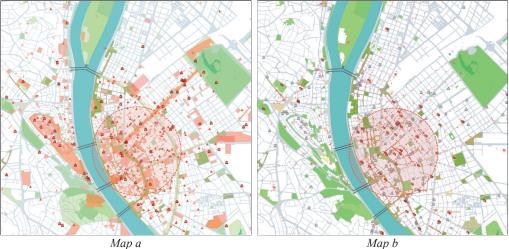
<sup>73</sup> Fonyódi 2019: 34.

<sup>74</sup> Michalkó 2010: 66.

tourism. It effectively shifts the demand for using the Danube in the inner city, which is difficult to achieve because of traffic, to the outer parts of the city.75 Riverbanks, which are close to nature and revitalised sections of small watercourses are being discovered and enjoyed by city dwellers because of the direct access to the watercourse and due to the urban cycle routes. Thus, new areas are added to the green/blue selection alongside the banks of the Roman Beach and the Soroksár branch of the Danube. Temporary traffic closures in inner city areas are testing the demands of city dwellers, and at the same time, they are preparing the ground for a social debate on a more liveable city.

A good place is no longer a need merely related to leisure time. Companies with highly skilled, creative employees, such as Prezi and LogMeIn choose to work in the feature-rich city centre rather than in distant office parks, and the unique Danube-front environment also played a major role in the unparalleled success of Graphisoft Park. In addition, fusion places have emerged that offer café, exhibition space and community office functions at the same time, such as the Kastner Kommunity in the Népszínháznegyed (People's Theater District), which won the Community Office of the Year Award in 2022.

All this is a good illustration of the trend of our time, as the boundaries between the time spent on work, commitments, and leisure become blurred, and the need for good places, previously enjoyed more on holidays and days off, is becoming increasingly important in our daily lives. This way the separation between a good place, workplace and place of residence is diminishing more and more.



Map a

The density of functions in the city centre and the central location make the area attractive to both foreigners and city dwellers for entertainment. The main entertainment venues for city dwellers are theatres, cinemas, nightclubs, bars, and pubs.

Density of attractions and tourist services in the city centre: built heritage, museums, exhibitions, viewpoints, accommodation, and high quality catering.

Figure 6: Location of the good places of the period in Budapest Source: compiled by the authors

<sup>75</sup> Fonyódi 2019: 34.

#### **Summary**

Bull and his colleagues identified four major trends that have a profound impact on the development of the leisure economy,<sup>76</sup> and these changes are also bound to affect Budapest's good places. In the coming years, the boundaries between working time, other social commitments and leisure will be blurred. The evolvement of leisure activities could take place along two scenarios: one of them, organic development is less likely, leisure activities are thought to undergo significant restructuring. The latter implies increasing lifestyle involvement and quality-of-life dimensions, a rise in the popularity of leisure time spent in the immediate environment and focusing on activities related to personal development (learning, sports, community work). Increased commercialisation will be reflected in the creation of new products and services, with new experiences. Lastly, the service provider side of the leisure services market will be expanding: the civil sector and local authorities will appear more markedly on the supply side of leisure services alongside the traditional business sector.

Besides these macrotrends, several further microtrends are shaping the future of leisure time.<sup>77</sup> The increase in the number of single-person households, new patterns of childbearing and cohabitation, the rise in retirement age, commuting (both daily and long-distance), working from home, increasing internet penetration, the expansion of the market for electronic goods, the rise in the popularity of dangerous hobbies, among others, will lead to the creation of new services, the expansion of leisure spaces, the emergence of new niche markets also in respect of the leisure spaces of Budapest.

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<sup>&</sup>lt;sup>76</sup> BULL et al. 2003: 280–288.

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## Dóra Szendi

# Can Budapest Be the Smartest City in Eastern and Central Europe?

#### Introduction

According to OECD forecasts, by 2100, 85% of the world's population will live in cities (up from today's 55–56%). Cities already account for 82% of global GDP, and projections suggest this could rise to 88% by 2025.<sup>1</sup> Alongside the concentration of population and global GDP, the largest cities are also hubs for capital (e.g. in the form of stock exchanges) and corporations. The Fortune Global 500 list shows that 21%, or 105 companies, are concentrated in the four global cities: London, New York, Paris, and Tokyo.<sup>2</sup>

The McKinsey Global Institute examined the world's 600 largest cities (including Budapest, the capital of Hungary) based on their contribution to global GDP growth between 2007 and 2025. It was found that approximately 1.5 billion people (22% of the world's population) live in these cities, which produced USD 30 trillion in GDP in 2007 (over half of global GDP), with an average GDP per capita of USD 20,000. These figures are expected to increase significantly across all three examined metrics by 2025. The population is projected to grow to approximately 2 billion, with improving average living conditions. The total GDP of the 600 cities is expected to reach USD 64 trillion, with average GDP per capita projected to be 1.5 times the 2007 level, amounting to USD 32,000.<sup>3</sup>

Nowadays, Industry 4.0 and globalisation are presenting new challenges to cities with technologies such as artificial intelligence, autonomous vehicles, 5G networks, and big data. In many cases, cities need to think in terms of new business models to overcome these challenges.<sup>4</sup> This is because rapid urbanisation brings with it numerous challenges, such as the growth of slums or the increasing pressure on basic services and infrastructure, as well as uncontrolled city expansion, all of which heighten the vulnerability of cities to economic and environmental shocks.<sup>5</sup> The rapid growth in the size and population of cities therefore – alongside economic factors – has a significant impact on society and the environment.<sup>6</sup> This highlights the significance of resilience, which refers to the ability to adapt to rapidly changing external conditions and manage shock-like external impacts.

- <sup>2</sup> Fortune 2022.
- <sup>3</sup> Dobbs et al. 2011.
- <sup>4</sup> Budapest Főváros Önkormányzata 2019a: 10.
- <sup>5</sup> Discover the Most Sustainable Cities in the World 2021: 1.
- <sup>6</sup> PERVEEN et al. 2017: 666.

<sup>&</sup>lt;sup>1</sup> OECD 2015: 15.

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In 2017, Kumar and Dahiya emphasised this by developing a maturity model for smart cities, where the first level represents access to basic urban services. This progresses through effective resource and energy use and sustainability, with the final stage aiming for cities to achieve a high level of resilience.<sup>7</sup> Analyses suggest that Covid–19 has further accelerated the shift towards a new urban paradigm, which could result in inclusive, green, and smart cities in the long term.<sup>8</sup>

The concept of a 'smart city' is a widely used term as an urban economic development driver, which can achieve significant increases in efficiency through the extensive adoption of new technologies.<sup>9</sup> However, these new technologies often involve the structural transformation of city economies and the automation, co-ordination, and system-level management of their processes. Change is not limited to megacities; for instance, at a global level, the most radical population growth and economic transformation are expected in the second- and third-tier cities of various countries.<sup>10</sup> In this approach, the innovation capacity of cities in the Eastern and Central European region (such as their role in smart city development) is of particular importance, as surrounding regions could also significantly benefit from their development, which could support their convergence towards the EU average.<sup>11</sup>

The aim of this chapter is to position Budapest as a smart city within the Eastern and Central European region, to present its strategy, and to review the anticipated developments. After introducing the smart city concept, the second part of the chapter presents the Hungarian capital's strategy across various focus areas, and then positions it among the broader group of Eastern and Central European capitals (Prague, Bratislava, Warsaw, Bucharest, Sofia, Zagreb, Ljubljana)<sup>12</sup> in light of key smart city rankings. The chapter concludes with a forecast of the city's expected position.

### 1. Theoretical overview

The smart city concept emerged in the academic literature in the 1980s and 1990s and refers to a city driven by information and communication technologies (ICT). Since its inception, numerous interpretations have been proposed to describe the concept, but there is still no accepted definition today.<sup>13</sup> Below, I will review several concepts related to smart cities, outlining the noticeable differences among them.

- <sup>7</sup> VINOD KUMAR DAHIYA 2017: 74.
- <sup>8</sup> OECD 2020.
- <sup>9</sup> KOLLAR et al. 2018: 7.
- <sup>10</sup> World Economic Forum 2022.
- <sup>11</sup> KOLLAR et al. 2018: 7.

<sup>12</sup> The broader concept of the Eastern and Central European region is justified by similar starting conditions, historical factors, strategic co-operation and socio-economic characteristics.

<sup>13</sup> O'GRADY–O'HARE 2012: 1581–1582.

#### 1.1. The concept and models of smart cities

Initially, the use of ICT (Information and Communication Technology) defined smart cities. Over time, more 'soft' elements (such as knowledge, human capital, and the role of innovation) have been incorporated into definitions, and today, participation and sustainable development are increasingly emphasised. Some approaches focus on ICT (buzzwords: 'digital', 'connected', or 'information-rich' cities),<sup>14</sup> while others stem from environmental considerations ('sustainable', 'green', 'eco' cities)<sup>15</sup> or knowledge aspects ('learning' or 'intelligent' cities)<sup>16</sup> and transport perspectives. What they have in common is the portrayal of cities as places that house efficient, highly productive, innovative, and collaborative communities.<sup>17</sup> One of the most frequently used models is the six-component model developed by Giffinger and co-authors (originally applied to medium-sized European cities), which includes economy, people, governance, mobility, environment, and quality of life,<sup>18</sup> using over 80 indicators in total to rank cities.<sup>19</sup>

In another point of view, a smart city is characterised by only two main features: technology and the creation of added value for stakeholders. The city administration aims to ensure quality of life, business opportunities, competitiveness, and cost reduction within a specific, well-defined geographical area.<sup>20</sup>

Alongside research institutions and experts, major international organisations and institutions also articulate their own perspectives. According to the UN's urban development programme, a smart city is a concept that leverages the opportunities provided by digitalisation, clean energy and technologies, as well as innovative transport technologies, thereby offering residents environmentally friendly decision-making and choice options. As a result, it supports sustainable economic growth and improves the services provided by cities.<sup>21</sup>

According to the most recent approach of the European Commission, a smart city is "a place where traditional networks and services are made more efficient with the use of digital solutions for the benefit of its inhabitants and business".<sup>22</sup>

Several theories focus on summarising the common intersections of various definitions and interpreting the concept in a holistic manner. The majority of these approaches review the literature from the perspective of the ultimate goal of smart cities, which is the quality of life for residents. For example, the IoT agenda starts from the technology

- <sup>15</sup> Bătăgan 2011: 80–87.
- <sup>16</sup> Komninos 2011: 172–188.
- <sup>17</sup> LAZAROIU–ROSCIA 2012: 332.
- <sup>18</sup> GIFFINGER et al. 2007: 11.

<sup>19</sup> Among European medium-sized cities with a population of between 100,000 and 500,000 (with at least one university centre and an agglomeration zone of less than 1.5 million inhabitants), Luxembourg is the 'smartest', ahead of Aarhus and Turku. Overall, the northern medium-sized cities led the ranking.

- <sup>20</sup> Glasmeier–Christopherson 2015: 6.
- <sup>21</sup> UN 2017: 19.
- <sup>22</sup> European Commission [s. a.]: 1.

<sup>&</sup>lt;sup>14</sup> Hollands 2008.

side and identifies several common elements in definitions of smart cities, including: technology-based infrastructure, environmental initiatives, a well-functioning public transport system, effective urban planning methods, and people who live and work in the city and utilise its resources.<sup>23</sup>

The capital city's smart city strategy defines the concept as a set of measures aimed at improving urban quality of life in the long term, with a focus on people and a liveable urban environment.<sup>24</sup> Additionally, the term 'smart' is also used as an acronym, as their interpretation suggests that a development achieves its true goal if it is "S.M.A.R.T. – Specific, Measurable, Attainable, Relevant, and Time-bound".<sup>25</sup>

The following model provides a summary of the framework conditions for smart cities. The central element of the model is the six components of smart cities – smart economy, people, governance, mobility, environment, and quality of life – based on the models by Giffinger and co-authors<sup>26</sup> or Cohen.<sup>27</sup> Nam and Pardo extend the basic model by adding three so-called boundary conditions that influence the model's success. These can be categorised into: human factors (human preferences, labour market characteristics), technological factors (technological development and digitalisation), and institutional factors (elements of the regulatory environment).<sup>28</sup> Fernandez-Anez and co-authors have further developed the model by incorporating global trends affecting cities, which is an important consideration in today's rapidly changing urban environment. These global trends include climate change, the increasing significance of new technologies, economic instability, global urbanisation, demand for new governance models, and social polarisation. For example, economic instability here refers to economic resilience, vulnerability, innovation, knowledge-based economy, and competitiveness.<sup>29</sup>

I have supplemented this framework model with a few additional conditions, as I believe the entire model is strongly embedded in a macroeconomic business environment with distinct characteristics and incentives that vary by country. This environment is fundamentally shaped by the asymmetric interdependencies among countries, regions, and cities (*Figure 1*). In my opinion, this influences the possibilities and success of financial and professional support for individual smart city initiatives.

- <sup>24</sup> Budapest Főváros Önkormányzata 2019a: 4.
- <sup>25</sup> Budapest Főváros XIII. Kerületi Önkormányzat 2019: 5.
- <sup>26</sup> GIFFINGER et al. 2007: 12.
- <sup>27</sup> Cohen–Obediente 2014.
- <sup>28</sup> Nam-Pardo 2011: 286.
- <sup>29</sup> FERNANDEZ-ANEZ et al. 2018: 78.

<sup>&</sup>lt;sup>23</sup> Brown 2018.

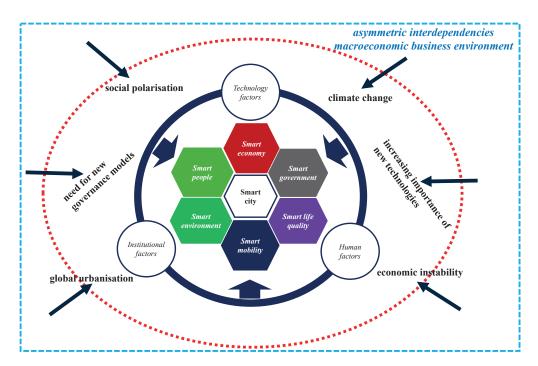


Figure 1: Smart city framework model

Sources: compiled by the author based on the model of GIFFINGER et al. 2007; NAM-PARDO 2011; FERNANDEZ-ANEZ et al. 2018

### 1.2. Smart city strategies: Variations in planning directions and management models

In addition to the focus areas (number and nature of components), theories can be clustered based on other aspects, such as the method of strategy development (top-down, bottom-up, or co-creation planning),<sup>30</sup> the number of stakeholders involved (triple, quadruple, or even penta helix approaches), or the role of ICT tools used.<sup>31</sup>

Urban development today has undergone a paradigm shift in several respects, and research activities related to smart cities have become a priority for all stakeholders (business sector, industry, policymakers, and the academic community).<sup>32</sup> The involvement and collaboration of different stakeholders vary from city to city, and there is no uniform framework for this. Consequently, depending on the number of stakeholders, the direction of strategic planning may also vary, reflecting the unique needs and contexts of each city.

According to Jong and co-authors, the concept of a smart city is based on the ideas of intelligent and creative cities. The former, which can be traced back to the earliest

<sup>&</sup>lt;sup>30</sup> Budapest Főváros Önkormányzata 2019a: 6.

<sup>&</sup>lt;sup>31</sup> SZENDI 2021: 173.

<sup>&</sup>lt;sup>32</sup> EREMIA et al. 2017: 12.

top-down approach, focuses on technology, while the latter is rooted in a bottom-up, community-based and private sector-driven approach. The ideal smart city combines these elements, being both smart and creative, which implies a balanced relationship between technology, institutions, and people.<sup>33</sup>

When involving stakeholders, three relevant approaches should be mentioned. The oldest is the so-called triple-helix model, which is based on the collaboration of the public, private, and academic sectors and primarily creates projects through a top-down approach. In this model, civic engagement is relatively weak.<sup>34</sup> In contrast, the quadruple-helix model integrates civil society as well, allowing for a more flexible response to social issues and establishing an institutionalised bottom-up approach for problem-solving. This provides a reactive solution to emerging problems and societal risks.<sup>35</sup> Recently, a new model for idea generation, the penta-helix approach, has emerged, which proactively integrates the participation of social entrepreneurs and activists.<sup>36</sup> This helps better address problems arising from a changing environment and can enhance the resilience of cities. Since cities are responsible for a significant portion of environmental issues, environmental protection has also been incorporated into the helix models. While the classic triple and quadruple helix approaches remain, the five-component penta-helix model sometimes evolves into a quintuple helix model, where the fifth pillar is the environment as a framework condition.<sup>37</sup>

Building on the penta-helix approach, the Smart City 3.0 theory is becoming increasingly popular today, which adopts a population-driven approach. Leading smart cities are beginning to apply co-creation strategies to jointly develop technologies and services desired by their residents.<sup>38</sup>

### 1.3. Smart city strategies and models in the capitals of the Eastern and Central European region

An examination of the capitals in the Eastern and Central European region reveals a diverse range of city management models. Due to their post-socialist heritage, most cities rely on top-down, centrally controlled models for their strategies (as also observed in the capital), a trend supported by existing literature.<sup>39</sup> However, it has become increasingly evident that several cities recognise the importance of more intensive involvement from the population and civil society to ensure social acceptance of their projects. In this review, I analyse the strategy development processes of the broadly defined capitals in Eastern and Central Europe, aiming to determine whether each city has a comprehensive

<sup>34</sup> Calzada–Cowie 2017: 25–28.

- <sup>37</sup> König et al. 2021: 9.
- <sup>38</sup> PASKALEVA et al. 2021: 399.

<sup>&</sup>lt;sup>33</sup> Jong et al. 2015: 27.

<sup>&</sup>lt;sup>35</sup> SZENDI 2021: 173.

<sup>&</sup>lt;sup>36</sup> Calzada 2020: 1150.

<sup>&</sup>lt;sup>39</sup> SAGAN–GRABKOWSKA 2012: 1142; IBĂNESCU et al. 2020: 79; NEDUČIN et al. 2021: 23.

smart city strategy and to assess the orientation of their strategy development, idea generation, and implementation (whether top-down or bottom-up). The details of the region's models are comprehensively summarised in *Table 1*.

Table 1: Capital cities in Eastern and Central Europe according to the urban governance models used in smart city strategies

Country	Capital	Existence of a complex smart city strategy	Orientation of the strategy
Bulgaria	Sofia	not	top-down
Czech Republic	Prague	yes (2017–2030)	top-down and bottom-up
Croatia	Zagreb	yes (2020–2030)	top-down and bottom-up
Hungary	Budapest	yes	top-down or bottom-up at district level
Poland	Warsaw	yes	top-down
Romania	Bucharest	not	top-down
Slovenia	Ljubljana	not	top-down and bottom-up
Slovakia	Bratislava	no/forming on the model of Vienna Twin City	top-down

Source: compiled by the author

Reviewing the strategies of individual cities reveals the following observations. In the case of *Sofia*, there is no comprehensive smart city strategy that covers all areas. However, there are forward-looking initiatives. In 2020, Sofia adopted a digital transformation strategy as a result of its participation in the European Commission's 'Digital Cities' challenge (2018–2019). The declared goal of this challenge was to achieve sustainable economic growth through the use of cutting-edge technology.<sup>40</sup> Additionally, within the framework of the 'Smarter Together' programme, Sofia has established a sustainable energy action plan for the period 2012–2020. This plan includes measures for energy management, energy planning, and building refurbishment, as well as for transport and waste management.<sup>41</sup> In 2019, the city administration introduced the 'Vision for Sofia adopted the suburban areas up to 2050, which is planned to be implemented with the combined participation of citizens, businesses, academia, non-governmental organisations, and government officials.<sup>42</sup>

In contrast, *Prague* has a comprehensive smart city strategy for 2030, with its main goals being sustainable growth and a high quality of life. Projects are implemented according to five core principles: the city aims to be eco-conscious, innovative, friendly and motivating, digitised, secure and resilient. Progress is monitored annually, and results are reviewed. Six key areas have been identified where the introduction of modern technologies is expected to have the greatest positive impact: future mobility, smart buildings and energy, a waste-free city, attractive tourism, people and urban environment,

<sup>&</sup>lt;sup>40</sup> European Commission 2019: 4.

<sup>&</sup>lt;sup>41</sup> Smarter Together: Sofia 2019.

<sup>&</sup>lt;sup>42</sup> Sofia Municipality 2017.

and data processing. The strategy incorporates both top-down and bottom-up elements, as the city administration plans and executes projects in the key areas, but project ideas can come from a wide range of sources, including the population, businesses, academic and research institutions, and local authorities.<sup>43</sup>

By 2030, *Zagreb* has established a framework strategy for smart city development, with key elements including quality of life, the economy, management and information, as well as environmental protection and climate change mitigation. One of the main focuses of the strategy is sustainability, with emphasis on areas such as energy networks, smart management of energy supply, water supply and sewage systems, as well as smart management of gas networks and street lighting.<sup>44</sup> The measures are always directed by the same team, which includes multiple stakeholders, continuously monitoring and improving the projects in a sort of 'living lab' approach.<sup>45</sup> The city builds on involving local actors both in idea generation and implementation, similar to Prague, using a governance model that combines both top-down and bottom-up approaches.<sup>46</sup>

Regarding *Warsaw*, the city's primary goal is to improve the quality of life for its citizens, and according to its strategy, it aims to become a mature, digitally advanced city in Eastern and Central Europe by 2030. Additionally, it will be a place that generates innovation and attracts international talent. Current solutions focus on the sensor-based collection and monitoring of data, and goals/key dimensions are defined based on the six components outlined by Giffinger and co-authors, which are implemented within a historically well-established top-down governance model (with a prominent role for the Warsaw City Hall).<sup>47</sup>

The municipal administration of *Bucharest*, in collaboration with Deloitte, is developing its smart city strategy by 2025, which is currently in the design and consultation phase, so specific goals are not yet known.<sup>48</sup> Bucharest began planning its smart city strategy in 2018, focusing largely on traffic management, transport infrastructure, e-governance, telecommunications, smart buildings, green energy, public safety, and smart tourism. The two main pillars are the transport and governance components. During the strategy development phase, the city exhibits strong top-down characteristics.<sup>49</sup>

*Ljubljana* does not have a comprehensive strategy in place (despite working with Siemens on the city's smart strategy since 2010).<sup>50</sup> However, as the European Green Capital in 2016, the city places a strong emphasis on sustainability in urban development.

<sup>&</sup>lt;sup>43</sup> Deloitte Česká Republika 2022: 88.

<sup>&</sup>lt;sup>44</sup> MALNAR NERALIC 2019: 8.

<sup>&</sup>lt;sup>45</sup> Classic examples include certain districts of Amsterdam and Helsinki, where specific project proposals are tested and, if successful, they can be expanded to the entire city or adopted as best practices by other cities.

<sup>&</sup>lt;sup>46</sup> Zagreb (HR) 2019.

<sup>&</sup>lt;sup>47</sup> GIFFINGER et al. 2007: 12; BAKER 2019: 4; MASIK et al. 2021: 4.

<sup>&</sup>lt;sup>48</sup> Romania Insider 2018.

<sup>&</sup>lt;sup>49</sup> IBĂNESCU et al. 2022: 249.

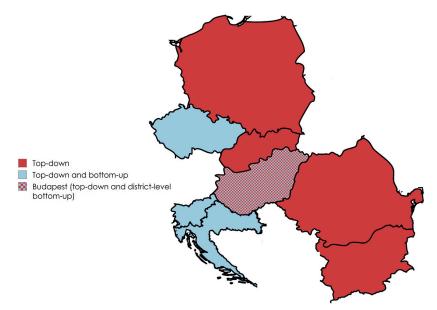
<sup>&</sup>lt;sup>50</sup> Pušnik et al. 2019: 143.

Ljubljana attempts to integrate citizens into the smart city development process, primarily through idea generation, thereby incorporating a bottom-up perspective into strategy formulation, similarly to Zagreb.<sup>51</sup>

*Bratislava* also lacks a complex smart city strategy. Several strategic documents have been developed for various sectoral advancements (such as the strategy for climate change adaptation, transport, social, and environmental studies), but a holistic smart concept for the city has yet to be completed.<sup>52</sup> The forthcoming strategy is likely to follow the Vienna model as part of the so-called Twin City project, which suggests a top-down approach.

Overall, among the capitals in the region, four still employ a top-down approach (see *Figure 2*), while in three cases, including Budapest at the district level, bottom-up initiatives are strongly present in the idea generation and strategy implementation phases.

As can be seen, there is no unified perspective on strategic planning within the V4 countries, but it is also evident that the capitals of countries with higher per capita incomes are more inclined towards the bottom-up approach. Thus, in the western part of the region, capital city strategies typically materialise in the spirit of co-creation, in a complex manner.



*Figure 2: Smart city strategies of the ECE region's capital cities Source:* compiled by the author

- <sup>51</sup> European Commission 2020.
- <sup>52</sup> HUSAR–ONDREJICKA 2016.

## 2. Key elements of Budapest's smart city strategy

In the following section, I will review the main objectives of Budapest's smart city strategy, the process of its development, its comprehensive and detailed focus areas, as well as specific features affecting the individual districts and potential connections with other strategies.

## 2.1. Smart city framework – Budapest's smart city model

Since the early 2010s, and in some cases even earlier, the development of smart city strategies has been initiated in an increasing number of EU capitals. Budapest's smart city framework strategy was adopted in 2019, with significant inspiration drawn from Vienna's smart city strategy. Vienna's top-down approach to smart city development, similar to Budapest's, defines the main development directions for sectoral planning, which then break down into specific strategic goals.<sup>53</sup> During the planning phase, the city reviewed several European examples concerning directions and actual project proposals,<sup>54</sup> however, the Vienna strategy was the closest to Hungarian concepts, which are internationally competitive smart city ideas (ranked 11<sup>th</sup> by IMD [Institute for Management Development], and 18<sup>th</sup> in the world according to the IESE [IESE Business School University of Navarra] index).<sup>55</sup>

The strategy's background partly includes Budapest 2030 Long-Term Urban Development Concept (which was already established in 2013) and Budapest Smart City Vision. The latter was completed in 2017, based on the goals of Budapest 2030 and sectoral plans. Among its main objectives are the following *(Table 2)*, which provided the foundation for defining the city's vision for the future.

Budapest 2030 Long-Term Urban Development Concept	Budapest Smart City Vision
Budapest as a strong member of the European region	International innovation hub
	Environmentally friendly use of resources and waste
Improved quality of life	Sustainable mobility
Value- and knowledge-based, sustainable economy	A city responding to environmental and technological changes
	Open, co-operative society
	Sustainable, local economic development

Source: Budapest Főváros Önkormányzata 2019a: 6–7

<sup>&</sup>lt;sup>53</sup> Dobos et al. 2015: 84.

<sup>&</sup>lt;sup>54</sup> Budapest Főváros Önkormányzata 2019b: 128.

<sup>&</sup>lt;sup>55</sup> Both indices rank smart cities according to different dimensions (see section 3.2 of this chapter for details).

With a view to the above considerations, Budapest's smart city vision is as follows: "Smart Budapest is a city that is environmentally, socially, and economically sustainable. By leveraging modern technology and fostering greater societal engagement, it aims to be a liveable city for its residents."<sup>56</sup> In other words, the capital's strategy strongly emphasises all three pillars of sustainability – environmental, social, and economic – as well as the crucial aspect of liveability. This liveability is to be enhanced through the opportunities offered by digital technologies. Furthermore, the strategy underscores the importance of societal engagement, which not only supports social acceptance of the goals but also helps achieve the desired outcomes.

In implementing the strategy, Budapest relies on the involvement of multiple stakeholders. Alongside the municipal government, state administrative bodies are responsible for enforcing the strategic principles in urban development and providing the regulatory framework needed to support the implementation of the strategy. Additionally, during both the planning phase and implementation (including monitoring the achieved results), there is a strong emphasis on involving the public and the civil sector. Meanwhile, market enterprises are primarily responsible for developing the products and services necessary for implementation (*Figure 3*). Thus, the top-down nature of the strategy is somewhat mitigated by its inclusion of stakeholders at various points, and it employs a kind of institutionalised bottom-up approach with the participation of civil organisations,<sup>57</sup> using a quadruple helix model.



*Figure 3: Governance model and stakeholders of the Smart Budapest framework strategy Source:* compiled by the author based on Budapest Főváros Önkormányzata 2019a: 13

The smart city strategy encompasses a total of 6 focus areas and 11 principles. Among the 6 focus areas, the model by Giffinger and his co-authors<sup>58</sup> may be most prominently mentioned, as it bears the greatest similarity, albeit in a slightly refined version (including proactive city governance, smart people, smart economy, sustainable resources, smart mobility, and urban quality of life). The 11 principles that organise the strategy primarily aim to support these components and generally reflect a holistic approach. The 11 principles are: efficient, co-operative, environmentally conscious, value-preserving and

<sup>&</sup>lt;sup>56</sup> Budapest Főváros Önkormányzata 2019a: 7.

<sup>&</sup>lt;sup>57</sup> CALZADA 2020: 1148.

<sup>&</sup>lt;sup>58</sup> GIFFINGER et al. 2007: 12.

value-creating, flexible, forward-looking, supportive (solidarity), creative, awareness-raising, secure, and transparent.<sup>59</sup> Each principle points towards a sustainable, liveable city capable of flexibly and swiftly responding to changes in the external environment and proactively managing shocks. In project planning, it relies on the creative knowledge and intellectual capital of its residents, while also shaping it through the implementation of developments. For each focus area, the plan specifies the main objectives of the respective pillar and assigns possible tools for implementation. These key points are summarised in the following diagram, based on the logic of Giffinger and his co-authors.<sup>60</sup>

SMART ECONOMY (objective: A high-quality business environment that supports innovation, knowledge sharing and cooperation)	SMART PEOPLE (objective: partnership, linking people and knowledge)		
<ul> <li>Local economic development services</li> <li>Living lab projects</li> <li>Innovation and start-up ecosystem</li> <li>Predictable regulatory environment</li> <li>Sustainable tourism, urban marketing</li> </ul>	<ul> <li>Raising awareness through campaigns, programs</li> <li>Developing digital competences</li> <li>Health promotion</li> <li>Quality of life improvements for older people</li> <li>Participation of NGOs</li> </ul>		
INITIATIVE CITY GOVERNMENT (objective: capacity to continuously renew governance, operational mechanisms and instruments; transparency of decision-making processes, openness, public participation)	SMART MOBILITY (objective: integrity, efficiency and quality)		
<ul> <li>Developing a data policy</li> <li>User-friendly online information interface</li> <li>Customer-focused services</li> <li>Smart coordination organisation</li> </ul>	<ul> <li>Developing community transport hubs</li> <li>Reasonable influence on mobility needs + regulated city-logistic processes</li> <li>Integration of suburban rail lines</li> <li>Cyclist-friendly developments</li> <li>Time-based, electronic ticketing</li> <li>Public car parking</li> </ul>		
SUSTAINABLE RESOURCES (objective: reduce resource use, increase efficiency of use, minimise energy loss)	URBAN LIFE QUALITY (objective: socially appropriate and affordable housing system; value-added regeneration of brownfield sites, scaling back greenfield investment)		
<ul> <li>Corporate social responsibility</li> <li>Smart grid</li> <li>Energy incentives for buildings</li> <li>Improving the competitiveness of the district heating system</li> <li>Waste reduction</li> </ul>	<ul> <li>Smart public space equipment</li> <li>Environmentally conscious architectural solutions</li> <li>Urban regeneration</li> <li>Rental housing system</li> <li>Encouraging the conversion of brownfield sites</li> </ul>		

Figure 4: Focus areas and principles of the Smart Budapest Strategy in the light of the objectives and possible solutions

Source: compiled by the author based on Budapest Főváros Önkormányzata 2019a: 11-12

- <sup>59</sup> Budapest Főváros Önkormányzata 2019a: 16.
- <sup>60</sup> GIFFINGER et al. 2007: 11.

Based on the above, Budapest faces significant challenges in all focus areas, and numerous solutions have been proposed to address them. Some of these are very specific, direct project proposals that have already begun planning (such as the creation of a living lab, development of digital competencies, data policy development, time-based electronic ticketing system [RIGO system], smart grid, smart street furniture), while others are comprehensive project proposals (e.g. innovation and start-up ecosystems or encouraging the functional transformation of brownfield sites). Implementing these, considering the named principles of the strategy, could significantly contribute to Budapest's long-term competitiveness among smart cities in Eastern and Central Europe. To support implementation, the Smart Budapest Community has been established. This community is designed to use its knowledge capital from the innovative entrepreneurial ecosystem and strengthen connections among innovators to discuss, review, implement, support, and represent Budapest's smart city-related policies.<sup>61</sup>

# 2.2. District-level smart city strategies for Budapest

Budapest's smart city strategy is complex not only in terms of the six focus areas mentioned but also geographically integrated. Some districts have their own smart district strategies, applying a kind of 'city within a city' approach. The unique aspect of these district strategies is that they often provide experimental environments for start-ups, similar to the living lab areas in Amsterdam or Helsinki (e.g. the smart city strategy for Józsefváros). They also adopt a strong bottom-up or co-creation approach (both District XIII and Józsefváros follow similar strategies). This bottom-up approach aims for stronger collaboration with civil society, which can be more feasibly implemented on a smaller scale within districts than across the entire capital. This approach improves the social acceptance of the strategies and allows for a response to actual emerging needs. If the district-level living lab projects are successful, their developments can be extended to other parts of the city or to the entire city itself. In the following, I will review the smart strategies of a few districts and examine how they might contribute to the city's goals set for 2030.

On 7 February 2019, the municipal government of District XIII (including Angyalföld, the Göncz Árpád City Center, the southern part of Népsziget, and the quarters of Újlipótváros and Vizafogó) adopted the Smart District Concept, which outlines the foundations of its smart district strategy.<sup>62</sup> The district's concept is based on the six components outlined by Giffinger and co-authors,<sup>63</sup> similar to the city's comprehensive strategy. However, when defining its goals, four main directions were identified, reflecting the district's unique features: development of an integrated municipal public service

<sup>&</sup>lt;sup>61</sup> MTI 2021.

<sup>&</sup>lt;sup>62</sup> Budapest Főváros XIII. Kerületi Önkormányzat 2019: 14.

<sup>&</sup>lt;sup>63</sup> GIFFINGER et al. 2007: 12.

system, improvement of citizens' living conditions, reduction of ecological footprint (energy efficiency), and support for active participation (e-services). The realisation of these goals is envisioned through four project packages: partner card service, development of partner-centred public services, 'Smart Net' for the benefit of residents and visitors, and a public parking system.<sup>64</sup> The partner card service has been operational in the district since 2009, and today more than 50% of the population uses it. With the card, users can receive discounts at shops in District XIII, in social stores, and for accessing public services. Currently, a smart application also supports even easier use (e.g. real-time messages about important events specific to streets) and the application process. Additionally, more free Wi-Fi access points have been established throughout the district. <sup>65</sup> In District VIII (Józsefváros), the smart city strategy was developed earlier. The municipal government first adopted the district's digital strategy in 2015, and then, in 2016, the Smart City Working Group was set up, which developed the outline of the concept later that year.<sup>66</sup> According to the strategy's vision, the goal is to create a 'balanced, culturally diverse, economically distinctive, and efficiently/smartly managed green inner-city district,<sup>67</sup> built upon the six components defined by Giffinger and co-authors.<sup>68</sup> A key element of the strategy is the establishment of living lab areas, which are considered one of the priorities in several areas and are deemed feasible with the involvement of universities and public institutions.

The city features several smart solutions and completed projects across various districts, such as smart benches in District II, smart paving stones in District IV, a project awarded for telemedicine services development in District VII, smart homes in Kőbánya, and a public space fault reporting application in Budafok. However, among the comprehensive strategies, the two mentioned above are the most extensive.

## 2.3. Regional co-operation and Budapest's smart strategy

The degree of integration is enhanced by the emphasis on city-regional collaborations in both Budapest's smart city strategy and its Integrated Urban Development Strategy, reflecting a key objective of the EU.<sup>69</sup> The smart city strategy highlights the need for collaboration and joint planning among partners to ensure the success of developments. This is crucial because one of the main goals of the city's long-term development strategy is to strengthen Budapest's role as a connecting hub in west–east and north–south directions within innovation, economic, cultural, and decision-making processes.<sup>70</sup> As regards

<sup>65</sup> Budapest Főváros XIII. Kerületi Önkormányzat 2019: 13.

<sup>&</sup>lt;sup>64</sup> Budapest Főváros XIII. Kerületi Önkormányzat 2019: 13.

<sup>&</sup>lt;sup>66</sup> Smart City Strategy for Józsefváros 2018: 4.

<sup>&</sup>lt;sup>67</sup> Smart City Strategy for Józsefváros 2018: 10.

<sup>&</sup>lt;sup>68</sup> GIFFINGER et al. 2007: 12.

<sup>&</sup>lt;sup>69</sup> Budapest Főváros Önkormányzata 2019a: 49; 2021: 6–7.

<sup>&</sup>lt;sup>70</sup> Urban Development Department of the Metropolitan Government of Budapest 2014: 32.

regional collaborations, the Budapest Metropolitan Region's Regional Development Strategy, completed in 2011, provides answers from several perspectives. The Budapest metropolitan area exhibits strong polycentric urban characteristics. The capital is surrounded by several cities with populations between 50,000 and 100,000, within a radius of 60-80 km (Székesfehérvár, Dunaújváros, Kecskemét, Szolnok, Gyöngyös-Hatvan, Salgótarján, Esztergom, and Tatabánya). These are the primary urban centres that define themselves as vibrant business hubs and attractive residential areas within the integration zone of the larger metropolitan region.<sup>71</sup> The strategy identifies Budapest as a potential MEGA (Metropolitan European Growth Area) region, which, according to the ESPON (European Spatial Planning Observation Network) classification, are prominent growth centres among European cities. Among the MEGA regions in Europe, the so-called Pentagon Area covers the most significant growth zone (with endpoints in London, Hamburg, Munich, Milan, and Paris).<sup>72</sup> In contrast, analysts view the so-called Central European Danube Integration Zone as a counterpoint. This zone covers the area enclosed by successfully specialised Central European metropolises, with key nodes such as Prague, Vienna and Bratislava (twin cities), as well as Budapest and Ljubljana.<sup>73</sup> It emphasises that co-operation among cities in smart strategies can further enhance the significance of the region.

In Budapest's future development, the above analysis considers five possible scenarios: 1. Spontaneous Growth Scenario (continuation of the previous unmanaged development path); 2. Self-contained City Scenario (minimum role of the agglomeration); 3. Danube Development Axis Scenario (with sub-centres like Esztergom and Dunaújváros); 4. Axisbased Development Scenario; 5. Diverse Polycentric Scenario (Budapest Metropolitan Region), where the last scenario represents the most complex approach. This scenario aims to create a regional economic hub similar to the Ruhr area in Germany, potentially providing the best support for implementing smart developments.<sup>74</sup>

Budapest's smart city strategy supports sustainability and the enhancement of quality of life, applying a complex, system-wide approach. In addition, it emphasises social inclusion and collaborative planning with various stakeholders, which can improve the widespread adoption of the smart city concept. At the same time, the city's strategy takes into account the alignment with higher-level goals and collaboration with surrounding cities and municipalities. The next section will focus on evaluating the city's current situation based on various city rankings, followed by an analysis of anticipated future developments in the final section.

<sup>&</sup>lt;sup>71</sup> GAUDER et al. 2011: 10.

<sup>&</sup>lt;sup>72</sup> ESPON 2005: 3.

<sup>&</sup>lt;sup>73</sup> GAUDER et al. 2011: 21; Urban Development Department of the Budapest Metropolitan Government 2014: 31.

<sup>&</sup>lt;sup>74</sup> GAUDER et al. 2011: 29.

## 3. Budapest's position as a smart city among East-Central European capitals and in global smart city rankings

Before positioning Budapest as a smart city, it is important to evaluate its place within the urban hierarchy using several socio-economic indicators *(Table 3)*. These indicators will establish its current standing and help predict its future ranking among smart cities. Essentially, these metrics provide a forecast of Budapest's potential to become a leading smart city.

In the analysis, I have assessed Budapest's position relative to other Eastern and Central European capitals (Prague, Bratislava, Warsaw, Bucharest, Sofia, Zagreb, and Ljubljana) based on key factors such as population, GDP per capita, R&D expenditures, and business density. This comparison helps to understand Budapest's current status and its capacity for future smart city development.

	Population (million people)	GDP per capita (euros) as a % of EU27 average)	Number of patents per 100,000 inhabitants	Number of active businesses per 1,000 inhabitants
Bratislava	0.43	127	1.3	277.6
Prague	1.32	105	4.2	325.3
Ljubljana	0.28	104	15.5	n. d.
Warsaw	1.77	98	5.3	185.1
Bucharest	2.13	85	1.5	80.7
Budapest	1.75	73	6.5	186.7
Zagreb	0.81	64	0.2	81.7
Sofia	1.24	55	n. d.	114.5

Table 3: Socio-economic data for the metropolitan regions (2019)

Source: compiled by the author based on Eurostat data

The above data suggest that Budapest's position is consistently around 3<sup>rd</sup> to 4<sup>th</sup> place in most indicators, except for GDP per capita. In terms of population, it is the 3<sup>rd</sup> most populous Eastern and Central European capital, following Bucharest and Warsaw (with only a slight lag behind Warsaw). However, in GDP per capita, the capital ranks only 6<sup>th</sup> among capitals, with a value reaching 73% of the EU average. Its position is favourable in terms of the number of patents per capita and the presence of active businesses. In patents, it is 2<sup>nd</sup> after Ljubljana, while in active businesses, it is 3<sup>rd</sup>, just behind Prague and Bratislava, slightly ahead of the Polish capital. Based on this, it is likely that the city's performance in smart city rankings would be around this position as well.

## 3.1. Ranking methods and urban competitiveness analyses

As a first step, I determined the position of the Hungarian capital based on various city ranking methods (rankings by research institutions and organisations) and city competitiveness analyses. This approach falls into the category of less complex, yet generally multi-dimensional measurements. The first ranking represents one of the European Union's classifications/approaches to categorising smart cities, focusing mainly on their intelligent and sustainable attributes.

In 2014, the European Parliament analysed a total of 599 European cities based on their smart attributes and examined, which dimensions of smart cities dominate in their cases. The analysis included a total of 6 pillars, following the example set by Giffinger and his co-authors.75 Among the examined cities, a total of 67 cities (11% of the entire list) had, for example, a prominent feature in the smart economy dimension. This was the second least popular after the 'people' pillar (52 cities), whereas the most popular environmental pillar concentrated 33% of the entire list. It is noteworthy that the maturity of smart cities (characterised by the complexity of their components) varies depending on city size (population). This means that the average number of smart city pillars also decreases with a decrease in city size. A city with a population of over 500,000 typically has more than 3.5 features simultaneously, while a smaller city (with a population between 100,000 and 199,000) has only 1.9 dominant components. At the time of the analysis, Budapest was a member of a cluster similar to other cities in Eastern and Central Europe, where the number of smart city initiatives was low and the number of components was still small. Three pillars were more prominently present in the Hungarian capital: mobility, environment, and people. Two projects were identified for Budapest during this period that were in the implementation phase and could contribute to the city's smart concept: the TIDE (Transport Innovation Deployment for Europe) project and the NICE (Networking Intelligent Cities for Energy Efficiency) project. Both projects were carried out through a major European co-operation effort. The TIDE project aimed to introduce innovative urban transport and mobility measures across Europe, primarily along the transport and environment pillars. The NICE project aimed to establish ICT partnerships and enhance energy efficiency among cities.76 The TIDE project was implemented between 2012 and 2015 with 12 participants and over EUR 2.5 million in funding, focusing mainly on activities such as energy efficiency, decarbonisation, transport safety, and electric vehicles in transport. During this period, co-ordination of Budapest's suburban transport began, and the city was also a key participant in the working group named 'Innovative Concepts for Optimizing Public Transport Organization and Performance'.<sup>77</sup> The NICE project took place between 2011 and 2014 and focused on energy efficiency growth driven by digital technologies in the spirit of the EU Green Digital Charter. Budapest was involved in this phase through the GuiDanCe project component, which supported the co-ordination of city activities through the Green Digital Charter.<sup>78</sup>

In the studies by Kollar and his co-authors, the performance of NUTS3-level (countylevel) regions was analysed based on the 6 components developed by Giffinger and co-authors. The following observations can be made for the capitals of Eastern and Central Europe:<sup>79</sup> The smart performance of regions varies considerably across countries. In the

<sup>78</sup> European Commission 2014.

<sup>&</sup>lt;sup>75</sup> GIFFINGER et al. 2007: 12.

<sup>&</sup>lt;sup>76</sup> European Parliament 2014: 65.

<sup>&</sup>lt;sup>77</sup> European Commission 2015.

<sup>&</sup>lt;sup>79</sup> KOLLAR et al. 2018: 23; GIFFINGER et al. 2007: 12.

economic pillar, the metropolitan regions most often achieved the highest positions within their countries, reflecting the concentration of economic activities in the Eastern and Central European region. In the smart environment pillar, the prominence of metropolitan regions is not clear-cut, with Polish regions performing particularly poorly compared to the overall ranking. In the governance pillar, Czech regions perform relatively poorly compared to their performance in the other pillars, while Polish regions have a relatively favourable position. In terms of smart living conditions, the Czech, Slovenian, and Slovakian regions perform the best. The outstanding performance of capitals based on all components is most favourable in Romania and Poland. In the social pillar, a strong concentration in the capital cities is observed in most countries.<sup>80</sup> The analysis presents results and regional positions from two perspectives: 1. a comprehensive comparison across Europe; and 2. a focus on Southeastern, Central and Eastern Europe (in addition to the Baltic states). In the overall European comparison, the metropolitan region of Budapest ranks approximately around the 1,000<sup>th</sup> position out of 1,337 NUTS3 regions, similar to Warsaw and Bratislava, while Prague and Ljubljana are ranked more favourably (between the 800<sup>th</sup> and 900<sup>th</sup>). Budapest ranks lowest in the European rankings in governance, living conditions, and environmental factors, but is fourth based on the economic pillar, following Prague, Bratislava, and Ljubljana. In the context of Central, Eastern, and Southeastern Europe, the Budapest region is around the 35th position, clustered with Warsaw. Within the region, the economic, living conditions, and transport pillars stand out prominently. The Sustainable Development Solutions Network (SDSN) and the Brabant Centre for Sustainable Development (Telos) have prepared a comparison of the performance of capitals and some major metropolitan areas in the European Union and EFTA (European Free Trade Association) against the United Nations Sustainable Development Goals (SDGs, 17 goals). This is a specialised version of city comparisons, focusing primarily on the environmental and economic dimensions of smart cities. In the initial prototype version, results were presented for a total of 45 European cities using 56 indicators. Oslo leads with a score of 74.8, indicating that it achieves 74.8% of the Sustainable Development Goals (SDGs) according to the metrics used in the index.<sup>81</sup> Budapest was also included in the analysis, and ranks 37th among the 45 European cities surveyed, with a composite score of 55.4. In terms of sustainability dimensions, Budapest still faces significant challenges in five areas, while issues are also notably present in seven other areas. For two dimensions (clean drinking water and reduced inequalities), there is only a minor shortfall compared to the set goals (data for one dimension is incomplete).<sup>82</sup> With this score, Budapest ranks 6th in the East-Central European region, ahead of Bucharest and Sofia.

The Global Urban Competitiveness Report was produced by the Chinese Academy of Social Sciences (CASS) and UN-Habitat, focusing on sustainable urban competitiveness.<sup>83</sup>

<sup>&</sup>lt;sup>80</sup> KOLLAR et al. 2018: 25–28.

<sup>&</sup>lt;sup>81</sup> LAFORTUNE et al. 2019: 13.

<sup>&</sup>lt;sup>82</sup> LAFORTUNE et al. 2019: 33.

<sup>&</sup>lt;sup>83</sup> UN 2020: 1.

Since 2015, over 1,000 cities worldwide have been ranked based on economic and sustainability competitiveness. The report creates five city clusters with distinct characteristics based on city connectivity and economic competitiveness. The first group includes global cities (A), the second group comprises international hub cities (B), the third group consists of international gateway cities (C), the fourth group features regional hub cities (D), and the fifth group represents regional gateway cities (E).<sup>84</sup> The most significant performance is observed in clusters A and B, where all analysed dimensions exhibit outstanding performance. The complete ranking includes the composite results of economic and sustainable competitiveness, categorising the analysed cities into the above-mentioned clusters. In contrast, the economic competitiveness ranking only provides a list of cities in order. The placement of the capitals of Eastern and Central European countries is presented in *Table 4*.

Ranking of ECE c Competitiveness r	ities in the Global Urban anking		Position of ECE cities in the economic competitiveness pillar		
city	cluster	city	ranking		
Warsaw	C+	Bucharest	182		
Prague	C+	Warsaw	193		
Budapest	C+				
Sofia	С				
Zagreb	С				
Bucharest	С				

Table 4: Position of ECE capitals in the global urban competitiveness ranking and its economic competitiveness pillar (2019–2020)

Source: compiled by the author based on UN 2020

*Note:* The ranking of cities in the Global Urban Competitiveness ranking column reflects their strong or weak positions. Ljubljana and Bratislava were not included in the analysis.

Among European cities, London and Paris belong to the so-called global cities group (classified as A+ and A), while Dublin, Vienna, and Brussels also hold prominent positions within category B. Among the capitals of Eastern and Central Europe, two clusters can be identified: Warsaw, Prague, and Budapest are in the higher competitiveness group of 'international gateway cities', while Sofia, Zagreb, and Bucharest face competitive disadvantages.

In the economic competitiveness pillar, which assesses a city's ability to create higher value and maximise services for its residents through internal organisational efficiency and external economic advantages in the processes of co-operation, competition, and development, London (2<sup>nd</sup>) and Munich (8<sup>th</sup>) are part of the global Top 10 list, while Dublin is in the Top 20 (14<sup>th</sup>).<sup>85</sup> From the Eastern and Central European region, two

cities are ranked on the list: Bucharest and Warsaw are both included, positioned in the last third of the ranking.

When considering both factors combined, it can be established that there is only a slight correlation between the positions held by the Eastern and Central European region in the overall ranking and its economic competitiveness. However, the Hungarian capital is in a promising position; as an international gateway city, it could play a significant role in the region's economic processes (such as transport corridors, trade, and capital flow) and could become a key centre of gravity in the region, as suggested by the Budapest Metropolitan Region's regional development strategy.

## 3.2. Multi-factor rankings

As the second step in positioning, I review complex smart city rankings (which are prepared in a comprehensive structure involving numerous indicators, expert opinions, and interviews) analysing Budapest's situation, where I also examine the stronger and weaker components of the city in comparison to the surrounding capitals.

In 2017, IMD (World Competitiveness Center) and Singapore University of Technology and Design (SUTD) decided to create a smart city index that focuses both on the economic and technological aspects of smart cities and their 'human dimension' (quality of life, environment, and inclusivity). Their smart city index was most recently published in 2021 and ranks the world's 118 smartest cities. The list measures residents' opinions on the structures available in their city (such as linear and human infrastructure) and technological applications.<sup>86</sup> At the top of the overall ranking is Singapore, followed by Helsinki and Zurich. The scores for the relevant priority axes and technological conditions are determined based on the opinions of experts and 120 surveyed residents in each city. The final scores for each city are calculated using data from the last three years of the survey, incorporating the residents' assessments. The infrastructure pillar queries the existing infrastructure of the cities, while the technology pillar addresses residents' expectations regarding technological provision and services. Each pillar is evaluated across five key areas: health and safety, transport, activities, opportunities, and governance.<sup>87</sup> The surveys mainly focus on topics related to satisfaction: how satisfied residents are with the quality of public transport in the city, the accessibility of public spaces, the quality of healthcare, etc. The results of the surveys are presented on a scale from 0 to 100, where 100 represents the best position and 0 the worst. The data for the last three years are illustrated in the following table, which includes both the top-performing cities and the capitals of the ECE region.

<sup>&</sup>lt;sup>86</sup> IMD 2021: 13.
<sup>87</sup> IMD 2021: 5.

	2019		2020		2021
1	Singapore	1	Singapore	1	Singapore
2	Zurich	2	Helsinki	2	Zurich
3	Oslo	3	Zurich	3	Oslo
4	Geneva	4	Auckland	4	Taiwan
5	Copenhagen	5	Oslo	5	Lausanne
19	Prague	44	Prague	75	Warsaw
61	Warsaw	55	Warsaw	78	Prague
83	Budapest	76	Bratislava	96	Bratislava
84	Bratislava	77	Budapest	97	Budapest
85	Bucharest	87	Bucharest	106	Bucharest
89	Sofia	89	Sofia	107	Sofia
sum	102	sum	109	sum	118

Table 5: Position of ECE capitals in the IMD Smart City Index (2019–2021)

Source: compiled by the author

*Note:* The italicised notation indicates results above the top 50%. Ljubljana and Zagreb were not included in the analysis.

Between 2019 and 2021, the IMD Smart City Index saw transformations among the top performers and within the Eastern and Central European region, although Singapore's leading position remained unshaken despite the challenges posed by Covid–19. Additionally, Zurich and Oslo also maintained their stable presence among the top five cities. Among the capital cities of the region, the ranking of settlements remained relatively constant, with two exceptions: a) Ljubljana and Zagreb are not included in the smart cities examined by the IMD, and b) the analysis of the actual situation of the cities is complicated by the fact that the number of cities included in the study varies annually. For the remaining six cities, Budapest fell one position in the rankings after 2020, although this merely indicates a position swap, as Budapest's performance each year moves in line with Bratislava's relevant indicator. Another shift in the region was the movement of Warsaw and Prague, with Warsaw becoming the best Eastern and Central European capital by 2021. In terms of ranking, Prague was in the top 50% of all examined cities in 2019 and 2020, but by 2021, it experienced a loss of position in the entire Eastern and Central European region, with no capitals remaining within the top 50%. In the region, there is a strong emphasis on evaluating human factors (labour market services and job creation), which have been further reinforced due to external shocks in recent times. Changes in the smart city rankings among leading cities highlight that different city management models operate differently during crises, particularly in terms of short-term and long-term effectiveness. In the short term, cities applying bottom-up management (Amsterdam, Helsinki) responded better, but lost ground in the long term, while the top-down strategy proved to be a more effective solution for crisis management in the long term. This is less pronounced among the capitals of the Eastern and Central European region, as most strategies are based on a top-down approach (with only a limited application of social involvement), but changes are still observable here. With the exception of Prague, all cities improved their relative positions slightly by 2020, which was followed by a more significant decline in 2021 across all cities.

The IESE Cities in Motion Index is prepared annually by the Business School of the University of Navarra and is another well-known example of smart city rankings. The current (2020) version of the index ranks 174 cities based on 9 dimensions and 101 indicators. The main dimensions are human capital, social cohesion, economy, governance, environment, mobility and transport, urban planning, technology, and international profile.<sup>88</sup> The overall index is led by London, followed by New York and Paris, highlighting the exceptional performance of global cities in this ranking *(Table 6)*. Among the top-performing European cities, 6 appear in the global top 10, with an additional 4 in the top 20.

	2014		2015		2016		2017		2018		2019		2020
1	Tokyo	1	London	1	New York	1	New York	1	New York	1	London	1	London
2	London	2	New York	2	London	2	London	2	London	2	New York	2	New York
3	New York	3	Seoul	3	Paris	3	Paris	3	Paris	3	Amster- dam	3	Paris
4	Zurich	4	Paris	4	San Francisco	4	Boston	4	Tokyo	4	Paris	4	Tokyo
5	Paris	5	Amster- dam	5	Boston	5	San Francisco	5	Rejkjavík	5	Rejkjavík	5	Rejkjavík
65	Prague	56	Prague	45	Prague	41	Prague	40	Prague	47	Prague	39	Prague
74	Budapest	65	Budapest	68	Budapest	54	Warsaw	53	Budapest	69	Warsaw	54	Warsaw
76	Warsaw	72	Warsaw	74	Warsaw	67	Budapest	64	Warsaw	70	Bratislava	62	Bratislava
86	Ljubljana	85	Sofia	83	Bratislava	70	Ljubljana	67	Bratislava	73	Budapest	74	Budapest
90	Sofia	87	Ljubljana	86	Ljubljana	77	Bratislava	74	Ljubljana	93	Ljubljana	98	Zagreb
n. a.	Bratislava	n. a.	Bratislava	95	Sofia	84	Zagreb	83	Zagreb	97	Zagreb	99	Ljubljana
n. a.	Bucharest	n. a.	Bucharest	107	Zagreb	91	Sofia	101	Sofia	103	Bucharest	103	Bucharest
n. a.	Zagreb	n. a.	Zagreb	110	Bucharest	109	Bucharest	n.a.	Bucharest	115	Sofia	116	Sofia
Σ	135	Σ	148	Σ	181	Σ	180	Σ	165	Σ	174	Σ	174

*Table 6: Position of ECE capitals in the IESE Cities in Motion Index (2014–2020)* 

Source: compiled by the author

The position of cities in the Eastern and Central European region has varied significantly in terms of rankings since 2014. At the same time, the total number of cities examined has also shown considerable growth over the period. Budapest's position was stable until 2018, usually ranking 2<sup>nd</sup> after Prague, but it fell to 4<sup>th</sup> place from 2019 onwards, being surpassed by Warsaw and Bratislava. Similarly to the IMD studies, Bucharest and Sofia are the laggards here as well, and while the order of cities differs, Budapest is still ranked 4<sup>th</sup> among the cities examined. In the region, Prague's position can be considered exceptionally strong, with its ranking continuously improving despite the increasing number of cities being evaluated. Budapest has also seen improvement but at a slower pace compared to Prague or Bratislava. When analysing individual components, Warsaw and Bratislava each have a pillar that is in the global top 10: in Warsaw, it is the governance pillar, while in Bratislava, it is the social cohesion factor. According to the most recent data, Budapest's strongest pillars are transport (31<sup>st</sup> place), human capital (34<sup>th</sup> place), and international outlook (39<sup>th</sup> place). However, the index highlights deficiencies in 'hard' factors, as the city ranks only 135<sup>th</sup> in the economic component, which measures indicators such as GDP, R&D, innovation, and corporate presence. This is not only one of the weakest areas for Budapest but also for all capitals in the region.

The European Commission periodically examines the quality of life in European cities through the 'Quality of Life in European Cities' report, typically every two to three years. Since one of the main goals of creating smart cities, according to many definitions, is to enhance the quality of life for residents, it is valuable to consider the population's perspective on the state of their cities. The most recent report, from 2019, covers 83 cities in the EU, EFTA, the United Kingdom, the Western Balkans, and Turkey. The survey reveals which cities have residents most satisfied with the quality of public and other services. A total of 700 interviews were conducted in the cities examined. Among EU cities, the highest satisfaction is found in the northern and western parts of the continent, with average satisfaction levels around 94% and 92%, respectively, while cities in the southern member states are in the worst positions. An interesting finding is that as city size decreases, resident satisfaction with their living environment increases, meaning that smaller cities are generally more liveable.<sup>89</sup> The analysis examines several dimensions of satisfaction within cities. *Table 7* illustrates the overall satisfaction with the city for the capitals in Eastern and Central Europe, including shifts compared to the year 2015.

Complex satisfaction with the city (%), 2015		Complex satisfaction with the city (%), 2019	
Prague	91	Prague	92.6
Budapest	90	Budapest	86.2
Warsaw	93	Warsaw	92.3
Ljubljana	92	Sofia	83.1
Sofia	86	Ljubljana	93.5
Bratislava	90	Bratislava	92.5
Bucharest	83	Bucharest	81.6
Zagreb	94	Zagreb	90.2

Table 7: Residents' satisfaction with their city in the ECE capitals

Source: compiled by the author

<sup>89</sup> BOLSI et al. 2020.

Based on the aggregate data, it can be inferred from the table that, with the exception of Prague, Bratislava, and Ljubljana, there has been a decline in overall satisfaction with cities, including a 3.8 percentage point decrease in Budapest. It is also noteworthy that there is a correlation between city population size and the quality of life for residents in Eastern and Central Europe. An analysis of the numbers reveals a moderately strong negative correlation between city population size and overall satisfaction. In other words, among the capitals in the region, cities with smaller populations tend to be perceived as more liveable by their residents.

In addition to satisfaction, the survey also inquired whether people consider their city to be a good place to live in general, beyond their personal situation. The survey found a positive correlation (around 0.6) between those who are completely satisfied with their city and those who agree that their city is generally a good place for people.

The correlation among the capitals of Eastern and Central Europe is also moderately strong (around 0.5, lower than the overall European city list) and positive between the two factors *(Figure 5)*, with its distribution roughly reflecting results from other rankings. Prague leads in both dimensions, while Bratislava and Warsaw also have favourable positions. However, unlike most previous analyses, Budapest shows more similarity to Bucharest and Sofia.

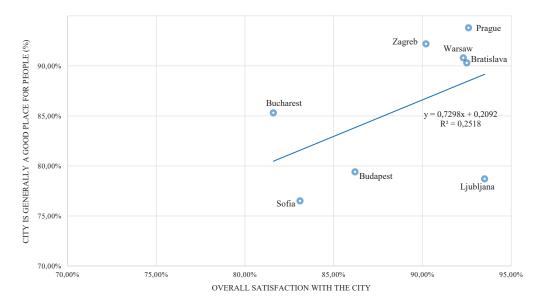


Figure 5: Correlation between complex satisfaction in Eastern and Central European capitals and overall perception of the city

Source: compiled by the author based on data from European Commission 2020

In the 2019 survey, people were also asked how the quality of life in their own city had changed compared to five years ago, with the following response options: a) quality of life has increased; b) decreased; or c) remained unchanged. On average, 38% of respondents across all cities reported that the quality of life in their city had improved over the past five years. The perceived quality of life increased most in cities of Eastern EU member states, averaging 53%, followed by cities in Northern EU countries (43%). Among capital cities within the Eastern and Central European region, the picture is heterogeneous: while 59.3% of respondents in Sofia and 53.1% in Prague believe that the quality of life has improved over the past five years, only 39.6% in Budapest and 26.9% in Zagreb hold this view.<sup>90</sup>

Among the indicators examined in the analysis, Budapest outperformed the average of the 83 cities in four areas (accessibility of online public services, cultural services, quality of public spaces, and use of public transport), while performing at the average level in three areas (satisfaction with the quality of public transport, affordability of public transport, and accessibility of job opportunities). However, there are two components where Budapest falls short by 15 percentage points or more compared to the city average (liveability for families with young children, quality of healthcare). Based on the number of factors where Budapest performs above average, it shows similarities with Bratislava, Bucharest, and Sofia in this ranking.

The following is a comparison of the three methodologies described above, focusing on how similarly the capitals of the region perform across various pillars. According to the IMD Smart City index, the various dimensions of the currently available structures are examined, focusing on the three components with the highest ratings. Among the cities reviewed, the accessibility of cultural services stands out as the most notable component, with ratings exceeding 65%. Budapest scores 72.7% in this category, making it the third highest after Prague and Warsaw, except for Bratislava, where the education of children receives the highest rating. Additionally, the accessibility of labour market services is a top 3 factor in four cities, while business job creation services are a top 3 factor in three cities. Besides cultural services, Budapest also received good ratings in the above two components (63.5% and 61.3%, respectively). At the same time, it is clear that the performance of the capitals in the ECE region shows significant deviations in structural factors compared to leading European smart cities, both in terms of outstanding components (e.g. healthcare, education, lifelong learning) and in the strength of the ratings (higher scores). The summary of the three methodologies is presented in Table 8.

IMD Smart City index	IESE Cities in Motion index	Quality of life in the European Cities Survey					
Common characteristics of the ECE cities							
Availability of cultural services is outstanding (over 65%) – strongest component in all cities except Bratislava. Availability of labour market services is in the top 3 for four cities Business job-creating services are in the top 3 for three cities.	Social cohesion is among the top 3 components in 6 out of 8 cities, while governance is among the top 3 in 4 cities. The environment and human capital pillars are also in a strong position.	Emphasis on affordable and accessible public transport. Significance of cultural elements/ services.					
	Specificities						
In the case of Bratislava, the highest-rated aspect is the education level of children. Differences of the ECE region compared to leading smart cities in Europe (!) – other outstanding components (e.g. healthcare) have stronger scores.	Unique characteristics of Budapest: high emphasis on transport, human capital, and international relations – social cohesion is not in the top 3. Warsaw and Bratislava each have a component in the international top 10.	Unique aspect for Prague is liveability, while for Ljubljana it is the quality of green spaces. In Budapest and Zagreb, the quality of public spaces is also excellent.					
e	are similar based on the three metrics, ng cities. They show a strong focus on c	6 1					

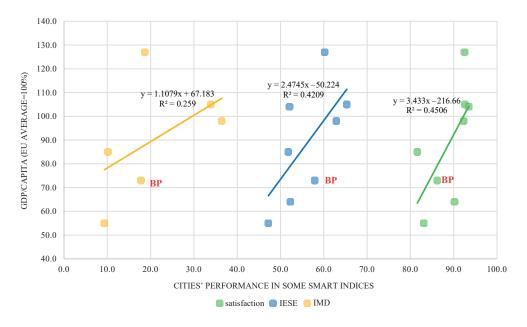
Table 8: Comparison of the positions of the ECE region's capitals according to three main rankings

Source: compiled by the author

In the IESE Cities in the Motion index, the capitals of Eastern and Central Europe also show similarities in various aspects (social cohesion is among the top 3 components in 6 out of 8 cities, and governance is in the top 3 for 4 cities). However, there is considerable variation in the rankings for individual factors. For instance, as noted in the detailed analysis of the index, Warsaw and Bratislava have components that rank in the top 10 internationally: Warsaw's governance pillar is 8<sup>th</sup> among 174 cities analysed, while Bratislava is 9<sup>th</sup> for social cohesion. Budapest, in contrast, differs somewhat from other Eastern and Central European capitals in this index. It shows the strongest values in transport, human capital, and international relations (ranked 31<sup>st</sup>, 34<sup>th</sup>, and 39<sup>th</sup> respectively). However, social cohesion in Budapest does not rank in the top 3, unlike most other cities, and the economic component is notably low at 135<sup>th</sup> place, which is the third-worst after Sofia and Ljubljana.

The 'Quality of Life in European Cities Survey' highlights two main pillars in the capitals of the region. Similar to the IMD index, it underscores the significance of cultural services and the significant attention given to affordable and accessible public transport across all cities, with a broad level of satisfaction among the population. A unique feature for Prague is its liveability, while Ljubljana stands out for the quality of its green spaces (which is not surprising given its former status as 'European Green Capital').<sup>91</sup> In Budapest, the quality of public spaces and online administrative services are also noted as excellent.

<sup>&</sup>lt;sup>91</sup> Cömertler 2017: 5–7.



*Figure 6: Correlation between cities' smart performance and GDP per capita, 2019–2020 Source:* compiled by the author

A comparison of the methods reveals that the capitals of the ECE region share similarities in strengths across all three metrics, however, they have distinct characteristics and emphasis compared to leading cities. A common point in the cities of the region (including Budapest) is that they tend to be stronger in soft factors (e.g. strong cultural centrality, social factors, and matters related to population satisfaction), whereas they lag behind in hard indicators compared to the leading cities (e.g. the IESE economic dimension with factors such as R&D, GDP, investments).

The performance of the cities in various smart indexes shows a positive correlation with the per capita GDP values. This suggests that areas with more developed economic indicators and functional urban regions are likely further along the path to becoming smart cities, as reflected in their higher rankings (*Figure 6*).

The linear trend, based on data from the IESE Cities in Motion Index and the Urban Audit Perception Survey, shows a fit of over 40%, indicating a relatively strong alignment. This suggests a good correlation, whereas the IMD Smart City Index demonstrates a less pronounced relationship. Kollar and colleagues' study supports a close link between smart city indexes and per capita GDP (i.e. smart cities and economic development) in European NUTS3 regions. The smart region index scores exhibited a strong and positive relationship with GDP measured in purchasing power parity per capita. Additionally, researchers observed a positive correlation across all pillars.<sup>92</sup> However, there was variation in this

<sup>&</sup>lt;sup>92</sup> KOLLAR et al. 2018: 24.

regard, as in many regions, only a slight improvement in the smart region pillars was observed relative to GDP levels, while others showed that a high level of smartness does not necessarily translate into economic performance. Therefore, these studies can help assess which aspects are the strongest and which areas require development.

## 4. Expected changes in Budapest's position in the region

The results seen in various rankings have highlighted that, within the broader Eastern and Central European region, Budapest typically ranks around 3<sup>rd</sup> or 4<sup>th</sup> among the capitals. In dimensions related to satisfaction and soft elements, Budapest's position is occasionally even better. According to most multi-dimensional analyses that aggregate numerous indicators, the environmental–sustainability pillar, as well as indicators related to public transport and cultural services (quality of life), reflect the most promising values. Therefore, it is worthwhile to compare some indicators in these dimensions from the perspective of the population as well. Since the majority of the previously discussed rankings (with the exception of the Urban Audit) were based on quantitative statistical indicators, the population's opinions on the achieved improvements and the smart status of the cities may differ. My aim was to identify changes and make possible predictions based on average shifts, so I examined the indicators over several years (2012, 2015, and 2019). I have analysed three main indicators:

- Complex environmental satisfaction (high satisfaction with urban green spaces;<sup>93</sup> high satisfaction with air quality in the city; high satisfaction with living in the city among respondents; high satisfaction with urban noise levels)
- Satisfaction with public transport (high satisfaction with public transport: bus, metro, tram)
- Satisfaction with cultural services/quality of life (high satisfaction with sports facilities, such as sports fields and indoor sports halls; high satisfaction with cultural facilities [concert halls, museums, cinemas]; strong overall satisfaction with urban quality of life; high satisfaction with public spaces, markets, and pedestrian areas)

The study was assisted by the Eurostat Urban Audit Perception Survey. The Urban Audit Perception Survey includes a total of 278 indicators measured on qualitative scales and supports qualitative research. The survey uses a five-point Likert scale for the indicators, with respondents categorised as follows (1 - very satisfied, 2 - somewhat satisfied, 3 - somewhat dissatisfied, 4 - dissatisfied, 5 - does not know/did not answer). Since the scaling and units of the indicators were consistent, no further transformation was needed during the calculations. Thus, based on the aggregation of the indicators and the average trend-based forecasts, the following conclusions can be drawn.

<sup>&</sup>lt;sup>93</sup> More than 80% of the population is highly satisfied.

Regarding complex environmental satisfaction, Ljubljana leads the ranking in all three years ahead of Zagreb, followed by Warsaw and Prague *(Table 9)*. However, while Prague's position is improving, Warsaw is losing ground. Budapest ranked 6<sup>th</sup> in 2012 and then 5<sup>th</sup> in 2015 and 2019, surpassing Bratislava with rapidly increasing values. Its average growth rate during the period reviewed is the highest, at 13.5%, alongside Prague.

	2012	2015	2019	2024 estimated
Ljubljana	39.0	43.5	42.3	44.1
Zagreb	30.8	36.0	37.7	41.7
Prague	20.8	24.3	27.1	31.0
Warsaw	26.0	25.3	24.6	24.0
Budapest	18.5	21.0	23.9	27.1
Bratislava	19.0	18.3	19.9	20.4
Bucharest	16.0	17.0	17.6	18.5
Sofia	17.0	16.8	16.4	16.1

*Table 9: Development of the complex environmental satisfaction index in the capitals of the ECE region (2012, 2015, and 2019) and expected change for 2024* 

Source: compiled by the author

Assuming the continuation of the previous trend (with all other factors remaining constant), it is expected that by 2024, Budapest will improve its position in environmental satisfaction, supporting the success of recent developments, and surpass the Polish capital, which has shown declining performance since 2012. No changes are anticipated in the ranking of other cities.

In terms of public transportation satisfaction, based on residents' opinions, Prague has led the ranking since 2015 (due to the decline of the previously leading Ljubljana), ahead of Ljubljana and Zagreb. Budapest also shows significant improvement in this indicator and is already 5<sup>th</sup> on the list by 2019 (*Table 10*). Its average annual satisfaction growth rate is the highest in the entire region (over 30%).

Table 10: Development of satisfaction with public transport in the capitals of the ECE region (2012,2015 and 2019) and expected change for 2024

	2012	2015	2019	2024 estimated
Prague	35.0	42.0	42.2	46.5
Ljubljana	41.0	31.0	32.9	30.2
Zagreb	22.0	29.0	30.2	35.6
Warsaw	29.0	24.0	25.8	24.6
Budapest	11.0	16.0	18.7	24.5
Sofia	19.0	18.0	17.2	16.4
Bratislava	10.0	11.0	16.1	18.2
Bucharest	9.0	6.0	7.2	6.7

Source: compiled by the author

The projected changes indicate that Budapest will remain in the 5<sup>th</sup> place, but the forecast shows a significant reduction in its gap, bringing it closer to the Polish capital, while significantly pulling ahead of Bratislava, which follows. There will also be several shifts in the region, as Ljubljana continues to lose ground and Zagreb could become the 2<sup>nd</sup> place holder by 2024. Additionally, Bratislava is expected to move up one place on the list.

In the dimension related to cultural services and quality of life, Ljubljana has the highest values throughout the entire period, with a significant advantage over Prague and Zagreb *(Table 11)*. Since 2015, Budapest has been 4<sup>th</sup> among the capitals, surpassing Warsaw, and its average growth rate in this category is also the highest (9.2%).

	2012	2015	2019	2024 estimated
Ljubljana	46.8	47.0	47.2	47.3
Prague	34.5	37.0	38.6	40.8
Zagreb	31.5	35.3	37.4	40.8
Budapest	25.3	28.5	30.1	32.9
Warsaw	28.5	27.0	27.6	27.2
Bratislava	21.3	20.5	22.2	22.6
Bucharest	18.5	20.0	19.9	20.6
Sofia	19.3	18.5	19.4	19.4

Table 11: Development of satisfaction with cultural services/quality of life in the capitals of the ECE region (2012, 2015 and 2019) and expected change for 2024

Source: compiled by the author

The forecast indicates that the ranking of cities will remain unchanged in 2024, with each city maintaining its position. However, Budapest is expected to further stabilise its fourth place and increase its lead over Warsaw.

Overall, based on the forecasts, it can be stated that further improvement in the above-mentioned three indicators could represent a significant breakthrough for the capital, potentially enhancing its position among smart cities in the region.

#### Summary

Since the 1990s, the term 'smart cities' has been widely used to refer to successful regions utilising digital technologies and the outcomes of Industry 4.0. However, a unified definition remains elusive. Definitions vary widely, ranging from ICT-based approaches to more complex definitions incorporating soft factors. Budapest's smart city strategy was developed in 2019, focusing primarily on sustainability and liveability, aiming to achieve these goals through the opportunities provided by digital technologies. The strategy is predominantly top-down in approach but also highlights the significance of social engagement in several aspects (district strategies, living labs, project generation processes). Its territorial integration is reinforced by the presence of smart strategies in several districts and its reliance on the broader metropolitan area.

Among the capital cities of the broader Eastern and Central European region (Prague, Bratislava, Warsaw, Bucharest, Sofia, Zagreb, Ljubljana), Budapest's position fluctuates around 3<sup>rd</sup> to 4<sup>th</sup> place in key socio-economic indicators, except for GDP per capita. Methods ranking smart cities and urban competitiveness studies highlight various strengths: the European Parliament's investigations focus on mobility, environment, and people; the European Investment Bank's report suggests that Budapest's regional position is comparable to Warsaw and Bratislava, whereas Prague and Ljubljana have more favourable standings; according to the Global City Competitiveness Ranking, Warsaw, Prague, and Budapest form a relatively high-competitiveness 'international gateway city' trio. Nonetheless, Budapest ranks only 6<sup>th</sup> in terms of SDG indicators, ahead of Bucharest and Sofia.

In rankings based on multiple factors, Budapest's performance in the IMD studies is aligned with Bratislava's relevant indicators (thanks to its strong human factors [labour market services, job creation]), while in the IESE index, Budapest has been in 4<sup>th</sup> place since 2019, following Prague, Warsaw, and Bratislava. The most favourable aspects are transportation and human capital, although in terms of hard factors (economic components), Budapest is in the lower third of the list. In ECE capitals, including Budapest, the observation holds true that cities with lower populations tend to appear more liveable according to residents' opinions. A common feature among the region's cities (including Budapest) is their relative strength in soft factors (such as a strong cultural centricity, social factors, and questions related to resident satisfaction), while they generally face greater disadvantages in hard indicator components compared to leading cities.

Forecasts suggest that the Hungarian capital's satisfaction indicators may improve further due to ongoing developments. For instance, Budapest may surpass the Polish capital, which has shown deteriorating performance since 2012 in terms of environmental satisfaction, while maintaining its 4<sup>th</sup> place among capitals in satisfaction related to public transportation and living conditions/culture, with an accelerating growth rate.

Several factors may have a favourable impact on Budapest's overall position, such as the co-creation approach in district-level strategies, which might improve the social acceptance of these strategies. If district-level living lab projects are successful, developments may be extended to other city areas or the entire city. Enhancing the aforementioned strengths may improve residents' satisfaction with various services, and progress in hard factors may favourably influence its ranking among Eastern and Central European capitals.

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#### Tamás Egedy

# At the Gateway to Opportunities: Towards a Creative and Knowledge-Intensive Budapest

#### Introduction

The drivers of urban development have been constantly evolving and changing over the past decades, adapting more and more to the process of globalisation and its characteristic trends, seen as a positive process by some, or considered negatively by others. In the shift from Fordist to post-Fordist economic structures, metropolitan regions have gained, and continue to gain an increasingly important role; furthermore, as focal points of development they are exerting a growing influence on urban populations and the labour force. Nowadays, the proportion of the urban population is rapidly growing, thus making the role of megacities, metropolises and other cities that are lower in the urban hierarchy increasingly important in the socio-economic development. This deserves particular attention in the light of today's increasingly fierce competition between different regions. Regional competitiveness is basically determined by the cities and towns in a region, so regional competition is enhancing competition between cities. Economic development and metropolitan development therefore mutually impact each other, and their development becomes progressively interlinked.<sup>1</sup> After the millennium, it became clear that the post-Fordist social and economic transformation of cities has brought to the fore new economic drivers such as knowledge, creativity, innovation, science and technology.<sup>2</sup> In the competition between city-regions, those are able to achieve a good position and obtain an economic advantage that create favourable conditions for these drivers. In the international and national competition between cities, the social and economic environment that cities can provide for the creative economy to settle down has an increasingly important role to play together with their ability to attract and integrate companies and workers engaged in the creative economy.<sup>3</sup>

Relying on the international and domestic research results, the purpose of this chapter is to provide an overview of the situation of the creative economy and the differences in the spatial distribution of creative and knowledge-intensive sectors, with special regard to the characteristics and situation of the Budapest agglomeration. Apart from presenting current development trends, we will lay special emphasis on the strengths and weaknesses of the metropolitan region and on how representatives of the creative class perceive Budapest as a city and a host economic environment.

<sup>&</sup>lt;sup>1</sup> SCOTT 2006: 10.

<sup>&</sup>lt;sup>2</sup> MUSTERD et al. 2007: 7.

<sup>&</sup>lt;sup>3</sup> Glaeser–Gottlieb 2009: 992.

## 1. The creative economy and the city

The creative economy was initially identified as the cultural economy, but it quickly grew to include copyright industries, information and communication technologies and research and development (R&D).<sup>4</sup> The notion of creative economy has been expanding, given the fact that individual creativity is the root of an exceptionally broad range of industries and activities. Their success depends on creativity and knowledge-intensive work, they have a high information content, moreover, their final products are unique intellectual or tangible products. The industries that can be classified as part of the creative economy are currently divided into two large categories, namely: creative industries and knowledge-intensive industries. The scope of creative industries is nowadays an especially broadly defined category, including the cultural economy, the copyright industries and the traditional and digital content industries. However, in the literature such approaches have become widespread over time that also include knowledge-intensive activities having a relatively high creative content in the definition of the creative economy. Knowledge-intensive industries may thus include ICT, specific financial, legal and business services, R&D and higher education. Companies operating in the creative economy are characterised by relatively small company size, high flexibility, knowledge-intensive work as well as customer-oriented, high information content activities. They are distinguished by domestic and international networking, within the framework of which they also attract other advanced economic activities. All these activities find an ideal location in large cities, where there is a high concentration of creative and knowledge-intensive industries. The creative economy is characterised by a relatively high share of customer-oriented activities (especially in the cultural economy), where it is necessary to have a daily contact between supplier and consumer. On the other hand, a high information content requires the existence of advanced information networks, close cooperation between companies with a similar profile and a high-quality R&D base; in other words, all the things that the major cities of the developed world can offer best.<sup>56</sup> According to Andy Pratt and Thomas Hutton, one of the most important spatial characteristics of the creative economy is its strong attachment to cities, especially in sectors with high added value. <sup>7</sup> Highly urbanised areas do not only attract creative industries but also cultural industries and specialised labour force.<sup>8</sup> Large cities often stand as strongholds of the creative economy in their wider environment. This has directed attention to the interrelations between the development of the creative economy and its role in the settlement hierarchy of cities, as cities are not only at the top of the settlement hierarchy as centres of labour markets and of the population, but they also possess a disproportionately large share of the creative economy. The dynamic development of the creative economy has also led to certain social structural transformations in cities. A gradual emergence of a new group, the

<sup>&</sup>lt;sup>4</sup> HARTLEY 2005: 12.

<sup>&</sup>lt;sup>5</sup> Kovács et al. 2011: 44; Mészáros et al. 2010: 145.

<sup>&</sup>lt;sup>6</sup> Сѕомо́я–Lengyel 2020: 575–578.

<sup>&</sup>lt;sup>7</sup> Pratt-Hutton 2012: 88.

<sup>&</sup>lt;sup>8</sup> Kézai–Rechnitzer 2022: 218–248.

"creative class", can be observed within the societies of the cities concerned. According to Richard Florida, this "creative class" is contributing to the economic performance of a city or region at an increasing rate.<sup>9</sup>

## 2. Past and present - Budapest on the road to becoming a creative city

In Budapest, as in other major European cities, the development of the creative economy in the modern age is rooted in the cultural economy and cultural traditions. In certain periods of its medieval and early modern history, Buda became a major cultural centre as a royal seat, such as the Renaissance court of King Matthias in the second half of the 15<sup>th</sup> century. It was not until the second half of the 19<sup>th</sup> century that Budapest was again elevated to the status of a European capital city. In the period from the 1870s to the First World War, Budapest played a very important role by transmitting European cultural influences to Hungary through its formal or spontaneously established institutional system, through the channels of the press and publishing, theatrical performances and other activities, spreading them to the various regions of the country. The capital also took a key role in spreading new patterns of cultural consumption, forms of entertainment, lifestyle, and material culture.<sup>10</sup>

After 1919, the intellectual life of Budapest underwent great changes. In the 1920s, a number of several world-renowned artists, scientists, and intellectuals lived and worked in Budapest, but at the end of the 1930s, political conditions forced many of them to emigrate. Thus, Hungarian scientists, artists and thinkers who had been forced abroad also had an impact beyond Europe in the second half of the 20<sup>th</sup> century. However, it was a positive phenomenon in terms of the development of the cultural and creative economy that between the two world wars, Hungary set up Hungarian institutes abroad to help Hungarians study and gain experience abroad, the most important of which were the Hungarian Academy in Rome, the Collegium Hungaricum in Vienna and in Berlin.<sup>11</sup>

After the communist changeover, the relations between Hungary and Western Europe were artificially eroded, so Budapest spent the four decades from 1948 to 1989 in forced isolation in many respects, cut off from the developmental trends of European culture. This has also contributed to the fact that, despite the developments of the last three decades, the Hungarian capital has only partially regained the role of a cultural centre that it used to play in the region in the past.

After the regime change, the economy recovered relatively quickly, and in the second half of the 1990s, it advanced with increased momentum and underwent significant structural changes. This was primarily due to foreign capital and investments and the emergence of multinational companies. Budapest benefited most from capital inflows (57% of investments between 1990 and 2000), and almost a quarter of foreign greenfield

<sup>&</sup>lt;sup>9</sup> Florida 2006: 24.

<sup>&</sup>lt;sup>10</sup> LUKOVICH 2005: 60.

<sup>&</sup>lt;sup>11</sup> Kovács et al. 2007. 27.

investments were also made in the western sector of the Budapest agglomeration. These investments greatly contributed to the modernisation of the economy both in Hungary and the capital city and to their introduction to international markets. The first wave of the foreign working capital came to the automotive, packaging, telecommunications, financial services, banking and construction sectors. These new sectors took over the place of the traditional heavy industries, and the role of services (e.g. logistics, financial and legal services) grew significantly. The electronics and computer industries were also popular target areas for foreign investments. As a conclusion, it can be stated that foreign capital and investments played a decisive role in laying the foundations of the creative economy in Hungary and Budapest.<sup>12</sup>

The fall of the Iron Curtain suddenly propelled Budapest from a peripheral position to the centre, which produced benefits in terms of transport, migration and tourism, fostering the development of the creative knowledge economy. The weight of the Budapest agglomeration within the country's economy is favourable for the development of the creative and knowledge-intensive branches of industry due to the fact that the region played and continues to play a prominent role in financial, legal, commercial, and transport services. The city's past and its advanced network of cultural, scientific and educational institutions also provided a good basis for the creative economy. Today, the innovative industries contribute significantly to the competitiveness of the economy of Budapest. The key industries driving the modern economy are concentrated in Budapest: pharmaceutical companies in the high-tech industry, telecommunications, IT and media companies in the ICT sector. There is significant investor interest from the IT and pharmaceutical sectors, as well as from the service providing centres, with wide-ranging R&D implications. Budapest also has a prominent role in R&D in Hungary. For the long-term development of Budapest, it is of particular importance to develop new technology and knowledge-intensive micro-enterprises (start-ups, spin-offs), to continue supporting their innovation activities, to support the experimental development of SMEs, to promote their networking and to encourage them to become large-scale suppliers.

Geographically, the city has benefited from the concentration of the creative economy's top industries in a relatively small area within the city. The axis of this area runs roughly along the Danube. It stretches from Rákóczi Bridge in the south (InfoPark, ELTE and BME university campuses, Millennium City Centre) to the north, encompassing the Danube Promenade and the Inner City with their cultural and arts institutions (theatres, concert halls), educational and research units (e.g. universities, MTA [*Hungarian Academy of Sciences*]), clusters of international legal and financial services (e.g. stock exchange), and institutions providing services to and operating tourism. The axis with creative institutions stretches on either side of the Danube, and it ends in the north with the Graphisoft Park on the Buda side and the former developments of Újpest on the other (e.g. galleries, R&D institutions). Future development projects for the creative economy in the capital should take greater account of this spatial concentration and exploit its benefits. At the same time, socio-economic transformation has created significant

<sup>&</sup>lt;sup>12</sup> Kovács et al. 2007: 14.

spatial differences within the Budapest agglomeration. Economic development has been particularly conspicuous on the periphery of the Budapest Metropolitan Region, where new development poles have emerged alongside the traditional centres in the areas of Gödöllő, Szigetszentmiklós–Dunaharaszti–Soroksár, and Budaörs–Törökbálint.<sup>13</sup>

Already in the 1990s, urban development policies outlined the possibility of making the capital once again the cultural and intellectual centre of Eastern and Central Europe, a gateway city connecting the West with Southeastern Europe. However, it was rather difficult to establish this unique position, as after the 1990s, Budapest found itself in an increasingly fierce competition with the cultural cities of neighbouring countries, especially Prague, Warsaw, and Krakow. In this competition, even the revival of traditional relations and rivalries between Budapest and Vienna, the emergence of an ever-increasing number of new cultural projects, events and institutions were not sufficient to restore the position of the Hungarian capital held in its 'golden age'. We had every reason to hope, on the other hand, that Budapest would become one of the leading cultural and creative centres of the region, luring attention with its attractive, valuable and in many respects unique cultural offerings and infrastructure. However, over the past one and a half decades, the political and economic processes starting both globally and locally, have been less favourable to the development of the creative economy.

Overall, it can be stated that Budapest set out from a favourable position in the competition between metropolitan regions, as a result of which the Budapest metropolitan region has been successfully integrated into the European metropolitan regions, thanks to the economic development of the last two decades. The key political and economic players in Hungary have clearly recognised the importance of the creative economy and the potentials it offers for social and economic development. In this field, the task for the coming years is to develop the creative and knowledge-intensive driver sectors further, which will ensure sustainable development for the city region and Budapest, while strengthening its role in the international competition.

## 3. What do statistics show?

In our analyses, we applied the TEÁOR'08 (NACE in the European communities) codes used by HCSO (*Hungarian Central Statistical Office*) to define creative economy.<sup>14</sup> For our statistical analyses, we used the data provided by the National Accounts Department of HCSO on the number of enterprises in operation (partnerships, sole proprietorships,

<sup>&</sup>lt;sup>13</sup> Kovács et al. 2007: 53.

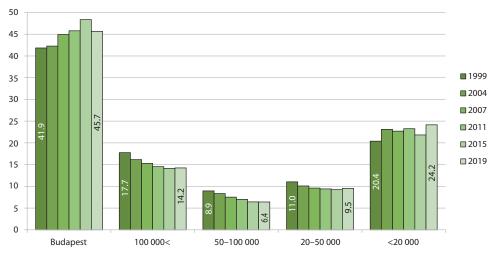
<sup>&</sup>lt;sup>14</sup> We listed the following activities under creative economy: a) *Creative industries:* publishing, advertising, news agency, software, media, entertainment, design, motion picture, fashion/clothing, leather, fur, jewellery; b) *Knowledge-intensive industries:* ICT – manufacturing of TV, telephones, audiovisual equipment, computers, etc., telecommunications activities, data transmission, data processing; financial service activities, international stock exchange services, international insurance, market research, auditing, workforce recruitment, international accounting services, tax consultancy, R&D and higher education, scientific and engineering research and development, social sciences and humanities research and development, higher education.

and budgetary institutions), the number of persons employed by them and their annual turnover over 6 time periods (1999, 2004, 2007, 2011, 2015 and 2019).

At the end of 2019, HCSO registered 266,000 companies in the creative economy in Hungary, which accounted for 31.8% of all businesses in the country. Companies in the creative economy employed 958 thousand people, which represented 22.8% of all employees. The aggregate revenue of creative companies was around €69.6 billion in 2019.

The Budapest agglomeration as the only truly metropolitan region in Hungary has always played a key role in the creative economy. The concentration of the creative and knowledge-based sectors (number of enterprises and employees, revenue) in the metropolitan region is higher than the weight of the capital in the Hungarian economy. While the share of the Budapest metropolitan region accounted for 38.5% of the total number of enterprises in Hungary in 2019, the Budapest agglomeration was home to 48.3% of the country's creative companies, which employed 56.6% of the creative workforce and accounted for 64.1% of the sales revenue realised in the creative economy.

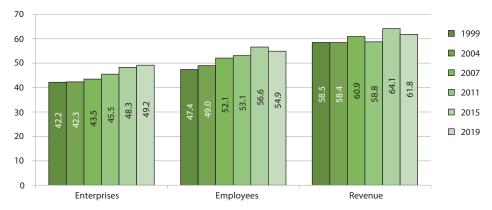
The creative economy essentially settles down in cities, and *there is a high correlation* between the position in the hierarchy of settlements and the share of the creative economy.<sup>15</sup> This is illustrated by the fact that while the share of Budapest and its metropolitan area increased gradually between 1999 and 2019 in respect of creative companies, employment and revenues, the share of rural cities at lower levels of the hierarchy of settlements decreased (*Figure 1*). However, our findings suggest that since 2015, the creative economy in rural Hungary has undergone a slow process of decentralisation, alongside the continued dominance of the Budapest agglomeration.



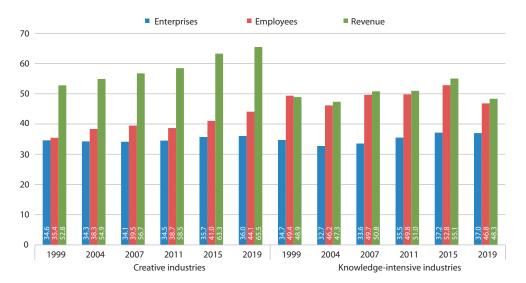
*Figure 1: Distribution of employees in the creative economy by category of settlements (1999–2019, %) Source:* compiled by the author based on the data of National Accounts Department of HCSO, 1999–2019

<sup>&</sup>lt;sup>15</sup> EGEDY et al. 2018: 288.

The share of the Budapest agglomeration has been growing steadily over the past two decades, even during crisis periods. Thus, the data suggest a growing spatial concentration of creative and knowledge-intensive sectors (*Figure 2*). Within the agglomeration, the dominance of Budapest is evident, and the weight of the capital city in the Hungarian creative economy tends to increase slowly but surely in the long term, both in the creative and knowledge-intensive industries (*Figure 3*). Over the past few years, a slow strengthening of the creative industries has been witnessed in Budapest and its agglomeration, while the position of the city region in terms of knowledge-intensive industries has become unstable compared to previous tendencies.



*Figure 2: The weight of the Budapest agglomeration in the creative economy (1999–2019, %) Source:* compiled by the author based on the data of National Accounts Department of HCSO 1999–2019



*Figure 3: The weight of Budapest in creative and knowledge-intensive industries in Hungary (1999–2019, %) Source:* compiled by the author based on the data of National Accounts Department of HCSO 1999–2019

Within the creative economy as a whole, the weight of the Budapest agglomeration is outstanding in the field of infocommunications (56.7%) concerning the number of enterprises, whereas based on the number of employees, the dominant role of the Budapest metropolitan area is particularly remarkable in legal and business services (59.3%). The share of the Budapest metropolitan area exceeds 93% in the field of finances, considering the amount of revenue (*Table 1*). If our findings are compared with previous indicators from 2015, there seems to be a dramatic drop in the number and share of employees working in the financial sub-sector (the share of employees fell from 70.9% to 43.0%), while a significant positive shift is observed in the revenue realised by the legal and business services and the R&D sector (the share of the agglomeration increased from 60.3% to 65.4% and from 78.7% to 84.7%, respectively). Overall, the Budapest agglomeration has slightly increased its share as regards the number of enterprises, whereas its importance has decreased in terms of employees and revenue.

	Enterprises	Employees	Revenue
Creative industry	48.7	53.8	72.2
Knowledge-intensive industry	49.7	55.7	55.8
Infocommunications	56.7	55.4	40.0
Finances	31.8	43.0	93.3
Legal business services	52.6	59.3	65.4
R&D higher education	49.4	51.3	84.7
Creative economy	49.2	54.9	61.8
Total	38.5	41.0	52.4

Table 1: Share of the Budapest agglomeration in branches of the creative economy, 2019 (%)

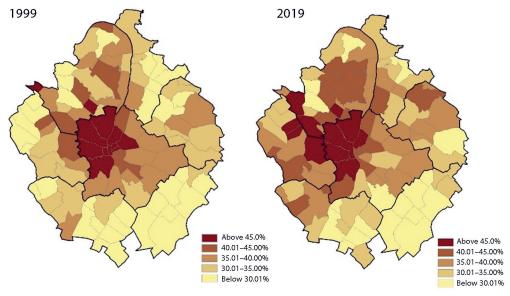
Source: compiled by the author based on the data of National Accounts Department of KSH, 2019

In the Budapest agglomeration, the financial services sector achieved the highest revenue per enterprise and per employee in 2019 ( $\in$ 889,200 and  $\in$ 316,400, i.e. 149% and 282% of the national average, respectively). The lowest indicator per enterprise was recorded in legal and business services ( $\in$ 169,700), and the lowest indicator per employee was identified in the more costly R&D sector and the lower income-generating, high-rate employer higher education ( $\in$ 26,600), corresponding to 28% and 23% of the national average, respectively.

By examining the number of enterprises and the number of people employed in them, as well as the absolute and relative amount of the revenue, the economic sectors that are the main drivers of the Budapest agglomeration can be readily identified. For all the three indicators, the dominant sector is 'Business management and management consultancy' (TEÁOR'08 code 70, e.g. business consultancy, public relations, communication). Other dominant activities in terms of the number of enterprises are 'Advertising' (731, e.g. advertising agency activities, media advertising), 'Complex administrative services' (8211), 'Clothing, retail trade' (4771) and 'Fashion and design' (741). In addition to 'Business management and management consultancy', most creative workers are employed in 'Legal, accounting and tax consultancy activities' (69), 'Labour market services' (78, e.g. employment agency, temporary staffing agency), 'Computer programming activities' (6201)

and 'Architectural activities' (711, e.g. engineering, technical testing). The latter two also play an important role among the highest revenue-generating activities. Other activities that are dominant in terms of revenue are 'Insurance, reinsurance and pension funds' (65) and 'Information services' (63, e.g. data processing, web hosting, web portal services, news agency activities).

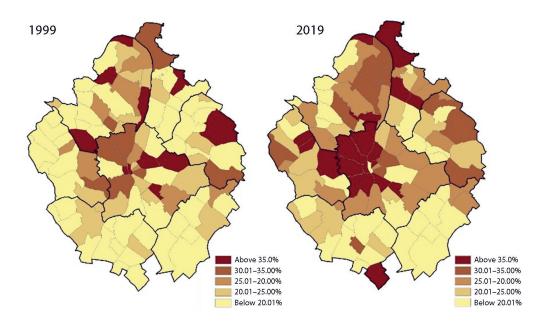
Examining the spatial concentration of enterprises in the creative economy, significant differences can also be seen within the Budapest metropolitan region. Within the capital, the share of creative enterprises among all the enterprises is the highest in the elite districts on the Buda side (51.6% in the 12<sup>th</sup> district; 50.8% in the 1<sup>st</sup> district; 50.0% in the 2<sup>nd</sup> district), while in the outer districts of Pest (e.g. Soroksár, Csepel, the Rákos districts) it is significantly lower. A northwest-southeast polarity can also be observed in the suburban zone, which can be linked to the suburbanisation process of the last two decades and to the elite groups occupying newly acquired spaces.<sup>16</sup> Figures 4 and 5 show the share of creative enterprises and the employed in the local economy in 1999 and 2019. The suburban towns where the share of creative enterprises is outstandingly high are located in the northwestern sector of the agglomeration, i.e. Budajenő (51.6%), Nagykovácsi (49.0%), Telki (48.0%) and Pilisborosjenő (47.6%). Based on the significance of the creative economy and the aggregate weight of enterprises, the people employed and the revenue in the metropolitan area, the following districts, towns and villages should be mentioned: the 1st, 2nd, 6th, 11th and 12th districts of the capital, the towns of Telki, Göd, Budakalász and the villages of Budajenő and Csobánka.



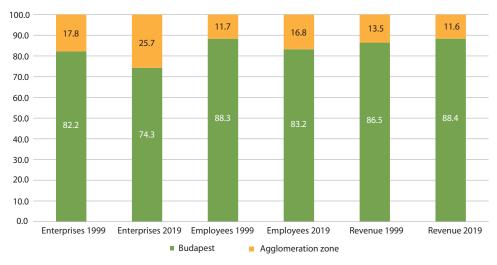
*Figure 4: Share of creative enterprises in the Budapest agglomeration (1999, 2019) Source:* compiled by the author based on the data of National Accounts of HCSO 1999, 2019. Cartography by Richárd Tomka

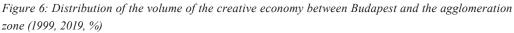
<sup>16</sup> Timár 2006: 38.

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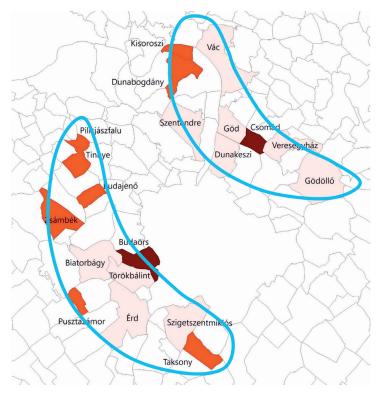
*Figure 5: Share of creative employees in the Budapest agglomeration (1999, 2019). Source:* compiled by the author based on the data of National Accounts of HCSO 1999, 2019. Cartography by Richárd Tomka





Source: compiled by the author based on the data of National Accounts Department of HCSO, 1999-2015

At the Gateway to Opportunities: Towards a Creative and Knowledge-Intensive Budapest



*Figure 7: Most dynamically developing settlements of the creative economy in the agglomeration Source:* compiled by the author

Statistical data show that within the Budapest agglomeration area, *the creative economy* of the agglomeration zone is developing more dynamically than that of the capital, and its weight in the number of enterprises and employees is continuously increasing (*Figure 6*). A review of the revenues leads us to the conclusion that, in the context of economic rationality, it is primarily the less capital-intensive enterprises that tend to choose the agglomeration for their sites (lower property prices and rents, lower overheads, while retaining their favourable geographical location close to Budapest). Since the new millennium, the development of the creative economy has been particularly dynamic in the western and southern sectors of the agglomeration (*Figure 7*) along the Pilisjászfalu–Biatorbágy–Törökbálint–Érd–Taksony axis and in the north and east along the Vác–Szentendre–Dunakeszi–Veresegyház–Gödöllő axis. In Budapest, the development dynamics of the 5<sup>th</sup>, 11<sup>th</sup>, and 13<sup>th</sup> districts were outstanding in terms of absolute indicators, and in terms of relative indicators the 1<sup>st</sup>, 5<sup>th</sup>, 6<sup>th</sup> and 9<sup>th</sup> districts had the highest rate of development.

# 4. The Budapest agglomeration in the eyes of the creatives

### 4.1. Factors affecting the mobility of creative employees and enterprises

Between 2006 and 2010, in the framework of the ACRE (Accommodating Creative Knowledge in the Enlarged European Union) international research project, we made an in-depth analysis using quantitative and qualitative research methods to study the opinions of creative workers, managers and foreigners about the Budapest agglomeration. The research provided insights into the most important personal, hard and soft social and economic factors influencing the mobility and the settling down of creative workers.

Our research findings show that for creative workers living in the Budapest agglomeration area, *personal reasons, personal ties* (e.g. born here, family living here, circle of friends) play the most important role in why they chose the city region as their place of residence. It is definitely worth separating the hard and soft motivational factors and treating personal and family motives separately. These can be such strong motivators for mobility to a metropolitan region, in this case Budapest, that the people involved ignore any other points of view.<sup>17</sup>

If we disregard personal motivation and we only focus on hard and soft relocation factors, we can say that Hungarian and foreign creative workers *come to Budapest mainly motivated by the hard economic factors*. Among these factors, job opportunities and college and/or university studies play a decisive role. Such factors are clearly considered more important by the representatives of knowledge-intensive industries, whereas in the case of those engaged in creative industries, the diversity of entertainment and cultural opportunities tend to have more than average importance.

Creative enterprises also choose Budapest primarily for the hard factors: they settle down in the Budapest agglomeration mainly *because of the size of the market and the labour market*. One of the greatest strengths of the Budapest agglomeration is the concentration of a *critical mass* in the city and its surroundings, both economically and socially. It means that Budapest, as the only metropolis in the country and the centre of the most developed region, has the potential to enter the competition of cities at international and European level. In the creative economy, the city region is a determining factor in Hungary due to its weight, so being based in Budapest gives a comparative advantage to the companies that are active in this sector.<sup>18</sup> Most of the business companies of the country are located in Budapest, the overall infrastructure is significantly better than the average (e.g. supply of offices on the real estate market, modern office buildings), local firms are in an advantageous position over their rural counterparts due to the larger market, higher demand and number of customers.<sup>19</sup>

<sup>&</sup>lt;sup>17</sup> Egedy–Kovács 2009b: 16.

<sup>&</sup>lt;sup>18</sup> Lengyel–Ságvári 2011.

<sup>&</sup>lt;sup>19</sup> Gajzágó–Gajzágó 2019.

Managers unanimously agree that among the soft factors, *informal contacts play a crucial role in* the Hungarian economy, so firms can benefit greatly from their presence in the capital. In addition, it should be mentioned that enterprises in Budapest and in its surroundings generally have access to higher quality legal, financial, commercial, logistical, etc. services.

The most important motivating factors for professionals in creative and knowledgeintensive sectors for settling down in urban and agglomeration areas are also the hard factors: the price of housing, the size of the dwelling and the availability of public transport. They also consider soft factors in the decision-making process, the most important of which are the quality and atmosphere of the living environment. Therefore, housing and accommodation, regardless of education and employment, play a predominant role in the choice of place of residence, which is influenced in practice only by financial means.<sup>20</sup> Age plays a decisive role in mobility to urban areas. It is particularly attractive for young people, as regards Budapest. The metropolitan region has a high population retention rate, i.e. once somebody has moved in, he or she rarely wants to move out or move on. Younger people tend to choose the metropolitan region as their place of residence because of hard factors (studying in the capital, moving for jobs and job opportunities), while soft factors (such as access to the natural environment) are more likely to be preferred by older people aged 45 or above. The inner city is a target area for certain strata of the creative class (mainly young people working in the creative industries).<sup>21</sup> So, even if not the whole creative class in general, but several of its representatives are currently strongly attracted to the inner city.

When choosing a site for their business within a city region, employers and managers *primarily consider hard factors*. These, first of all, include *the price, the size and the infrastructure* of the office, as well as its *good accessibility and transport connections*. According to the managers interviewed, the office market in the city region offers a good choice, but there are significant price level differences between Budapest and its agglomeration, so when choosing a site for their business, the rent (or price) of an office is an important limiting factor for small companies and companies that are short of capital. In terms of infrastructure, modern office buildings (e.g. Infopark) now take into account the needs of people working long hours, and make available fitness centres, massage parlours and shopping facilities, which was not a point of consideration when the first office buildings were built. Such industrial parks attract solvent demand, especially well-capitalised, medium-sized enterprises.

In addition to the supply on the office market, other high-priority criteria that the economic sectors and industries take into consideration when choosing their business premises are *transport and public transport*, and in connection with that also the *accessibility* of the site. All enterprises, without exception, consider the aforementioned factors when choosing a location for their site, though the role of the factors varies depending on the size of the enterprises. As the size of an enterprise increases, it becomes less

<sup>&</sup>lt;sup>20</sup> EGEDY–KOVÁCS 2009b: 24.

<sup>&</sup>lt;sup>21</sup> Kovács et al. 2008: 9.

sensitive to where its employees commute from. However, particular emphasis is put on the place of residence of the managerial strata in the site selection process. The surrounding environment of the office is an increasingly important consideration in the choice of site location.

*Clustering* should also be briefly mentioned, *which* does not yet have a long tradition in the agglomeration, though there are already signs of it. The process of clustering and the recognition and awareness of the significance of clustering among the managerial strata of the enterprises in Budapest have not yet been clearly demonstrated by our studies conducted so far. The degree of clustering in different sectors and industries varies across the city region. Some sub-sectors (e.g. IT) show signs of clustering (e.g. Graphisoft Park, Infopark), although some experts are of the opinion that this is an artificially generated process rather than a natural development trend. At the same time, for example, there is no clustering in the 'Business and management consultancy activities', whereas in the 'Motion picture, video, motion picture related activities', there is a kind of 'anti-clustering' and fragmentation process taking place, according to managers.

# 4.2. Strengths and weaknesses of Budapest according to the creatives

According to the opinions of employees and managers working in the creative economy, the strengths and weaknesses of Budapest can be summarised as follows:

In the case of Budapest, the most important strengths of the metropolitan region are the following: a) *job and career opportunities,* which are found highly attractive by domestic and foreign employees; b) *high quality cultural life, leisure, sports and entertainment opportunities;* c) *services, commercial networks and gastronomy.* Among the soft factors we should point out the *residential environment,* residential areas of high standards and quality, the *geographical location of the* city and its *cultural milieu.* The advantages of the city, according to the opinion of the majority of the managers interviewed, are primarily linked to the *services* provided by the metropolis. In Budapest, as in large cities in general, the quality of services is higher, and the variety of supply is wider. The capital plays a key role in the cultural life of the country, and the cultural industries are very strongly represented in the Budapest agglomeration. Budapest has the most favourable positions in terms of cultural services. As our analysis shows, another strength of Budapest is the diversity of its *residential areas*, offering a wide choice for people and businesses wishing to settle in the city.<sup>22</sup>

Out of the hard factors, the creatives consider *the Hungarian tax system* as one of the greatest weaknesses of the city region. Apart from this, the *high cost of living* must also be highlighted, as all three target groups consider life in Hungary and Budapest very expensive compared to salaries. Among the soft factors, *air pollution, the polluted environment and noise* must be mentioned in the first place. The *neglect of the built environment* and the *deterioration of the quality of life in the metropolis* are seen as important

<sup>&</sup>lt;sup>22</sup> EGEDY–Kovács 2009a: 288.

limiting factors by the creatives. From foreigners' point of view, the city is very beautiful, it attracts tourists, and while visitors see a city under construction, people who live here see it rather as a metropolis that is difficult to live in. Creative managers think that one of the biggest obstacles to development in/around the Budapest agglomeration is the situation of *transport and public transport*, the capital clearly provides the worst conditions in this field. There are currently very few multi-storey car parks and parking spaces available in relation to the number of vehicles, and the metropolis has been struggling to solve the parking problem practically since the regime change, but without success. A low level of *tolerance*, acceptance of diversity and openness in society take a prominent place on the list of weaknesses of the capital. Primarily, managers and foreigners are of the opinion that Hungary has an extremely *low level of political culture*. The unnecessarily high level of *administration and bureaucracy* also creates an unfavourable situation. Our main findings are summarised in the SWOT analysis in *Table 2*.

Strengths	Weaknesses
Weight and role of Budapest in the national economy	The situation of transport and public transport
Favourable position in the creative economy	Lack of cooperation between the actors of local
Good labour market situation, job and career opportu-	economy
nities	Weak and inadequate clustering process
High quality services	Weak strategic thinking of local entrepreneurs, lack of
Good supply on the office market	business strategies
Variety of residential areas	Passive and defensive behaviour of managers in the
	local economy
	Quantity and quality of green spaces
Opportunities	Threats
Geographical location	Size, capability and openness of the national economy
Spectacular development of some creative and	Political climate and culture, bureaucracy, problems of
knowledge-intensive sectors	economic regulation
The attractiveness of the Budapest agglomeration in the	Systemic problems in public and higher education
domestic labour market	High degree of specialisation in the SME sector
Concentration of companies and enterprises Concentra-	Price levels for skilled and experienced labour
tion of higher education	The role of state subsidies in the development of certain
	sectors
	The risk of corruption linked to informal relationships
	Increasing level of social problems, tensions and
	intolerance

Table 2: SWOT analysis of the Budapest agglomeration based on the views of creative workers and managers

Source: compiled by the author

# 5. Proposals for the development of the creative economy

Based on our multiannual research conducted among creative workers and employers, we have formulated our professional recommendations that can help the creative economy to develop further in Budapest. Developments in the economic, built and social environment can make a major contribution to improving the competitiveness of the city.

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As regards the most important suggestions concerning the economic environment, it is to be emphasised that the complex and differentiated diversity offered by Budapest should be communicated much better in the 'image' of Budapest. This can be attractive to both tourists and people working in the creative professions. The communication strategy of Budapest should be changed. Budapest needs to reposition itself among European cities, emphasising those elements and factors where it has real potentials. Another important question is whether the city will develop its cultural economy, which has excellent potentials, by investing additional resources in its development, or whether it will give priority to the development of other creative and knowledge-intensive sectors in the future. If the city decides to focus on cultural industries, the range of offerings should be broadened. There are relatively many offerings for younger age groups, but more limited opportunities for middle-aged and older age groups. Statistical data suggest that the profitability of knowledge-intensive industries by far exceeds that of creative industries. Thus, economically, it is much more reasonable to develop them. The economy of the country and of the capital is less supportive of creative workers from abroad who want to move to the country, settle down and set up their businesses there. The system is not adequately prepared to receive foreigners, and neither the country nor the capital city is exploiting the potentials of foreign creatives. It would be worthwhile making foreign creative workers who have lived, worked and raised a family in Hungary for many years be involved in local economy more strongly.

Among the *suggestions concerning the built environment*, it is important to highlight the need to modernise public areas, create interdisciplinary groups for the design and reconstruction of public spaces, which could include representatives of different creative professions (e.g. artists). In Budapest a public space could be created where representatives of all the creative professions could work and sell in one place. This way, they could create their artistic 'products' by inspiring and helping each other. It would be beneficial to create alive, functional community spaces and meeting places for different generations in public spaces, this would also invigorate the city visually. Public transport should be undoubtedly improved, the different networks should be coordinated, and the integration of the transport network should be upgraded (e.g. linking rail and suburban rail lines).

Among the *proposals concerning the social environment,* it should be mentioned as a priority that the future development and competitiveness of Budapest is due to be adversely affected by the low level of tolerance. The state or the municipality of the capital could develop a long-term strategy and programme to tackle the spread of extremist views. To reducing the level of intolerance, children and young people could be sensitised, while the national values should certainly be emphasised and borne in mind. Attracting highly skilled creatives to Hungary could also have economic and cultural benefits. The immigration and settling down of highly skilled foreign creatives could be facilitated by the setting up of a mentoring scheme to give assistance to highly skilled foreigners arriving in Hungary in their daily life, integration and settling down.

# Conclusions

After the regime change, economic development in Hungary accelerated due to the internationalisation of the economy, the inflow of foreign working capital, and the emergence of multinational companies. On the ruins of the state socialist economy, which in many respects resembled Fordist mass production, a service-based, flexible accumulation of capital was consolidated, while a new spatial order of the division of labour emerged. Since the mid-1990s, the national economy has been undergoing modernisation at a fast pace and after 2000, the development of the creative economy has increasingly come into the focus of national, regional and local economic strategies. The creative economy has grown stronger in Hungary and in Budapest, and the advance of knowledge-intensive industries, in particular, has been spectacular over the past two decades. As a result of this process, the role of Budapest has become more highly valued and the weight of the Budapest agglomeration within the Hungarian creative economy has increased significantly, a trend that even crises have not been able to reverse.

The strengthening of the creative economy in Hungary has created new territorial disparities. Due to the increasing spatial concentration of the creative economy, the traditional East–West slope of the economy tends to be replaced by the distance from Budapest.<sup>23</sup> The former centre–periphery, developed–underdeveloped relations therefore no longer present themselves primarily at regional level, but within the hierarchy of settlements. The creative economy is actively shaping and transforming the geographical environment of Budapest, which has gradually transformed the society, economy and not least, the physical environment and spatial appearance of the city since the turn of the millennium. People's attachment to a metropolis is based not only on traditional economic factors (agglomeration factors, clusters), but the benefits of urban spaces (cultural diversity, recreational spaces and a wide range of personal connections) and the historical past also plays a part in it.

With its infrastructural developments, the neoliberal urban development policy focusing on competitiveness has fostered the spatial concentration and development of the creative economy in the Budapest agglomeration. However, it has exacerbated spatial inequalities and has revealed so many negative features and has been so counterproductive over the last three decades that it has ultimately failed to live up to expectations. Today, the city region, the inner areas of Budapest and the areas beyond its administrative boundaries, are faced with numerous social, economic and, not least, political problems. Greater emphasis should be placed on local needs and demands in developments in and around the city, using the excellent opportunities offered by the careful development of the remaining reserve areas and brownfield areas.

By rethinking the city, by building a reinvented city, and by taking more active and effective advantage of the creative economy during this process, the unrealised urban development goals of previous decades could be achieved.

<sup>&</sup>lt;sup>23</sup> Egedy 2021: 74.

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# About the Authors

- **† Beluszky, Pál** graduated in geography from Kossuth Lajos University of Debrecen in 1959. He taught at a secondary school for three years, then worked as a research fellow and later as a senior research fellow at the Research Institute of Geography of the Hungarian Academy of Sciences. His research interests included settlement geography, and more specifically, urban geography, urban agglomerations, the hierarchical system of the Carpathian Basin over several time scales, and the problems of disadvantaged areas. In 1984, he was one of the founding members of Centre of Regional Studies of the Hungarian Academy of Sciences. In 1970, he earned his CSc. in geography, in 1994, he became a Doctor of the Hungarian Academy of Sciences. His research interests later expanded to include the geography of villages and historical geography. He published around 26 books and more than 200 articles. In 1989 and 2021, he participated in the work on the National Atlas of Hungary. He was awarded the Széchenyi Prize in 1990, the Deák Ferenc Research Prize in 2004, the Officer's Cross of the Order of Merit of the Republic of Hungary in 2006, and the Middle Cross of the Hungarian Order of Merit of the Hungarian Republic in 2016. The essay in this volume was published after the author's passing.
- **Dövényi, Zoltán** is a Doctor of the Hungarian Academy of Sciences (2003) and Professor Emeritus at the University of Pécs. His academic career spans almost half a century focusing primarily on social geography. His work addresses the geographical aspects of social tensions, the spatial structure of the labour market, domestic and international migration processes, and the characteristics of urbanisation following the change of regime. He has been a long-time researcher of domestic issues in social geography and historical geography, and in recent years, his interests have increasingly turned to political geography and geopolitics. https://orcid.org/0000-0002-9576-8375
- **Egedy, Tamás** is a geographer with a PhD and a Doctor of the Hungarian Academy of Science. He is an Associate Professor at the Budapest Business University, and a Senior Research Fellow at the Geographicaly Institute of the HUN-REN Centre for Astronomy and Earth Sciences. He has played a key role in the comprehensive study of the physical, social, and economic environments of housing estates in Hungary, and in exploring the effects of urban regeneration in Hungarian cities on the social environment and quality of life. In the last decade, he has made outstanding contributions to research on the development trends and urban geography of the creative economy in Hungary. He is editor of leading Hungarian journals in the field of geography and the vice-president of the Hungarian Geographical Society. https://orcid.org/0000-0003-3929-8425

- **Fonyódi, Mariann,** PhD, is a chartered architect, an urbanist and an Associate Professor at the Department of Urbanism, Faculty of Architecture on Budapest University of Technology and Economics. She is engaged in research on and teaches the preservation of historic urban heritage and urban regeneration, as well as in practice as a planner, both at the municipal and architectural scale.
- Jeney, László is a geographer and Associate Professor, who specialises in regional geography and economic geography analysis methods, with a focus on spatial inequality studies. His primary research interest is analysing development disparities among large cities in East-Central Europe. He lectures in the Department of Economic Geography and Urban Development and serves as Chairman for Social Sciences of the Students' Scientific Association Council at Corvinus University of Budapest. Additionally, he is a member of the Technical Committee of the National Council of Students' Scientific Association, Section for Physics, Earth Sciences, and Mathematics and also serves as the Secretary General of the Hungarian Geographical Society. https://orcid.org/0000-0003-3178-1420
- Kiss, Kornélia, PhD, is an Associate Professor and Head of the Department of Tourism at the Budapest University of Economics and Business. She started her professional career at Horwath HTL Hungary, an international tourism and hotel consultancy, and managed the research activities of the Hungarian Tourism Plc., responsible for national tourism marketing, for almost a decade. Since 2015, she has been engaged in higher education in tourism. Her research interests encompass quality of life and well-being, leisure, tourism marketing, and consumer behaviour in tourism. https://orcid.org/0000-0002-8475-7494
- Kovács, Zoltán is a full member of the Hungarian Academy of Sciences, a Research Professor at the Institute of Geography of the Centre for Astronomy and Earth Sciences of the Hungarian Academy of Sciences, and a senior lecturer at the Department of Economic and Social Geography of the University of Szeged. His expertise lies in social geography, with particular emphasis on urban geography. His research involves a comprehensive study of urban development in Hungary and the East-Central European region. He has explored the transformation of the internal spatial structure of cities, residential mobility, the social and environmental conditions for the regeneration of degraded urban neighbourhoods, and the current challenges of sustainable urban development. https://orcid.org/0000-0003-2697-4682
- Michalkó, Gábor, PhD, is a geographer, tourism researcher, and Professor at the Faculty of Economics, Pannonia University. He is also a scientific advisor at the Institute of Geography, CSFK. With a three-decade professional career dedicated to the trans-disciplinary development of tourism as a science and to the advancement of higher education in tourism, his main research topics include urban tourism, shopping tourism, tourism and the quality of life, and tourism security. https://orcid.org/0000-0003-2495-1858

- **Molnár, Dóra,** PhD, is a certified security and defence policy expert, and a board-certified specialist lawyer. She is a lecturer at the Department of International Security Studies, Faculty of Military Science and Military Training at the Ludovika University of Public Service, and a researcher at the Institute for Cyber Security Research at the Eötvös József Research Centre. Her primary research interests encompass strategic security issues, national and international security, and the legal, defence, and strategic aspects of cybersecurity. https://orcid.org/0000-0002-1476-5253
- Pál, Viktor graduated in 1992 as a secondary-school teacher of geography and history from the Faculty of Natural Sciences, József Attila University of Szeged. His doctoral research focused on the adaptation of health geography trends and spatial inequalities in population health. He received his PhD from the Faculty of Natural Sciences, University of Pécs in 2006 and his habilitation (a post-doctoral qualification demonstrating the ability to conduct independent research and teach at a university level) from the University of Szeged in 2015. His primary research area is health geography, and he has also conducted research in tourism, spatial development, and economic geography. Currently, he is an Associate Professor at the Department of Economic and Social Geography, Faculty of Geography and Earth Sciences, University of Szeged, Faculty of Science and Informatics. https://orcid.org/0000-0002-5558-7641
- Sikos T., Tamás is a Doctor of the Hungarian Academy of Sciences, a Klauzál Gábor Prize-winning economist, and a University Professor. In 2024, he was awarded the Officer's Cross of the Order of Merit of the Republic of Hungary. He is a pioneer in marketing geography in Hungary, specialising in spatial issues in retailing, regional research methodology, and various problems of villages and cities. His specific research interests include the vulnerability of food supply chains and sustainable trade analysis. He was the Head of the Hantos Elemér Doctoral School of Economics and Regional Sciences at the University of Miskolc between 2000 and 2024 and a Professor at the Institute of Management Science. https://orcid.org/0000-0002-1650-5084
- Székely, Gáborné is a Fényes Elek Prize-winning statistician and manager of several Hungarian housing surveys. Her activities focus on the development of Hungarian housing market indicators, the functioning of the housing sector, its spatial trends, and its social statistical aspects. She is the head of the Housing Statistics Department at the Central Statistical Office of Hungary.
- Szendi, Dóra, PhD, is a Senior Lecturer at the Institute of World and Regional Economics, University of Miskolc. Since 2016, she has also served as the Secretary of the Hantos Elemér Doctoral School of Economics and Regional Sciences. Since November 2019, she has been the Head of the Northern Hungary Division of the Hungarian Regional Science Association. Her main research area includes regional sciences, focusing on the analysis of territorial disparities, with particular attention to the development

of peripheral regions in East-Central Europe. She holds a PhD in this research area and has experience in project work, primarily involving EU projects. https://orcid. org/0000-0003-0010-9949

- **Tiner, Tibor** is an economist and geographer who earned his CSc. in geography, and was awarded the Prize of the Hungarian Academy of Sciences. He is a Senior Research Fellow of the Institute of Geography of the Hungarian Academy of Sciences. He is known for his innovative contributions to Hungarian transport, telecommunication, and settlement geography research, as well as for developing methods in these areas. His research is recognised for its comprehensive exploration of small area development processes and the scientific substantiation of infrastructural conditions for regional development. He has taught for many years as an Associate Professor at the Selye János University in Komárno (Slovakia) and at the doctoral schools of the Faculty of Economics of Szent István University at Gödöllő. https://orcid.org/0000-0002-3498-5851
- Uzzoli, Annamária graduated from the Faculty of Natural Sciences of Eötvös Loránd University, Budapest in 1999. Her doctoral research focused on socio-spatial differences in health status in Hungary, and she received her PhD from Eötvös Loránd University in 2004. Her health geography studies emphasise the spatial and geographical aspects of health inequalities. In recent years, she has researched the impact of the coronavirus epidemic on health status and healthcare. She is currently a Senior Research Fellow at the Institute of Geography, Centre for Astronomy and Earth Sciences. https://orcid.org/0000-0002-0484-1451

The 150th anniversary of Budapest presents a prime opportunity to reflect on and identify the most critical issues and topics for research concerning our capital. The authors of this volume have embraced this task by delving into the history of Budapest, tracing its development, and exploring the city's future prospects.

Given the spatial distribution of society and the economy, it is essential to examine Budapest's place and role within the regional urban system. As is well-known, the merger of Pest, Buda, and Óbuda in 1873 set the stage for Budapest to emerge as a rival centre to Vienna within the Austro– Hungarian Monarchy, and establish itself as the heart of the Carpathian Basin. At that time, Budapest was a key pillar of social and technological modernisation, with its burgeoning industry propelling it to the status of a world city.

Despite enduring the great upheavals of history, Budapest, along with other cities in Eastern and Central Europe, has become a driving force in an era of increasing globalisation. These cities now have the opportunity to solidify their positions in the international urban hierarchy. However, the question remains whether this will elevate Budapest, or any of its competitors, to a leading role as a metropolitan centre. Our book seeks to answer this question, among others.