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Determinants of social and economic inequalities between the Budapest metropolitan area and Hungary's larger urban centres

Júlia Schuchmann¹

Abstract

Hungary's only large urban area with a population exceeding one million that can be considered significant on both the global and European scales is the Budapest metropolitan area. Beyond Budapest, there are eight major urban centres in Hungary² with populations beyond 100,000. These regional metropolitan areas serve as important economic hubs and university towns. Despite their regional significance the economic and social dominance of the Budapest metropolitan region remains overwhelming. A further unfavourable trend is that these large regional cities are continuously losing population, due to substantial outmigration – particularly those struggling with persistent economic difficulties. The primary aim of this study is to reveal the socio-economic disparities between the Budapest metropolitan region and Hungary's eight largest urban regions.

Keywords: Budapest metropolitan area, Hungarian rural urban areas, inequalities, Czech urban development trends, similarities-differences

Absztrakt

Magyarország egyetlen, egymillió fő feletti lakosságú nagyvárosi térsége, amely globális és európai szinten is figyelembe vehető, a Budapesti agglomeráció. A budapesti agglomeráción kívül még nyolc, 100 000 főt meghaladó vidéki nagyvárosi térség található

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² The study examines the Budapest agglomeration defined by the Hungarian Central Statistical Office (KSH) within the framework of the Budapest urban region. For the rural metropolitan agglomerations, the definitions provided by the KSH are likewise applied, primarily due to data availability considerations.

hazánkban. A magyar vidéki nagyváros térségek fontos regionális központok, gazdasági erőterek, egyetemi városok. A regionális vidéki városközpontok ellenére a budapesti agglomeráció gazdasági és társadalmi dominanciája határozza meg az ország gazdasági és társadalmi folyamatait. Az utóbbi évtizedben kedvezőtlen tendencia figyelhető meg. A fejlettségbeli polarizáció a főváros és a vidéki nagyváros térségek között egyre élesebbé váltak. A vidéki nagyvárosi területek folyamatosan veszítenek lakosságukból az elöregedés és a tömeges elvándorlás miatt. Különösen azok a nagyváros térségek érintettek ebben, amelyek gazdasági problémákkal küzdenek. A tanulmány fő célja, hogy feltárja a budapesti agglomeráció és a nyolc legnagyobb magyar városi régió közötti társadalmi-gazdasági egyenlőtlenségeket.

Kulcsszavak: Budapesti metropolisztérség, magyar vidéki nagyváros térségek, egyenlőtlenségek, cseh-magyar nagyváros térségek, hasonlóságok-különbségek

Introduction

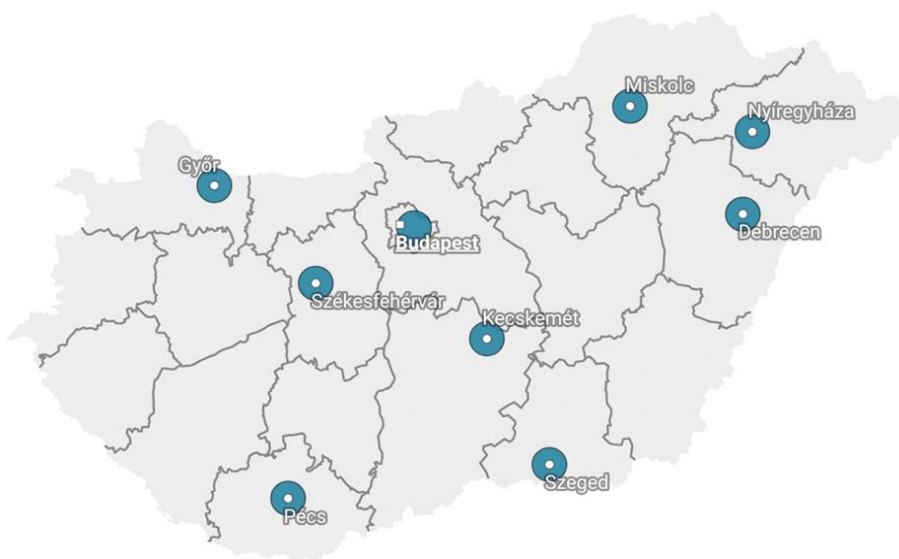
Hungary's only significant metropolitan area, with a population exceeding one million, is Budapest, which, as the national capital, occupies a central and privileged position within the country's spatial, social, and economic hierarchy. Approximately 27% of the Hungary's total population resides in Budapest and its wider metropolitan area, where 48% of the national GDP is produced. The proportion of residents holding a tertiary degree in the Budapest metropolitan area is twice as high as in other regions, and around two-thirds (67%) of the country's research and development potential is also concentrated here (Budapest 2030 Long-Term Development Concept, 2013). The population and economic weight of Budapest and its surroundings have shown a continuous upward trend, while the country's large regional cities – those with populations exceeding 100,000 – have experienced relative stagnation. Together these cities accounted for around 14% of Hungary's population both in 2011 and 2022.

Over the past three decades, the eight major regional urban centres and their respective metropolitan regions – Debrecen, Szeged, Pécs, Győr, Miskolc, Kecskemét, Nyíregyháza and Székesfehérvár – have followed divergent development trajectories. Each began from distinct historical, economic, and social starting points; they differ in terms of inherited structural characteristics, the scale and composition of locally available resources, and the geographical position that has determined their development opportunities after 1990 (*Map 1*).

As a consequence of these variations marked disparities have emerged among them in both economic performance and social competitiveness (Szirmai 2009; Szirmai 2014; Rechnitzer, Páthy, Berkes 2014). Regional metropolitan areas that integrated earlier and more effectively into European and global economic networks – notably Székesfehérvár and Győr – benefited from early inflows of foreign direct investments (FDI), which significantly strengthened their economic bases and international embeddedness.

Map 1.

Geographical location of the nine largest urban areas in Hungary



Source: Author's own compilation using Datawrapper.

During the last decade the polarization between the central, western and eastern, and south-eastern parts of Hungary has deepened considerably. These regions become increasingly separated from one another in terms of their social and economic development. Growing disparities can also be observed among the largest metropolitan areas outside the capital. During the last decade, the polarisation between the central, western, eastern, and south-eastern parts of Hungary has deepened considerably. These regions have become increasingly separated from one another in terms of their social and economic development. Growing disparities can also be observed among the largest metropolitan areas outside the capital.

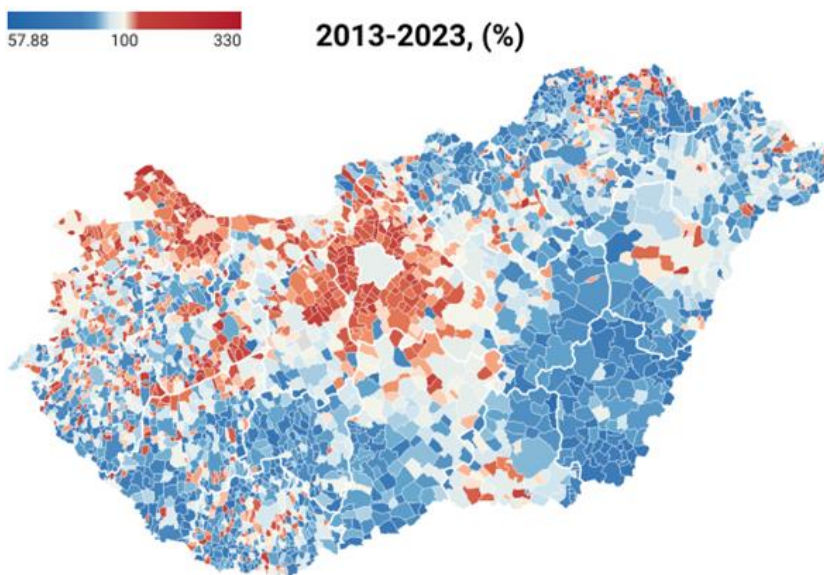
Demographic processes of Budapest and rural metropolitan areas: Growing population in the capital region, declining rural metropolitan areas

Population trends

Hungary's large cities and their metropolitan regions have a pronounced population concentrating potential. This is particularly evident in the case of Budapest, where the population has been continuously increasing over the past decades, and the capital region's share in national demographic processes has been steadily rising (Schuchmann, Váradi 2014:112). In 2000, the Budapest metropolitan area accounted for only 17.5% of Hungary's total population; by 2008 this figure had risen to 25%, by 2018 to 27%, and according to the most recent data, it reached 28% in 2022 (*Table 1*).

Figure 1.

Population change in the Hungarian settlement network, 2013–2023,
expressed as a percentage



Source: Author's own compilation using HCSO data

Between 2013 and 2023 a substantial population decline occurred across rural Hungary. This demographic loss now affects not only peripheral rural areas, but also the majority of the larger rural metropolitan regions. A particularly marked population

decrease can be observed in the case of several major urban centres such as Miskolc, Pécs, Szeged, Debrecen, Nyíregyháza and Kecskemét. Between 2013 and 2023, a substantial population decline occurred across rural Hungary. This demographic loss now affects not only peripheral rural areas but also the majority of the larger rural metropolitan regions. A particularly marked decrease can be observed in the case of several major urban centres such as Miskolc, Pécs, Szeged, Debrecen, Nyíregyháza, and Kecskemét. Only two metropolitan regions – the Budapest metropolitan area, and the Győr metropolitan area – experienced population growth during this period (*Figure 1*).

The second phenomenon marks a shift compared to earlier trends. Previously, population loss primarily affected the central cities of metropolitan areas, mainly due to residential suburbanisation, as people moved to surrounding settlements. However, recent data indicate that population decline now characterises not only the urban cores but also the suburban zones. In other words, the population of entire metropolitan areas is decreasing, and residential suburbanization can no longer able offset this process. Between 2013 and 2023, the most significant population decreases occurred in the Miskolc metropolitan area (-8%), and the Pécs metropolitan area (-3.2%). Among the rural metropolitan areas, only the Győr region experienced population growth. The main factors behind the overall population decline are ageing and increasing outmigration (*Table 1*).

Table 1.

Population change in the nine largest metropolitan areas of Hungary including the core city, suburban zone, and total metropolitan area, 2013–2023 (percentage values)

	<i>Core city</i>	<i>Suburban zone</i>	<i>Total metropolitan area</i>
Budapest	97.3	112.5	102.1
Győr	101.2	113.9	106.7
Székesfehérvár	96.6	103.0	99.2
Kecskemét	97.3	108.4	99.1
Szeged	97.0	104.3	98.5
Nyíregyháza	97.5	99.8	98.0
Debrecen	98.4	104.7	99.9
Pécs	95.0	104.3	96.8
Miskolc	89.1	97.0	92.0

Source: HCSO data

The third phenomenon is the increasing population concentration in the Budapest metropolitan area. In 2008 this region accounted for 25% of the country’s total population, while by 2023 it had already reached 28%. At the same time, opposing demographic trends can be observed within the metropolitan area itself. The population of Budapest, the capital city, shows signs of stagnation and slow decline, whereas the agglomeration zone continues to grow dynamically. Two major factors explain this suburban population growth. The first is residential suburbanization – the continuous outmigration from the densely populated inner neighbourhoods of Budapest to the greener and more spacious suburban settlements. In 2013, the population of the Budapest agglomeration zone was 808,428, and during a ten years’ period it had risen to 909,105 by 2023. This represents an increase of more than 100,000 people within a single decade. Such rapid and substantial population growth poses significant challenges for peri-urban settlements, particularly in terms of infrastructural capacity and service provision. The second factor is the substantial internal migration from other, less developed regions of Hungary towards the capital region (*Table 2*).

Table 2.

The share of the country’s population represented by the Budapest metropolitan area

<i>Population</i>	<i>2008</i>	<i>2011</i>	<i>2013</i>	<i>2023</i>
Suburban zones	817,210	854,895	808,428	909,105
Capital city of Budapest	1,733,685	1,729,040	1,749,734	1,686,222
Budapest metropolitan area	2,550,895	2,583,935	2,627,457	2,595,327
<i>Share of the country’s total population (%)</i>	<i>25</i>	<i>26</i>	<i>27</i>	<i>28</i>

Source: HCSO data

In addition to the processes already mentioned, the sharp escalation in real estate prices in Budapest has further intensified outmigration from the city. According to the Hungarian Central Statistical Office, the average price of a second-hand apartment in Budapest was HUF 17.4 million in 2014, rising to HUF 56 million by 2024 – an almost fivefold increase.

Although housing prices in the Budapest agglomeration have also shown steady growth, they remain significantly lower on average. In 2024, the average price per

square metre of an apartment in Budapest was 1.3 million, while in the suburban areas it stood at 712,000 per square metre.

The COVID-19 pandemic further reinforced this suburbanisation trend between 2020 and 2021. During this period driven by fears of infection, lockdowns, and curfews, a considerable proportion of residents relocated from the densely populated capital to less crowded suburban areas – some on a temporary basis, while others established more permanent residence outside the city.

To conclude, the trends observed over previous decades have essentially remained unchanged: the same two Hungarian metropolitan areas, Budapest and Győr – have continued to increase their populations, while the other major rural urban areas have been either decreasing or stagnating. However, compared with earlier trends, a new phenomenon can now be identified in the case of the largest rural urban areas: according to the current data, not only have the populations of the central cities decreased, but the surrounding suburban zones have also started to lose residents.

The population decline has been particularly pronounced in two major rural urban areas: Pécs and Miskolc, where the decrease has accelerated drastically over the past decade. Miskolc has lost around 20,000 inhabitants, while Pécs has lost approximately 10,000, both of which have had clearly negative effects on their economic and social development.

Over the past decades, the population concentration within the Budapest metropolitan area has intensified. In 2008, this urban region accounted for approximately 25% of Hungary's total population, a proportion that had risen to around 28% by 2023. In contrast, the combined population share of the eight largest rural metropolitan areas has remained essentially unchanged, stabilising at about 16% throughout the same period.

Ageing

In addition to the population decline observed in Hungary's largest metropolitan areas, population ageing has also become a major challenge. This is not only a metropolitan but also a national phenomenon. Hungary has one of the lowest fertility rates in the European Union, coupled with persistently high mortality rates.

The country's fertility rate has been declining for many years, reaching 1.4 in 2020, which is far below the replacement level of 2.5 required for generational renewal. Over the past decade, Hungarian society has undergone continuous ageing. The ageing index clearly illustrates this process: between 2013 and 2023, the number of elderly people per 100 young people has quadrupled. As Table 3 shows, ageing affects all major

Hungarian metropolitan areas, although to varying degrees. The ageing index of Budapest is the highest – exceeding both the national average and that of other large urban areas.

The population of the Budapest agglomeration is also ageing, though at a slower pace than the capital itself, primarily due to residential suburbanization which tends to attract younger families with children. Among the rural metropolitan areas, the ageing process is most pronounced in Szeged and Pécs, where indicators exceed both national and regional averages.

The ageing of the population in Hungarian metropolitan areas presents serious challenges for the labour market, housing, social care systems, social and cultural life, as well as for the medium- and long-term urban planning and governance of cities. The phenomenon of shrinking cities – marked by both declining and aging population – is not unique to Hungary but reflects a broader European and global trend.

Table 3.

Ratio of elderly to young population, expressed as the number of elderly persons per 100 young persons

	2013	2016	2019	2023
Budapest	149.2	149.9	161.6	175.6
Budapest metropolitan area	124.6	127.4	135.6	143.2
Győr metropolitan area	110.63	115.81	120.79	124.72
Székesfehérvár metropolitan area	114.13	123.7	134.63	142.22
Pécs metropolitan area	129.82	138.97	149.51	168.11
Kecskemét metropolitan area	99.14	105.63	113.96	125.91
Szeged metropolitan area	127.22	138.4	149.18	163.44
Debrecen metropolitan area	103.9	111.89	119.87	129.99
Miskolc metropolitan area	116.95	124.31	131.49	139.7
Nyíregyháza metropolitan area	98.2	108	119.1	132.1
<i>Hungary</i>	<i>119.3</i>	<i>125.9</i>	<i>134.3</i>	<i>141.4</i>

Source: TEIR data

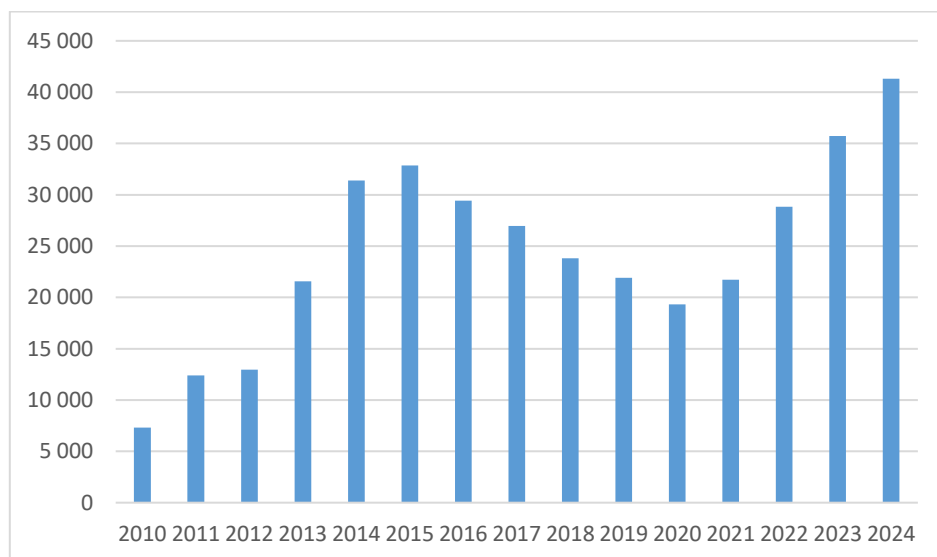
Migration

Hungary's population decline for decades is driven by two major interrelated processes. On the one hand, the persistently low fertility rate, and continuous population ageing have resulted in a natural decrease, limiting the potential for demographic reproduction

(as discussed earlier). On the other hand the country has experienced substantial population loss as a consequence of outward migration. Between 2010 and 2024, a total of 367,509 individuals left Hungary to live abroad – a figure roughly equivalent to the combined population of Debrecen and Nyíregyháza, the two largest rural urban centres in the country. The intensity of emigration and labour migration has increased steadily since 2010, with only two short periods of deceleration: first, during the United Kingdom’s withdrawal from the European Union (2019-2020), and second, throughout the COVID-19 pandemic, when border closures and widespread job losses – particularly in the tourism sector – prompted the temporary return of many Hungarian workers. However, from 2022 onwards, a renewed and substantial rise in emigration has been observed. The principal driver of this significant emigration wave is economic motivation. As citizens of a European Union member state, Hungarians have the freedom to work in other EU countries, and often seek employment opportunities offering higher wages and improved living standards. The considerable income disparities between Hungary and Western Europe continue to act as a strong pull factor, reinforcing this long-term trend of emigration.

Figure 2.

Annual emigration from Hungary, 2010–2024



Source: HCSO data https://www.ksh.hu/stadat_files/nep/hu/nep0030.html

Domestic migration in Hungary is concentrated in specific regions, primarily the Budapest metropolitan area, and the western and Transdanubian urbanized regions. Migration patterns differ across urban areas. In Budapest, population growth in the metropolitan area, is largely driven by suburbanization, resulting both from out-migration of city residents and migration from more distant regions.

In contrast, Győr demonstrates migration trends of national significance, attracting residents beyond its immediate region. Key factors contributing to its appeal include the city's economic strength, the stable operation of the Audi factory, ongoing urban and infrastructural developments, the presence of Széchenyi István University, and proximity to the Austrian and Slovak borders.

The city's border location has also facilitated cross-border labour mobility. Following Hungary's EU accession in 2004 and the opening of the Austrian labour market in 2011, western border, settlements – particularly Győr –, emerged as important national migration destinations. By 2014, over 11,000 Hungarian workers were employed in the Austrian province of Burgenland, and by 2016, 16,000 Hungarian workers had entered the Austrian labour market, mainly in Burgenland, Upper Austria and Vienna. These workers are mainly employed in tourism, construction and various service sectors (Bertalan 2020:106).

In the case of the Székesfehérvár – one of Hungary's most economically successful – metropolitan areas, migration patterns appear to be largely balanced: the number of people moving into and out of the city has remained roughly equal. Despite this balance, Székesfehérvár itself still experienced a modest population decline between 2011 and 2022, losing the equivalent of a small village – a total of 1,916 residents over a decade.

This decline can be explained by the proximity and pull effect of Budapest, which continues to attract both businesses and residents, as well as by the gradual loss of Székesfehérvár's former attractiveness and the near-saturation of its labour market (Baranyai 2021:239).

Apart from these two Transdanubian metropolitan areas, varying degrees of out-migration have been a defining feature of the remaining metropolitan regions and represent a major cause of their population decline.

Over the past decade, Miskolc and its surrounding region have suffered the most severe population losses due to emigration. Between 2011 and 2022, a total of 8,677 residents left the Miskolc metropolitan area – the highest figure among Hungary's eight major regional urban centres. The reasons for this outmigration are rooted in long-standing economic and social challenges, which the city has only partially managed to overcome.

Historically, the Miskolc metropolitan area has consistently absorbed the labour force from surrounding settlements but has been unable to retain it. The city has been characterised by rapid population turnover, marked by the outmigration of more highly educated residents and the influx of lower-qualified workers. The rigid economic structure of Miskolc further exacerbated this tendency, as the city proved insufficiently adaptive to contemporary economic transformations.

This trend began to change with the arrival of major German multinational companies. The establishment of Robert Bosch Power Tool Ltd. in 2001, followed by Robert Bosch Energy and Body Systems Ltd. in 2003 marked a significant turning point in Miskolc's industrial development. Together these subsidiaries employ more than one hundred development engineers and a total workforce exceeding 5,000 employees. In recent years, Miskolc's economy has shown signs of gradual strengthening, yet addressing and mitigating its persistent social challenges remains essential. Enhancing the city's population retention capacity is a crucial precondition for achieving sustainable development (Józsa 2021).

Another metropolitan area that has experienced significant migration losses over the past decade is Pécs. Despite being one of the oldest university cities in the Hungary, with considerable research and development capacity, and industries built on centuries-old traditions (such as leather and ceramics), the city has faced mounting demographic and economic challenges. Pécs was designated the European Capital of Culture in 2010; however, the major cultural and urban development projects implemented on that occasion – including the Kodály Concert Hall and the Zsolnay Cultural Quarter – still have not managed to fully achieve their intended revitalising effects. The construction of the M6 motorway, rather than stimulating economic growth, diverted local resources and failed to generate the expected regional benefits. Moreover, the city has struggled to effectively assert its interests in securing development funds and attracting investors (Póla, Pálné Kovács, Gibárti 2023:164). Between the last two censuses, the population of Pécs declined by 9,927 people, representing a 5.6% decrease, of which 6,590 resulted from outward migration. Emigration primarily affects the more educated population, who tend to move either to Budapest, or abroad (Rácz, Kovács, Horeczki 2021:211).

The metropolitan areas of Nyíregyháza, Szeged, Debrecen and Kecskemét show either a stagnant population trend or only a minor degree of emigration. Although Szeged became the third most populous city in Hungary in 2018 – surpassing Miskolc – it has since been unable to sustain this favourable trajectory. Since the early 2000s, the city has experienced a substantial outflow of residents, primarily directed to Budapest and the western border regions, driven by stronger labour market opportunities and higher wages (Vida, Lengyel 2021).

Table 4.

Changes in the migration coefficient per 1,000 inhabitants, 2011–2021

	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Budapest metropolitan area	5.5	5.4	5.9	6.8	4.3	3.2	3.6	4.0	2.6	-1.9	0.6	1.4
Győr metropolitan area	4.8	5	6.4	7.2	5.9	5.8	8.0	14.6	13.1	7.8	8.5	4.8
Székesfehérvár metropolitan area	0	0.7	1.4	0	0.4	-0.9	0.4	-1.9	-0.1	0.5	0.7	3.5
Kecskemét metropolitan area	3.5	5.0	1.9	1.6	1.1	0.2	0.3	-2.4	-1.2	0.7	-0.7	-1.1
Pécs metropolitan area	-2.7	-8	-1.2	0.9	-0.2	-0.5	-0.5	-1	-2.7	-0.7	-3.8	-3.7
Debrecen metropolitan area	-3.5	-4.7	-1.4	-1.3	-1.7	-2.0	-1.2	-2.9	-2.6	-1.0	-3.5	-4.2
Nyíregyháza metropolitan area	-2.2	-1.6	-1.8	-2.6	-2.6	-0.4	-3.4	-1.7	-0.4	-0.3	-2.0	-1.0
Szeged metropolitan area	1.8	0.2	2.6	2.8	1.6	-1.0	-0.9	-0.7	-2.4	-0.5	-6.3	-5.9
Miskolc metropolitan area	-3.8	-6.4	-3.7	-3.1	-2.2	-0.2	-3.6	-2.6	-5.2	-5.3	-8.3	-5.6

Source: HCSO data

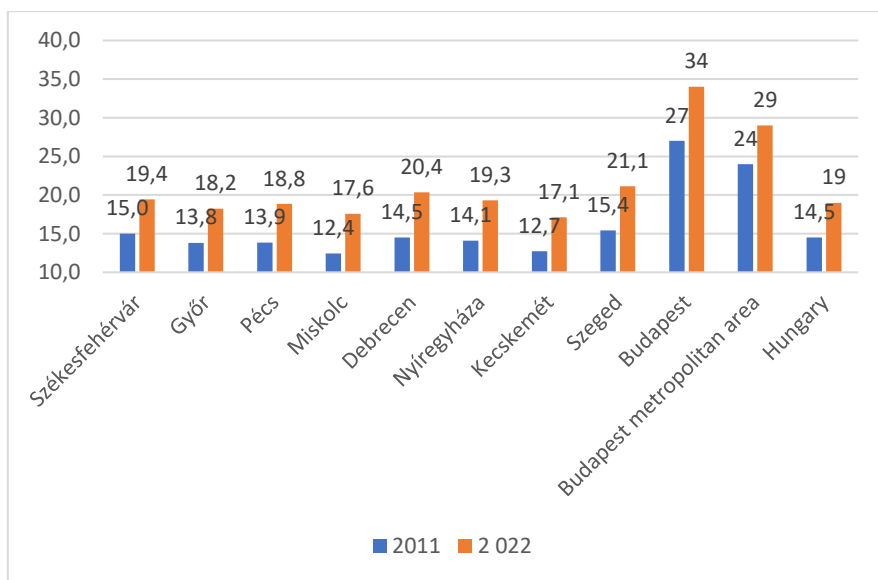
Education

The developmental differences between the capital and the major provincial cities are also reflected in the educational attainment of their populations. Trends in the population's educational status can be observed through data from the two most recent censuses. A favourable tendency is that the proportion of graduates increased between 2011 and 2022, both nationally and across the nine metropolitan areas. At the same time, the share of degree holders in the capital was nearly twice the national values in both 2011 and 2022, and the Budapest agglomeration zone also significantly exceeded

the corresponding national and rural metropolitan averages. In other words, the strong concentration of graduates in the capital and its wider region has persisted. The gap in the proportion of graduates between the major rural metropolitan areas and the Budapest metropolitan region has not only remained but has even slightly widened.

Figure 3.

Proportion of graduates in Hungary and in the nine largest metropolitan areas, 2011 and 2022, expressed as a percentage

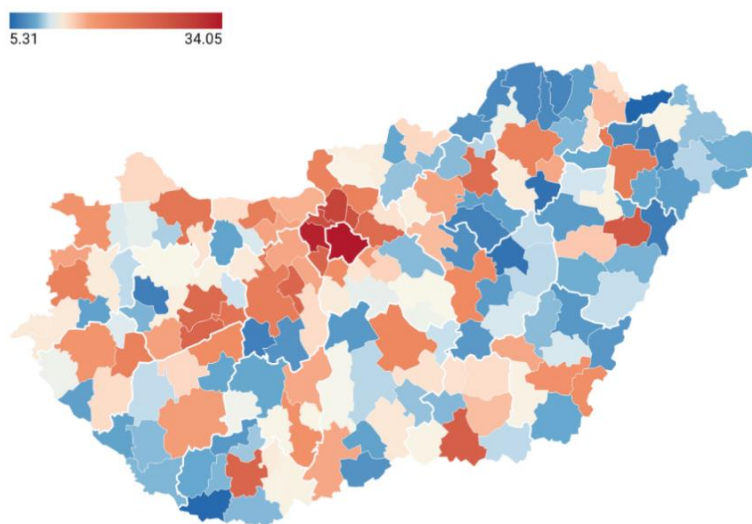


Source: HCSO Census 2011, 2021

The spatial distribution of graduates within in Hungary reveals a strong concentration in Central and Western Transdanubia, particularly in Budapest and its agglomeration, where the proportion of degree holders far exceeds the national average (Szirmai, 2019). Higher shares are also found along Lake Balaton and around Lake Velence. In contrast, in Eastern Hungary, Southern Transdanubia, and the Southern Great Plain, graduates are mainly concentrated in larger and medium-sized cities, while peripheral regions continue to lag behind.

Figure 4.

Proportion of graduates in the total population by district, in 2022,
expressed as a percentage



Source: Author's own compilation using HCSO data

Income

An empirical study conducted in 2005 and 2014 on a representative sample of 5,000 across nine major Hungarian metropolitan areas³ examined changes in income conditions and inter-regional disparities. The findings revealed that the share of high-income residents increased within the Budapest metropolitan area, while the proportion of very low income groups declined (Szirmai 2015).

As early as 2005, the proportion of low-income residents was significantly higher in rural metropolitan areas than in Budapest, while the share of high-income groups was markedly lower. These inequalities persisted through 2014. Moreover, unfavourable

³ The 2005 research (Urban Areas, Spatial Social Inequalities and Conflicts – Regional Social Factors of European Competitiveness) was conducted under the National Research and Development Programme (NKFP). A related 2014 project, Social Conflicts – Social Well-being and Security – Competitiveness and Social Development (TÁMOP-4.2.2. A-11/1/KONV-2012-0069) further developed this research line.

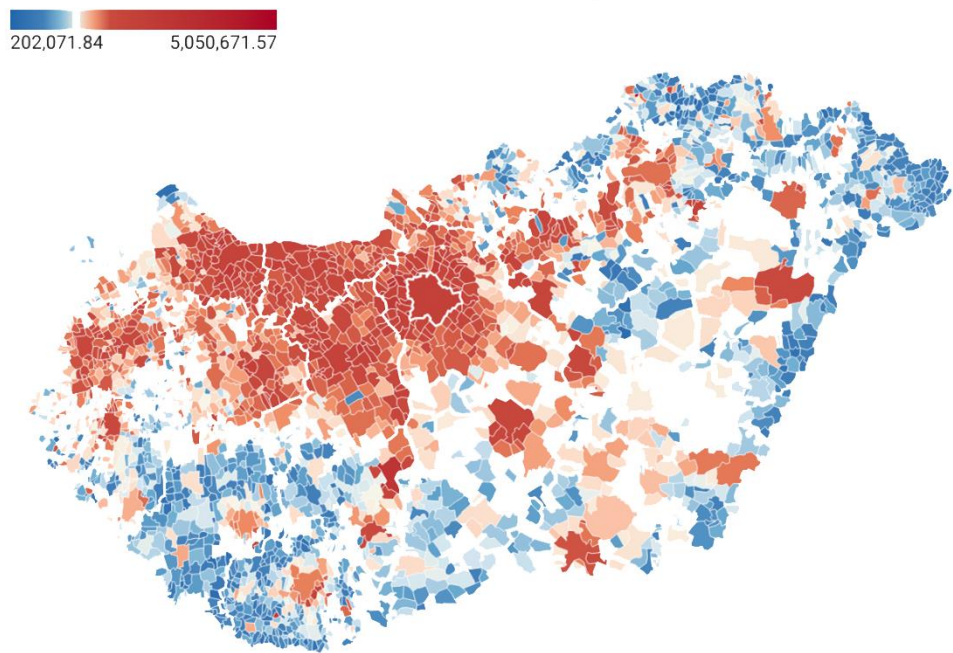
tendencies emerged in rural metropolitan areas: The proportion of low income households increased compared to 2005, while the share of those in better financial positions remained nearly unchanged. Consequently, the material living standard gap between the rural metropolitan areas and the capital region further widened. The global economic crisis of 2008 and 2010 had a profound impact on Hungary's economy and society (Schuchmann & Váradi 2014). Recent data on personal income per taxpayer further indicate a deepening of income polarization. As illustrated in Figure 5, pronounced disparities have emerged between the north-western, central, eastern, and southern regions of the country. Higher-income areas are concentrated in the zones marked in red and orange, whereas lower-income regions are predominantly found in the blue-shaded areas.

There are significant income disparities between the capital, the cities with county status, and the smaller towns and villages. The concentration of higher income groups clearly delineated geographically, revealing a distinct spatial divide within the country. In broad terms, Hungary appears divided into two parts. Budapest, together with parts of Central and Western Transdanubia, stands in sharp contrast to the rest of the country.

Incomes are somewhat higher in the major rural metropolitan areas (Kecskemét, Szeged, Debrecen, Pécs, Miskolc), as well as in settlements located along major transport corridors or those benefiting from their position around Lake Balaton. However, conditions have improved little in the country's low-income regions. For decades, the villages and small towns of Eastern and North-eastern Hungary, as well as those situated along the Croatian-Hungarian border, have been characterised by persistently low incomes and living standards.

Figure 5.

Personal income tax per capita, (HUF), 2023



Source: Author’s own compilation using TEIR data

Economy

Similar to income levels, there are pronounced disparities in economic development between the Budapest metropolitan area and the eight rural metropolitan areas. Recent research on Hungary’s major cities indicates that while some rural urban areas have shown signs of catching up, most display patterns of stagnation or even decline.

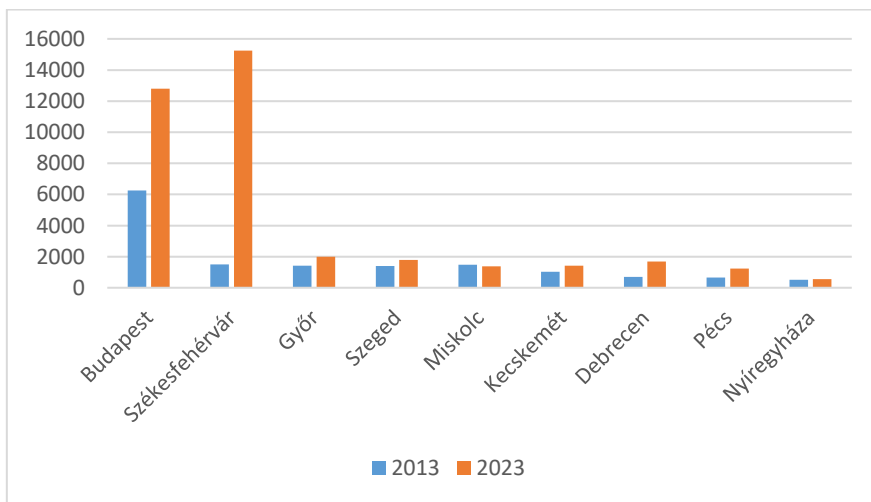
János Rechnitzer identified four distinct economic development paths among Hungarian rural urban areas (Rechnitzer, Berkes 2021), which are the following:

1. Cities building on a new (industrial) base, such as Győr and Székesfehérvár, both characterised by substantial foreign capital investments;
2. Traditional, but renewing cities and their economies including Miskolc and Debrecen;
3. Transitional cities, where economic restructuring remains incomplete and;
4. Path-finding cities, whose traditional economic structure require transformation to become competitive – typical examples being Szeged and Pécs (Rechnitzer, Berkes 2021).

The economic performance of rural cities is shaped by multiple factors, including inherited structures, local social characteristics, and geographical location. Beyond Budapest, the most dynamically developing rural cities are Győr, situated near Hungary's western border, and Székesfehérvár. The latter generates two-thirds of Fejér County's GDP, and in terms of registered corporate capital, Székesfehérvár ranks first among Hungary's rural cities.

Figure 6.

Registered capital of enterprises per 1,000 inhabitants 2013–2023

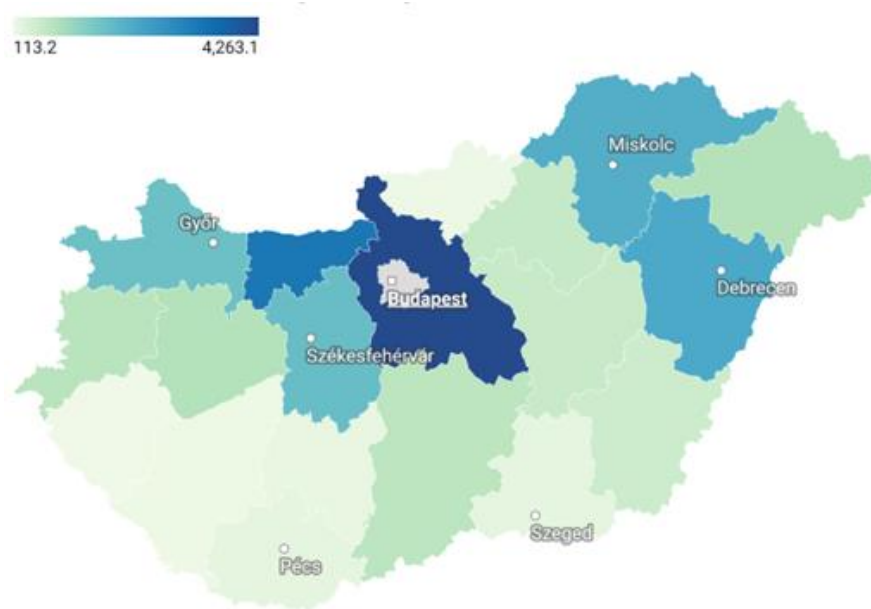


Source: TEIR data

Foreign capital investments play a crucial role in determining the competitiveness of Hungary's regional urban areas. However, substantial regional disparities persist in terms of their ability to attract investment. In 2023 the majority of foreign capital inflows were concentrated in the central region of the country – specifically Budapest and Pest County – along with Central- and Western-Transdanubia. Among the rural counties, Hajdú-Bihar and Borsod-Abaúj-Zemplén attracted the most significant investments. In recent years, Debrecen and its region have become major destinations for large-scale international investments, including two of the most notable examples: BMW Manufacturing Hungary Ltd. and the Chinese battery factory. Similarly, the largest industrial park in Miskolc is dominated by Bosch, the German multinational company (*Figure 7*).

Figure 7.

Spatial distribution of Foreign Direct Investments (FDI) by county,
(billion HUF), 2023



Source: HCSO data

After 2010, the Hungarian government sought to diversify the sources of foreign direct investment (FDI). One of the key objectives of the “Eastern Opening” foreign trade strategy, launched in 2012, was to increase the share of foreign capital originating from countries that been absent or only marginally were present in the Hungarian market. This policy primarily targeted Asian economies that had have shown remarkable growth in recent years (Bernek 2018). The three most significant Asian investors in Hungary today are China, Japan and South Korea, which together account for the majority of new capital investments made in the country in recent years (Szigethy, Ambrus 2024).

Table 5 presents the most recent major foreign direct investments in Hungary, most of which were made by Asian companies. In line with the government’s economic development strategy, these investments primarily concern battery manufacturing and automotive industries, both of which promote electro mobility. It should be noted, however, that these projects have been implemented with substantial government support and classified as priority state investments.

Particular attention has been drawn to the Chinese battery factories, which have been the subject of significant public criticism. The main concerns include the absence of environmental impact assessments, prior to construction and the potential environmental hazards posed by battery production, such as risks to local ecosystems, water resources, and human health. Another challenge is the insufficient capacity of the Hungarian labour market to supply these factories with a workforce possessing the necessary specialized skills on large scale (Györffy 2023).

In recent years, only a limited group of provincial cities has benefited from these investments, while the majority have not. The development prospects of Hungarian cities appear increasingly constrained by the ongoing process of centralization, the diminishing decision-making powers of local governments and the tightening of financial regulations (Rechnitzer 2022).

Table 5.

The largest investments announced in Hungary since 2018

<i>Investing company</i>	<i>Year of announcement</i>	<i>Country</i>	<i>Industry</i>	<i>Location</i>	<i>Amount invested (billion HUF)</i>	<i>Number of employees</i>
CATL	2022	China	Battery	Debrecen	2,900	9,000
BYD	2023	China	Automotive industry	Szeged	2,000	10,000
BMW	2018/22	Germany	Automotive industry	Debrecen	800	1,500
Sunwoda	2023	China	Battery	Nyíregyháza	580	1,000
Ewe Power	2023	China	Battery	Debrecen	400	1,000
Mercedes	2022	Germany	Automotive industry	Kecskemét	400	3,000
W Scorp Corp	2022	South Korea	Battery	Nyíregyháza	300	1,200
Halms	2025	China	Automotive industry	Miskolc	80	1,000
Robert Bosch	2023	Germany	machine manufacturing	Miskolc	70	2,000

Source: <https://telex.hu/g/2025/09/29/vulcan-shield-global-bekes-nagyberuhazas-hipa-letszam-befektetes>

Conclusion

The aim of the study was to examine the inequalities in the demographic, social, and economic processes of the Budapest metropolitan area and the eight rural metropolitan areas. The analysis covered trends observed over the past decade. Regarding demographic patterns, the Budapest metropolitan area and the rural metropolitan areas, share several common characteristics. All of them are experiencing population ageing, although to different extent.

The ageing of the Budapest metropolitan region is comparable to that of other large metropolitan areas. The process has been moderated by the immigration of younger, working-age populations, particularly to the suburban zones. In contrast, population ageing has accelerated in rural metropolitan areas (e.g. Pécs, Miskolc) where large-scale emigration has occurred.

Six major trends have emerged in the dynamics of the resident population:

1. Accelerated population decline in rural metropolitan areas.

Over the past decade, the population decrease in rural metropolitan areas has intensified. The populations of Miskolc and Szeged, which previously exceeded 200,000 inhabitants, have now fallen below this threshold, indicating a weakening ability to retain residents.

2. Severe decline in cities facing long-term economic difficulties.

Population decline has been particularly drastic in cities struggling with persistent economic challenges, such as Miskolc, and the South-Transdanubian regional centre, Pécs. Over the past decade, only one rural metropolitan area – Győr, located on Hungary's western border – has recorded population growth. Migration trends largely mirror these demographic changes.

3. Improving educational attainment and growing spatial disparities.

Between the last two censuses, the educational level of the Hungarian population improved, with the proportion of university graduates increasing nationwide. The concentration of graduates in metropolitan areas is significant – particularly in Budapest and its surrounding agglomeration, where the share of graduates is twice the national average. Conversely, small rural settlements and peripheral regions are characterized by low proportions of graduates.

4. Income polarization.

There is considerable income polarization between the capital region and rural metropolitan areas, as well as among the rural metropolitan areas themselves. Only the Győr and Székesfehérvár urban regions have reached income levels comparable to the capital. The income gap between the central, and western Transdanubian regions and the peripheral rural areas remains significant.

5. Economic dominance of Budapest and selective rural development.

Budapest and its surrounding region continue to demonstrate the strongest economic performance and the greatest ability to attract capital and investment. Among the rural urban areas, Győr and Székesfehérvár have maintained their position as major economic centres. Owing to government designated priority investments, the economic status of several rural cities has improved in recent years. Many Asian (particularly Chinese and South Korean) companies have established their operations in the metropolitan areas of eastern and northern Hungary, primarily in battery production. However, the economic benefits of these projects for the host regions are disputed, as these companies often employ foreign workers with specific technical expertise, rather than Hungarian professionals, and do not generally create high-skilled employment locally. Despite these large industrial

investments population decline in the major rural metropolitan areas (Debrecen, Miskolc, Szeged) has not been halted, in fact the outmigration of young and educated residents has intensified.

6. Deepening regional inequalities.

Not only have disparities between the capital and the eight rural metropolitan areas widened, but significant differences have also emerged among the rural metropolitan areas themselves. One key reason for this is the uneven territorial distribution of incoming capital. The lack of foreign investment has contributed to the disintegration of certain urban areas and intensified outward migration. Furthermore, the government's ongoing centralization policy may also further reinforce territorial inequalities.

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