



# Regional Differences in Development and Quality of Life in Hungary During the First Third of the Twentieth Century\*

Zsolt Szilágyi

*University of Debrecen*

*szilagyi.zsoltster@gmail.com*

In this essay, I look for answers to the following three questions: to what extent did the borders of Hungary after the 1920 Treaty of Trianon overlap with borders of structural development in 1910 and in 1930; what does the term “development” mean when we are talking about the Carpathian Basin; and how did geographical differences in standards of living change in the territories under discussion over the course of these two decades. To some extent, the new political borders which were drawn in 1920 in the Carpathian Basin overlapped with the borders which reflected the different levels and patterns of development in the region. This is a consideration which has been given little attention in the secondary literature in Hungary. The developmental structure of the Carpathian Basin in 1910 can be mapped using the GISa Hungarorum Database. One discerns in this structure a major line of development. Within this line, one finds an area in which the level of development was higher than average and, in some places, considerably higher than average. Another distinctive feature of this area was that it had several centers, and this fact was of particular importance from the perspective of the Treaty of Trianon and its alleged consequences. In recent years, groundbreaking research on economic history has persuasively shown that Hungary managed to recover economically relatively quickly after 1920. Numerous factors played a role in this recovery. One of the more decisive, I argue in this study, was the geographical developmental structure of Trianon Hungary, which had several centers. Although the territory of Trianon Hungary was considerably more developed than other areas of the Carpathian Basin, it is quite clear that the economic fault lines which existed after Trianon had in fact existed before Trianon too, and the internal peripheral areas had already formed (and remained essentially unchanged throughout the interwar period). Thus, the Treaty of Trianon did not play any role in the emergence or formation of these areas. The treaty may well have had grave consequences for the country and region, but the developmental geographical structure of Hungary in the interwar period, which ultimately exerted a shaping influence on development in Hungary for the rest of the twentieth century, was not a result of Trianon.

Keywords: HDI change, regional differences in development, Interwar Hungary

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### Theoretical and Methodological Frameworks

During the last roughly three decades of the twentieth century, both in the fields of geography and history, research focusing on structural analyses was gradually pushed into the background as new analytical perspectives and frameworks gained ground and agent experience became a priority. Thus, quantitative sources and methods which rely on quantitative sources seemed to lose a lot of their significance by the turn of the century. A series of novel postmodern approaches gained ground. This prompted some scholars to raise scientific concerns. For instance, Geoffrey Crossick, professor at the University of London, highlighted that overemphasis on cultural questions leads to the striking neglect of structural issues and a drop in the number of empirical studies.<sup>1</sup>

Crossick was one of the first scholars to encourage the renewal of empirical studies, which was appreciably furthered by the digital revolution, which accelerated dramatically at the turn of the twentieth and twenty-first centuries. Due to the widespread use of personal computers, the sophisticated table management and data management programs, and the increasing use of the geospatial systems in the science of history, a new era of empirical studies dawned. The new quantitative historical studies were inspired in part by a need for a “new materialism” that came in the wake of postmodern history recordings and also by the overwhelmingly popular<sup>2</sup> spatial turn.<sup>3</sup>

The pioneering 2006 study by Róbert Győri entitled “Bécs kapujában” (“At the Gates of Vienna”),<sup>4</sup> which was published in the Hungarian periodical *Korall*, has played a crucial part in scholarship and research in Hungary. The study is an extended chapter from Győri’s doctoral dissertation, in which he lays a new historical geographic bases for measuring differences in the rates of local regional development.<sup>5</sup> As far as the selection of variables was concerned, Győri chose indicators of literacy, economics, and infrastructure.<sup>6</sup> He used the following six indicators (Table 1–2).

1 Quoted by Kidd and Nicholls, Introduction, xxi.

2 Benda, *Zsellérből polgár*; Novák, “Az erőszak topográfiaja;” Kővér, *A tisztaeszlári dráma*; Majorossy, “A foglalkozás;” Szilágyi, *Homokváros*.

3 Soja, *Postmodern Geographies*; Warf and Arias, *The Spacial Turn*; Szilágyi, “A társadalmi tér;” Izsák, “A tértudás;” Izsák and Düll, “Városi térfordulatok.”

4 Győri, “Területi fejlettségi.”

5 Győri, “A térszerkezet.”

6 Győri, “Területi fejlettségi,” 233.

Table 1  
Indicators of regional developmental studies conducted by Győri

Code	Specification	Source
m1	literacy rate among the population over 6 in 1910	MSK Ús. Vol. 42
m2	rate of patients undergoing medical treatment between 1901 and 1910	MSK Ús. Vol. 46
m3	rate of high-quality residential buildings in 1910	MSK Ús. Vol. 42
m4	rate of migration balance between 1901–1910	MSK Ús. Vol. 46
m5	rate of non-agricultural workers in the labor force in 1910	MSK Ús. Vol. 48
m6	net cadastral income per agricultural employee in 1908/1910	MSK Ús. Vol. 39*

*Source:* Győri, “Bécs kapujában,” 233.  
Remark: \*) rates of net cadastral income recorded by Győri followed by the corrections published in 1914, while during a later inspection of the Alföld region, the same process was conducted based on the data from 1935 (Szilágyi, “A fejlettség területi különbségei,” 49).

Table 2  
CDI calculation method for component indicators

Indicators (m1–6), base variables (v1–13)		Number of records	Data missing	Mathematical formulas for indicator calculation	
Code	Description				
m1	v01	number of people under 6, 1910	12 542	0	$m1 = v03 \times 100 / (v02 - v01)$
	v02	total population in 1910	12 542	0	
	v03	literacy rate, 1910	12 542	0	
m2	v04	annual mortality rate, 1901–1910	12 535	7	$m2 = v05 \times 100 / v04$
	v05	annual average rate of fatalities receiving medical treatment (from all deaths), 1901–10	12 536	6	
m3	v06	number of stone or brick houses, 1910	12 542	0	$m3 = (v06 + v07) \times 100 / v08$
	v07	number of adobe or mud houses with stone or brick foundation, 1910	12 542	0	
	v08	total number of houses, 1910	12 542	0	
m4	v09	total population in 1900	12 537	5	$m4 = (v02 - v09 - v10) \times 100 / v09$
	v10	total population specific to the date 1910	12 542	0	
	v10	rate of natural population change, 1901–10	12 535	7	
m5	v11	number of agricultural traders, 1910	12 542	0	$m5 = (v12 - v11) \times 100 / v12$

Indicators (m1–6), base variables (v1–13)		Number of records	Data missing	Mathematical formulas for indicator calculation	
Code	Description				
	v12	total number of earners in 1910	12 542	0	
m6	v13	cadastral net income from total land tenures in Hungarian Koronas, 1908	12 434	108	$m6=v13/v11$
	v11	<i>number of agricultural earners, 1910</i>	12 542	0	
Totals (v1–v13)			162 913	133	

*Source:* CBRDD, compared to the original sources, GHD <> MSK Ús. 39, 42, 46, 48, own editing.  
*Note:* variables in italics have been listed previously. Description of m1–6 indicators are included in Table 1.

The average derived from the normalized value of six developmental indicators (m1–6) makes the Complex Developmental Index (CDI). If this methodological procedure is taken as the basis on which to identify and compare regional differences, then we are given not an overall picture of the rate of modernization and development, but rather an incomplete sketch based on subsequently selected indicators. In practical terms, we can only see what the development indicators measure compared to prior circumstances, which allows for interpretation of the developmental overview of a simplified version.

As for the rate of development and the quality of life, further methods are available with which to measure them. In recent decades, the use of *Human Development Index* (HDI)<sup>7</sup> has gained ground, especially in the social sciences. Today, primarily sociology, geography, and political science utilize HDI. This multivariable index is adapted mainly to classify the regions as “developed,” “less developed,” and “underdeveloped” and also to map the regional differences in the quality of life. In the 1970s and 1980s, there was a growing need among social researchers to develop a multivariable index<sup>8</sup> which would replace the “one-dimensional” GDP<sup>9</sup> already widely used to measure the rate of economic development. There was need of an index which would be reactive not just to economic factors, but also to other (individual) circumstances (skills and

<sup>7</sup> *Human Development Report 1990*, 109.

<sup>8</sup> Hicks and Sreeten.

<sup>9</sup> According to Farhad Noorbakhsh, GNP, the specific indicator (of measuring standard of living), was commonly adopted following a recommendation included in a UN report in 1954. Noorbakhsh, “A Modified Human,” 517.

opportunities). Income is one factor on the basis of which “human welfare” can be gauged. But human welfare is perhaps better gauged via an assessment of choice options. In particular, the extension of choice options as a process gives meaning to the term “human development.”

The method of according to which the HDI is attained was published in the first issue of the series *Human Development*.<sup>10</sup> The calculation method on which HDI is based has been refined over the course of the last couple of years (e.g. in 1991, 1999), but the process itself has remained unchanged. The value of HDI takes the arithmetic average of three component indicators (lifespan, knowledge gained from education, and standard of living). The component indicators are defined as follows: lifespan via life expectancy at birth; knowledge via the average of literacy and numeracy added to the combined key indicators of the elementary, secondary, and higher education levels; standard of living via the volume index of per capita GDP measured by purchasing power parity (PPP).<sup>11</sup> The Hungarian historical sources do not allow us to map differences in development within the area of the country via the UN method of HDI calculations. In order to arrive at an informative map, HDI must be modified in the Hungarian case. The rates used are as follows: rate of life expectancy at birth instead of raw death rates, literacy rate among those above six years of age instead of education component indicator; rate of land tax, real estate tax, corporation tax, and tantième tax out of the ordinary tax system instead of GDP (Table 3).

Table 3  
Source of required variables for HDI component indicator

Code	Description	Source
k1	Average of deaths (1901–10)	MSK Ús. Vol. 46
	Population (1910)	MSK Ús. Vol. 42
	Average of deaths (1921–30), data broken down by year	KSH 1969.
	Population (1930)	MSK Ús. Vol. 83
k2	Literacy rate (1910)	MSK Ús. Vol. 42
	Population above 6 (1910)	MSK Ús. Vol. 42
	Population (1910)	MSK Ús. Vol. 42
	Literacy rate (1930)	MSK Ús. Vol. 83
	Population above 6 (1930)	MSK Ús. Vol. 83
	Population (1930)	MSK Ús. Vol. 83

<sup>10</sup> *Human Development Report 1990*, 109.

<sup>11</sup> *Ibid.*; Nemes Nagy, *Terek, helyek*, 301–05. Tomka, *Gazdasági növekedés*, 187–94.

Code	Description	Source
k3	Municipal substitute taxation of which base relies on state taxation of 1908 (K)	MSK Ús. Vol. 39
	Land tax, house tax, income tax levied on urban residents, taxes and other direct taxes levied on guilds, companies liable to public accountability (1910, K)	MSK Ús. Vol. 58
	Population (1910)	MSK Ús. Vol. 42
	Total state taxes serving as the basis for municipal substitute taxation (1934, P)	MSK Ús. Vol. 93
	<i>Tax estimates for towns (method of calculation is listed in the text):</i>	
	· Land tax paid by municipal cities (1933/34, P)	AS 1934: 51
	· House tax paid by municipal cities (1933/34, P)	AS 1934: 77
	· Company tax and tantième tax paid by municipal cities (1933/34, P)	AS 1934: 149
	· Land tax paid in county towns (corporate towns) (1933/34, P)	AS 1934: 51
	· Total of land tax paid within the country (1933/34, P)	AS 1934: 51
	· Cadastral income from lands agriculturally cultivated by towns (1935, AK)	MSK Ús. Vol. 99
	· Total of house tax paid in county towns (1933/34, P)	AS 1934: 77
	· Utility value of dwellings used by owners in county towns (1933/34, P)	AS 1934: 82
	· Raw income from leased dwellings in county towns (1933/34, P)	AS 1934: 83
· Company and tantième tax paid by county towns (1933/34, P)	AS 1934: 149	
· Number of residents working in industry, trade, and travel (1930)	MSK Ús. Vol. 86	
<i>Sources:</i> in addition to the above, the date 1910 is listed: GHD, own editing.		
<i>Note:</i> the dissolving of k1–3 is listed in the methodological description of HDI calculation.		

I have obtained details from three databases for the calculations of territorial inequalities in regional development and quality of life: 1. GISa Hungarorum Database (GHD, 7.3 million data entries, Gábor Demeter),<sup>12</sup> 2. Kárpát-medencei Területi Fejlettségi Adatbázis /Carpathian Basin Regional Development Database/ (CBRDD, 0.4 million data entries, Zsolt Szilágyi), 3. Magyarországi Életminőség-alakulás Történeti Adatbázisa (Hungarian Quality of Life Historical Database (HQLHD, 0.5 million data entries, Zsolt Szilágyi).

<sup>12</sup> OTKA K 111766: Implementation of geoinformatical system to execute research on the history of Hungary and the Austro–Hungarian Monarchy (1869–1910).

### *The development the Spatial Structure of the Carpathian Basin at the Beginning of the 20<sup>th</sup> Century (CDI)*

The first complex, multivariable development studies of the Carpathian Basin were done relatively late, in 2000, when Pál Beluszky published his findings.<sup>13</sup> Beluszky used twelve indicators in his study.<sup>14</sup> He sought to select indicators (drawing on his years of scientific experience and his intuition) which would enable him to map both the economic and social changes effectively. The results profoundly rewrote all the concepts formed on the spatial structure of modernization in the Carpathian Basin at the turn of the nineteenth and twentieth centuries.<sup>15</sup>

On the basis of Beluszky’s findings, we can conclude that the majority of the country had reached a level of modernization at the beginning of the century. Beluszky introduced the Kisalföld and the Great Plain as the regions which had led the process of modernization,<sup>16</sup> where the former market towns claimed the leading position in this process.<sup>17</sup> No further advancement has been made until now. (With regards to national politics of regional development, János Péntes has recently done studies from the perspective of geography.)<sup>18</sup>

Figure 1 was created using the unified development indicators (m1–6) after the standardization of the indicators based on the average values (CDI). It indicates regional differences. The two central regions, Vienna and Budapest, conspicuously stand out. The leap of development in Budapest, which was influenced from the east, is significantly harsher than it was in the case of Vienna. Apparently, the development of the region between the two capital cities was outstandingly high: probably the two metropolises enhanced each other’s influence. It is also obvious that spatial contact was stronger between the mine basin around Tatabánya (Dorog) and the capital than it was between any other regions. It is also clear that the Hungarian capital’s economic hinterland was made up not just of the abovementioned regions, but also of the areas to the south of Budapest along the Danube, which were rich in German horticultures,

<sup>13</sup> Beluszky, “Egy félsiker.”

<sup>14</sup> Beluszky and Győri, *Magyar városhálózat*, 85–86.

<sup>15</sup> Beluszky, *A Nagyalföld történeti földrajza*; Szilágyi, “A fejlettség területi különbségei.”

<sup>16</sup> Timár, *Vidéki városalakók*, 21; Beluszky, “Kárpát-medence országrészeinek,” 348; Beluszky, *A Nagyalföld történeti földrajza*, 239; Beluszky and Győri, *Magyar városhálózat*, 85.

<sup>17</sup> Beluszky and Győri, *Magyar városhálózat*, 87; Beluszky, “Kárpát-medence országrészeinek,” 354.

<sup>18</sup> Péntes, *Periférikus térségek*, 14–18.

and areas to the southeast of Budapest, which were fruit and vegetable farmlands at the rim of the towns of Kecskemét, Nagykőrös, and Cegléd.

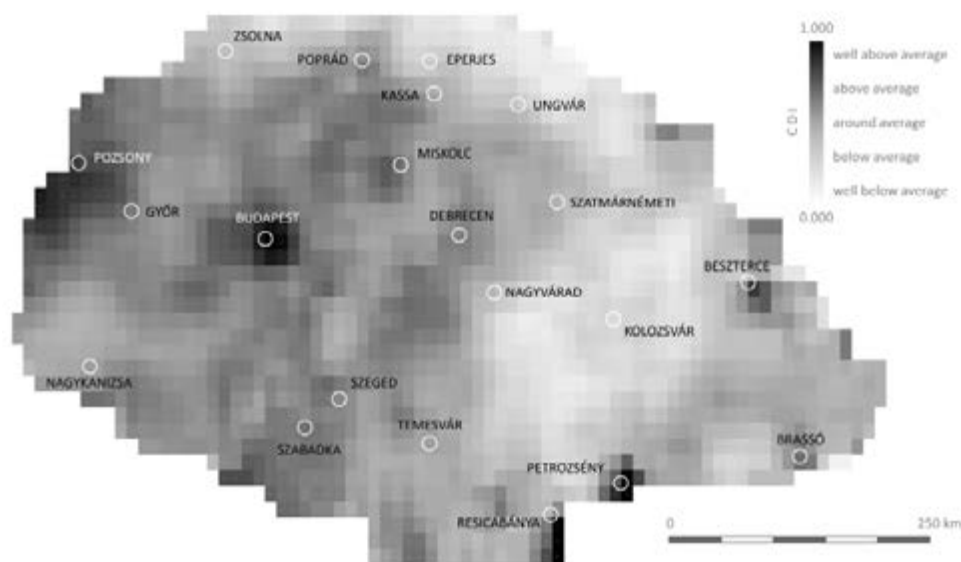


Figure 1. Development spatial structure in the Carpathian Basin based on CDI, 1910  
Source: CBRDD, own calculations and compositions

Central regions which as peaks stood out with significantly lower rates of modernization were the surroundings of Resicabánya (today Reșița in Romania), Petrozsény (Petroșani, Romania), and Beszterce (Bistrița, Romania). Regions which showed less significant development were around the cities of Rozsnyó (Rožňava, Slovakia) and, in the south, Zombor (Sombor, Serbia; Sombor lies in the region known as Eszék, which is not included in this study). At the beginning of the century, what at the time was known as Upper Hungary was a more or less coherent area with an above-average level of development. It included the cities of Zsolna (Žilina), Poprád (Poprad), Kassa (Košice), Rozsnyó, and Besztercebánya (Banská Bystrica), all of which are found in Slovakia today. The area around the cities of Nagykanizsa, Kaposvár, and Szekszárd was similarly developed, as were the triangle formed by Zombor, Szabadka (Subotica, Serbia), and Újvidék (Novi Sad, Serbia) and the market town belt over the Tisza River (the formed by the cities of Szeged and Debrecen). Towards the Székely Land, a region in the eastern stretch of Transylvania, two “development corridors” appeared: the gateway towards the north, which was bordered on either side by

the cities of Szatmárnémeti (Satu Mare), Nagybánya (Baia Mare), and Beszterce (Bistrița) to the northeast and Marosvásárhely (Târgu Mureș), Kolozsvár (Cluj), and Nagyváradi (Oradea) to the southwest, and the one lying towards the south, south of the Maros River, following the crest of the southern Carpathian Mountains across the so-called Saxon Lands (a region of Transylvania which had a strong Saxon present until the last decades of the twentieth century).

At the beginning of the century, the regions which had below-average development rates were the Zalai hills, the sand lands of Bugac, the plains of the Hortobágy, and the so-called Nyírség. These areas were either densely populated small villages with no regional centers or uninhabited areas where the biogeographic indicators (such as low total annual rainfall, etc.) impeded the emergence of settlements. Over the main structure line, in the north of the *peripheral region*, a narrow zone and in the east an expanded zone appeared, both with development rates which were well below average.

Based on the above descriptions of the different regions (which are confirmed by numerous sources in the Hungarian secondary literature), the so-called “development slope,” according to which the rate of development shows a gradual decrease following the direction from the western regions towards the eastern part within the territory of historical Hungary, proves incorrect. The new results allow us to deconstruct the “slope thesis.” We should not regard the surface forms of development as a slope, but rather should consider them a hilly land which slopes from the direction of west towards east and from south towards north and also shows rises in the form of coherent areas or islands. These “high areas” are divided by lowland valleys which prove to have high (metaphorical) altitudes in patches, but mostly have surprisingly low points. As a consequence, the rigid “slope image” should be rejected in favor of an image of a “development membrane” with varied and flexible forms.

The development membrane reveals the developmental spatial structure of the Carpathian Basin in the most visual way possible. The most apparent feature of Figure 2 is that the developmental terrain is the inverse of the geographical terrain. At places where tall mountains were found in reality these regions had low rates of development. In places where a basin was found, there can be found the most developed regions. Certainly, this statement is not well founded yet. However, it highlights the fact that though there had been raw material resources for possible industrial purposes in the mountainous area, and also energy resources were also easily available, the processing plants and the low energy-demand industries were set in the basin-related divisions. Literacy rates

and access to basic health were better in the middle of the country (i.e. the flatlands), and immigration rates were higher. All these facts make it clear that the Carpathian Basin was at an above-average development level at the beginning of the twentieth century. This region was a dynamically developing part of the country at the beginning of the twentieth century, with a high level of economic innovation compared to its surroundings, and it offered higher standards of living. On the whole, this region was a basin which attracted people who hoped not simply to earn a livelihood, but also sought to invest.

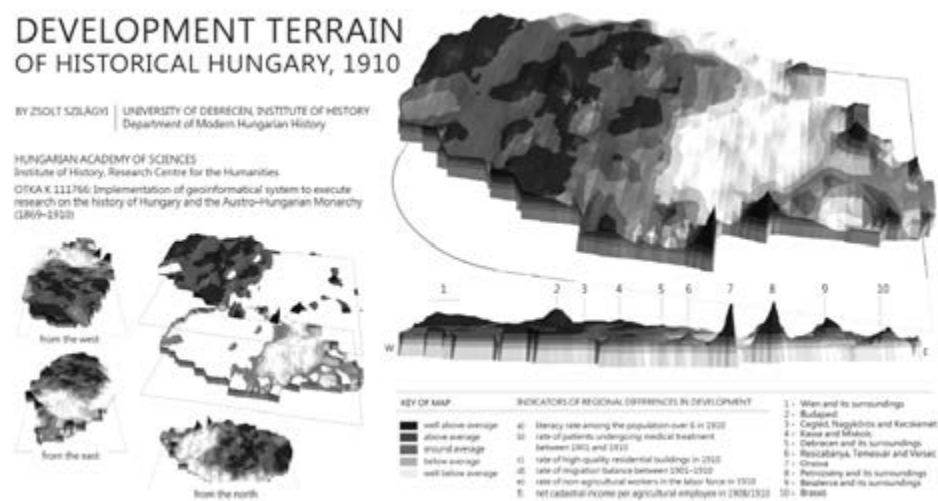


Figure 2. Development terrain (membrane) of historical Hungary, 1910  
Source: CBRDD, own calculations and compositions.

Based on this, we must reject the notion that, from the perspective of modernization, the two capital cities and the surrounding areas were the only parts of the Carpathian Basin at the beginning of the twentieth century which enjoyed promising rates of development. On the contrary, we can clearly construct a multi-centered developmental structure of the Carpathian Basin based on the subsequently selected indicators. Our study reveals that a developmental main structure line existed at the turn of the century in the Carpathian Basin, in other words a kind of “break line” (Figure 1). The areas over the main structure line can undoubtedly be regarded as peripheral in the narrative of the economic development rate of the area. Our study indicated the need for further research to determine whether this line overlaps with the

eastern borders of Hungary established by the Treaty of Trianon and, if so, to what extent. Gábor Demeter has shown that “the new country borders, as internal break lines, existed before the Treaty of Trianon, and they did not simply constitute break lines defined merely by differences in language.”<sup>19</sup> The extent to which some of the newly created national borders in the Carpathian Basin correlated with the developmental spatial structure of the greater area is unclear. This question merits further study.

Within the main line of development structure lay a region which was not homogeneous at all and showed above average (often very above average) rates of development (Figure 2). It was a multi-centered region, which gained specific meaning in the narrative of the Treaty of Trianon. The pioneering economic historic research of recent years have clearly proven that the country regained its stability relatively quickly after 1920.<sup>20</sup> *This economic success was due to many factors, but on the basis of our study, it is clear that one of the most important elements was the multi-centered developmental spatial structure of Hungary after the Trianon Peace Treaty.*

### *Regional Differences in Quality of Life in Hungary in 1910–1930*

Based on the calculations, the national average of HDI in 1910 was 0.451, which showed a slight rise of 2% to 0.461 as a result not just of the past economic and social changes but also as a consequence of distortion stemming from the adapted resources. Practically, in 1924, the community tax base components had seen modifications following an Administrative Circular specified by the Ministry of Home Affairs.<sup>21</sup> Consequently, the calculations were based on four specific indicators: land tax, real estate tax, corporation tax, and *tantième*.<sup>22</sup> Thus, income tax and mine tax were deleted from the base of substitute tax. Corporate tax and *tantième* were “theoretically” equal to the previous tax paid by public companies and associations also the tax on equity interest and the benefit tax. The conditions of taxability, however, had seen profound alterations in the meantime. Consequently, the substitute component indicators for GDP from 1910 and 1930 (which consist of the abovementioned taxes) can only be

19 Demeter, “Történelmi kérdések földrajzi szemszögből,” 30.

20 Tomka, “Gazdasági rekonstrukció;” Pogány, “A nagy háború hosszú árnyéka.”

21 177.200/1924 BM (Ministry of Interior), MSK Ús vol. 93: 14\*.

22 100/1927 PM (Ministry of Finances), 10,000/1927, 1929-23-1§; 200/1927 PM, 20,000/1927 1929-2§, 1929-29§, 1390/1933 ME 1§; 400/1927 PM, 40,000/1927, 2030/1932 ME 6–10§, 1390/1933 ME 2§, 2600/1933 ME 4–6§. AS 1934: 49, 75, 147.

compared to a limited extend. With regard to these factors, the spatial structure of territorial inequalities related to quality of life had remarkable features: the major part of Transdanubia, the agglomeration of the capital city, and the rim of the towns in Tiszántúl were more developed according to this narrative than any other parts of the country. Societies in the northern regions which were industrially more developed were in a favorable position, as were town dwellers. An additional distinctive feature of the emerging spatial structure is that when taking into consideration the territory of the country as it was later defined by the Treaty of Trianon, the northeastern region of the Great Plain was acknowledged as a periphery even in 1910. Peripheral regions were clearly marked by the Nyírség, the region of Közép-Tisza and Jászság, and also parts in the Hills of Zala and the wider surroundings of Bugac. The results derived by two different methods of calculation (CDI, HDI) closely overlap (Figure 3).

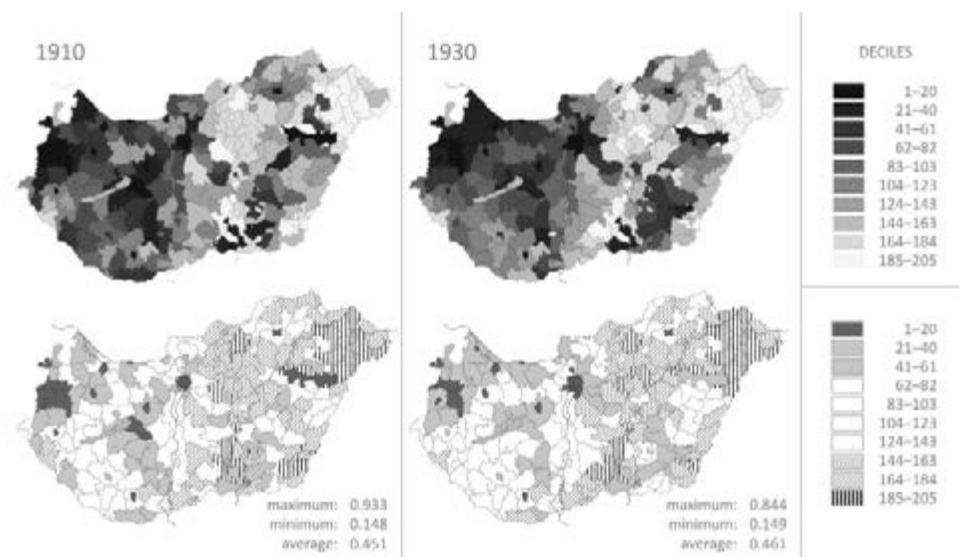


Figure 3. Regional differences in the quality of life between 1910 and 1930

Source: GHA, MÉTA, own calculations and compositions.

The overall picture becomes more complex as we investigate the volume of changes in certain regions. It is clear that more than 40 percent of the territorial units were substantially “stable.” Between 1910 and 1930, there were no towns or districts in these regions that would have shown a “leap” forwards or backwards of more than 20 points in an imaginary ranking. This kind of regional attribute can be identified with most of Transdanubia, the Sárretek district of Tiszántúl, the third of the western region between the Danube and

the Tisza Rivers, the Zemplén, the Bükk, and the Cserhát Mountains. The northern area of the Great Plain was in a particularly disadvantageous situation, as were the districts of Kiskunhalas and Kiskunfélegyháza and the majority of the districts in the border areas east of the Danube River. This contributed to the emergence of a state in which the pre-Trianon internal peripheral regions faced further deterioration and their positions became more disadvantageous. In the districts that were transformed into border areas, the pace of development apparently became slower. By contrast, the towns, especially the capital city and its agglomeration and the towns of Northern Transdanubia (including Miskolc), kept their previous momentum. From the perspective of development, they made dramatic leaps in the national ranking. The Győri basin near Vienna was an interrelated unity which showed a different developmental trajectory, as were the extended environment of the Pre-Alps and the city of Szombathely. In the north, only Miskolc underwent this different process of development, and in the Great Plain, only the areas lying next to the railway between Budapest, Szolnok, and Debrecen and the southern parts of Békés County (Figure 4).

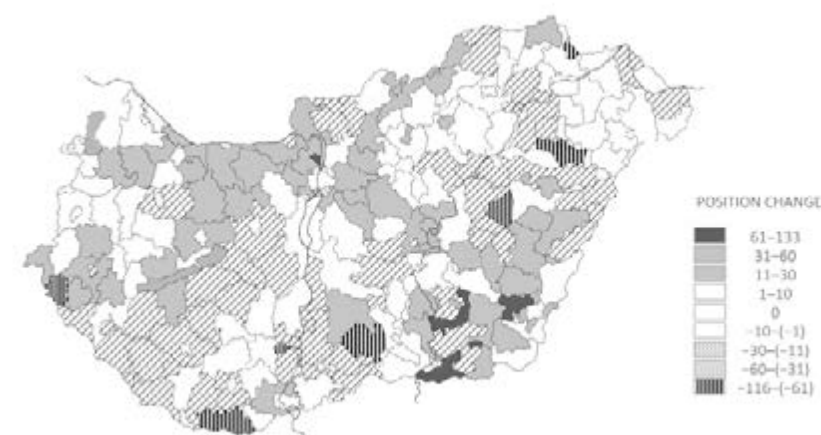


Figure 4. Changes in the quality of life between 1910 and 1930

Source: GHA, MÉTA, own calculations and compositions

A new consideration which is important if one seeks to place the data in a meaningful context lies with the calculation of the *variation coefficient*.<sup>23</sup> A further question arises here as to whether the differences in development (quality of life) among the regions, towns, and villages showed decreasing or rising tendencies. If the value of the variation coefficient proves lower for the period under study then the rate of regional development discrepancies among the areas compared also shows a decrease, which indicates a favorable outcome. This case indicates convergence; otherwise, the opposite should indicate divergence. (Table 4, Figure 5).

Table 4  
Variation coefficient changes within the area of Hungary after the Treaty of Trianon, 1910–1930

Description	Variance		Average		Variable coefficient		Difference	
	1910	1930	1910	1930	1910	1930	points	%
Covering the total area of the country after the Treaty of Trianon								
Country area including Budapest	0.11	0.10	0.45	0.46	23.35	21.20	-2.15	-9.22
Country area excluding Budapest	0.10	0.09	0.45	0.46	22.28	20.51	-1.78	-7.97
Counties	0.07	0.07	0.44	0.46	16.75	15.32	-1.43	-8.55
Districts	0.09	0.08	0.42	0.44	20.24	17.91	-2.33	-11.51
Towns	0.12	0.12	0.52	0.52	22.51	22.10	-0.41	-1.84
Towns excluding Budapest	0.11	0.11	0.52	0.52	20.32	20.88	0.56	2.75
Statistics by regions								
Towns								
Transdanubia	0.08	0.09	0.59	0.56	14.15	16.06	1.91	13.50
North Great Plain including	0.11	0.07	0.46	0.48	24.28	15.39	-8.89	-36.62
Budapest	0.12	0.13	0.51	0.51	24.42	25.07	0.65	2.65
Great Plain excluding Budapest	0.10	0.12	0.49	0.50	20.17	23.11	2.93	14.55
Districts								
Transdanubia	0.05	0.05	0.49	0.49	10.30	9.69	-0.61	-5.97

Description	Variance		Average		Variable coefficient		Difference	
	1910	1930	1910	1930	1910	1930	points	%
North	0.05	0.04	0.40	0.41	13.67	10.36	-3.31	-24.23
Great Plain	0.09	0.09	0.37	0.40	23.04	22.23	-0.81	-3.50
Regions								
Transdanubia	0.07	0.07	0.51	0.50	13.89	13.12	-0.77	-5.56
North	0.07	0.05	0.41	0.42	17.17	12.85	-4.32	-25.16
Great Plain	0.12	0.12	0.42	0.44	28.29	26.72	-1.57	-5.55

Source: GHD, HQLHD, own calculations.

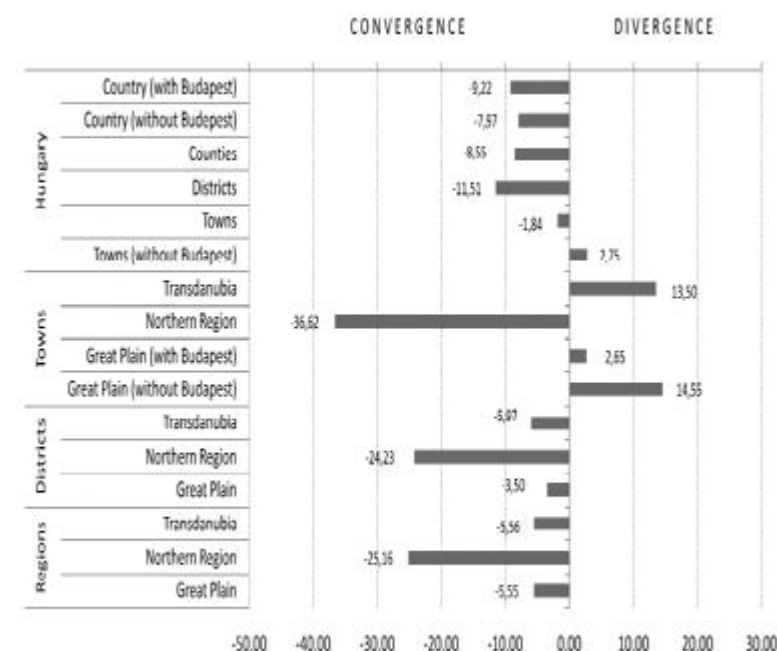


Figure 5. Variation coefficient changes, 1910–1930  
Source: HQLHD, own calculation and editing

Between 1910 and 1930, in the area of the country as it was defined by the Treaty of Trianon, there was a decrease not only in regional development disparities related to the rate between districts (-11.5%), but also related to the rate between towns (-1.8%), which suggests that, overall, the disparities among towns showed only minimal differences in comparison to the disparities among districts, where the rate of convergence was six times higher. If we examine the

23  $VE = S/X \times 100$ , where variation is indicated via S, average is indicated via X. Csizte and Németh, *Az életminőség területi, 31–38.*

shifts in disparities among towns excluding Budapest, then a kind of divergence can be traced (+2.8%), which means that *while the regional differences between the capital and the other towns decreases, in the case of the statuses among towns, a completely different tendency can be observed. An ongoing increase is traceable.* The status is different if we inspect the differences based on regional sections. Convergence can only be seen among the towns of the northern region (−36.6%), while the gap between the towns on the Great Plain shows a more remarkable increase (+14.6%) than between Transdanubian towns (+13.5%). In contrast with these trends, the differences among the villages in the three macro-regions of the country showed further decreases, especially in Transdanubia, where the convergence of villages was five or six times more in volume than the villages in the other two regions. *Therefore, the disparities among the villages in Transdanubia became less traceable at a remarkably higher space and rate than in any other region of the country.*

As a consequence, we can also determine which region, given its own attributes, was more preferably influenced by the equalization process of regional differences. It is demonstrable that it was neither the Great Plain nor Transdanubia which marked the process, but surprisingly, the northern region proves to have taken the lead, where convergence reached rates five times higher than the rates found in other regions. This remarkably preferable status can be primarily attributed to the higher rate of disparity equalization between Northern towns (Figure 5).

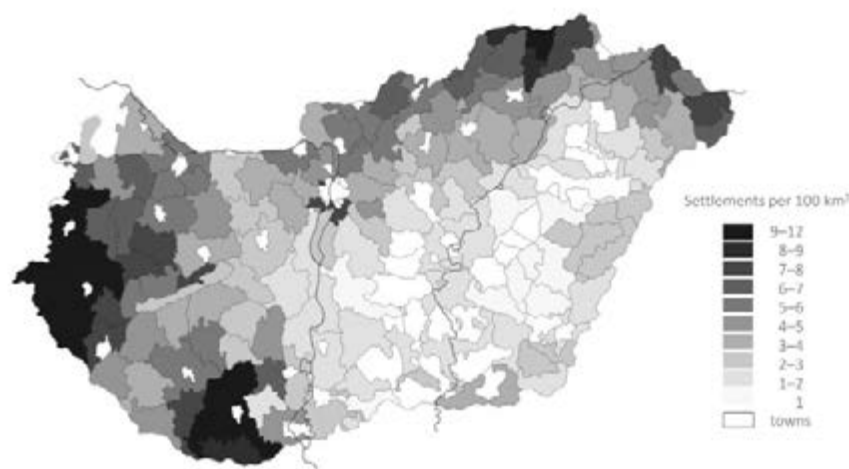


Figure 6. Settlement density in Hungary, 1933  
Source: HQLHD, own calculation and own editing.

Overall, *the rate of gap decrease showed more considerable moderation for the villages in Transdanubia, while the rate of gap decrease showed more considerable moderation for towns in the northern regions.* However, the data relevant to the Great Plain indicate that a process completely different from the formerly sketched ones took place. As was the case in Transdanubia, the disparities among the towns of the Great Plain continued to grow; the regional disparities among the villages continued to show no decrease, but only slight moderation, unlike in the other regions. So, *in the Great Plain, travel processes between the villages and the towns slowed down after World War I, which was not typical neither to Transdanubia nor to the Northern Region.* Furthermore, the regional differences in lifestyles showed faster growth than the “adjustment” itself, which indicates that the gap between the agricultural towns in the Great Plain and the villages saw further “depths.” This exceptional process can be correlated with the unique settlement structure of the land, and it also indicates that the population density of the Great Plain was much lower than the population density of other regions. (Figure 6).

### *The Development of Quality of Life in Hungary Based on International Comparisons*

Using the data assembled by Nicholas Crafts,<sup>24</sup> Béla Tomka has taken European data-based comparisons related to Hungary on the basis of HDI. Since some of the data was unobtainable, Crafts could not determine the index related to Hungary at the beginning of the twentieth century, so the calculations for 1913 were made complete by Béla Tomka. This has enabled historians to analyze the status of Hungary in correlation with a Western European context. Based on the results, it is apparent that the quality of life in Hungary compared to Northern and Western Europe was clearly even more unpreferable than it had been in 1913. (Figure 7). Over the course of the following decades, the gap displayed significant shrinking: while at the beginning of the century the HDI index was only 78% of the Western European average, by the mid period of the century it took 93%.<sup>25</sup>

<sup>24</sup> Crafts, *The Human Development Index*.

<sup>25</sup> Tomka, *Gazdasági növekedés*, 199.

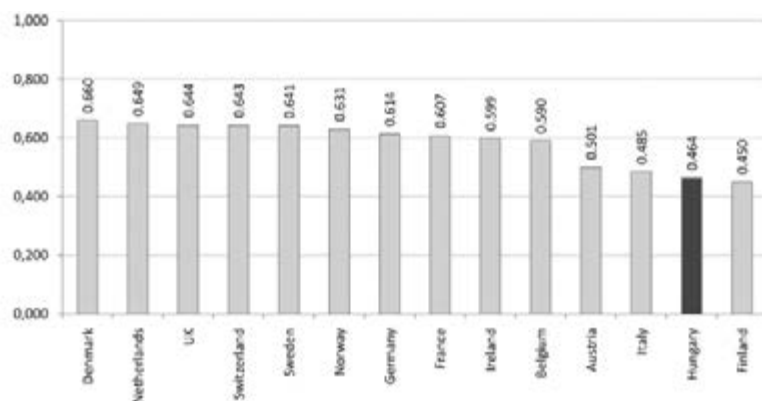


Figure 7. HDI rate in Hungary, compared to Western Europe, 1913  
 Source: Tomka, *Gazdasági növekedés*, 191. Own editing.

In recent years, Leandro Prados de la Escosura has collected the base data from different countries of the world. His work enables us to determine the three component indicators of HDI in 1870 when focusing on different time sections. The researcher had taken the point at the beginning of his studies that the HDI (UNHDI) calculated via UN methods can only be utilised at a confined birth rate in case of historical perspectives and in the global context, which induced him to make changes to the calculation methods (he has introduced the use of the geometric mean instead of the arithmetic mean) and also to give the index a new name: Historical Index of Human Development (HIHD).<sup>26</sup>

Based on the data available, Prados has published HIHD indexes about 164 countries. These indexes enable one to sketch a quantitative image generated via the most modern methods of the quality of life validatable for both countries and eras. Consequently, the time and space dynamics of the changes in the quality of life have become constructible. (Figure 8).

Based on the latest findings, the rate of “development” could have been more balanced than was suspected earlier. The region-based comparison also highlights the fact that, compared to other northern and western European countries, a significant improvement was traceable in Hungary between 1870 and 1925. It clear that the increase in the quality of life shows balance between 1870 and 1913, though perhaps a slight slowdown is observable at the turn of the century. Although, it is clear that in the regions of northern and western Europe there was a favorable improvement with higher rates and faster paces of modernization and improvements in quality of life (which

<sup>26</sup> Prados, “Improving the Human Development Index.”

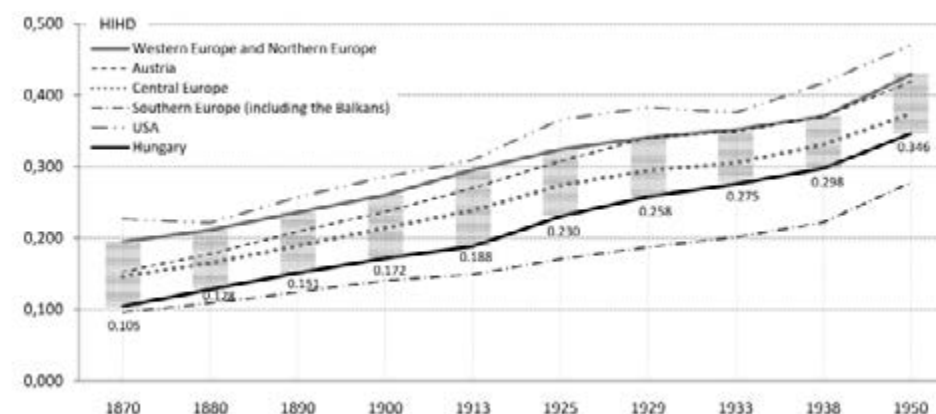


Figure 8. Changes in HIHD in Hungary based on the comparison of international data, 1870–1950

Source: WHD 1870–2015, own editing.

theoretically was correlated to the prospering economy) at the beginning of the twentieth century until the outbreak of World War I. As for the quality of life, which was theoretically (also) in correlated to the prospering status of the economy, The trend commencing in 1913 went onwards, and this contributed to further apparent gap decreases in Hungary as compared to northern and Western European average. This trend stemmed from the increase in national HIHD between 1913 and 1925. Then, it correlated with the slowdown of transformation in the Northern and Western regions between 1925–1929. At the same time, it is also clear that in the Northern and Western European regions, the transformation of the quality of life was asserted with more unfavorable effects due to the recession (1929–1933) than in Hungary. The data also indicate that during the first half of the twentieth century, in 1938 the quality of life as a national average was the closest to the northern and Western European standard: while this average in 1870 was 54% of the former standard, and in 1913 was still just 64%, then in 1938, right before the outbreak of World War II, it took 81 percent. In addition, the “improvement” of national quality of life correlates or in other words relates with the central European processes, while as opposed to the southern- European status, it shows an acceleration in the speed of changes detouring the national quality of life into a favourable direction. Finally, from the perspective of Austria, it is essential to mention that in the decades right after the Austro-Hungarian Comprise, the quality of life shows more remarkable increases in Austria than in Hungary. Practically, Austria converged at an accelerating space towards the quality of life dictated by the

northern and Western European countries, which it actually reached in 1929. From this point onwards, it advanced in complete correlation at the same level.

### Conclusion

On the basis of our study, in the narrative of Carpathian Basin, the territory of post-Trianon Hungary was significantly more developed as compared to its surrounding regions. Even prior to the Treaty of Trianon, the break lines already existed, and the internal/peripheral regions had already emerged. As a result, the emergence of these gaps cannot be attributed to the consequences of Treaty of Trianon. The territorial inequalities related to quality of life owned remarkable features: the territory of the country was divided into a western region of the Danube and an eastern part of the Danube. It is essential to emphasize that although the Great Plain had a multi-centered development spatial structure as an agricultural region, it still ensured a sustainable basis for economic stability; and via the developed status of its center divisions it also ensured the balance of transition. These regions were the innovation centers that ensured the background to structure transition and to the temporary expansion of garden cultivation culture. The Treaty of Trianon has had serious consequences, but one must admit that it was not the Treaty of Trianon that resulted in the internal spatial structure which defined the developmental spatial potentials of Hungary for the rest of the twentieth century.

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## APPENDIX

Changes in differences in the quality of life (HDI- Human Development Index) in Hungary after the Treaty of Trianon between 1910 and 1930

*Remarks on the Table*

Adapted details have been published based on the decreasing order of HDI records of 1930.

ID	Identification number. Consists of three parts (separated by periods). First part: processus/district (1) or town (2), second part: codes for a county in the Kingdom of Hungary (1–25), third part: the number for a processus/district or town within a county
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The counties of Hungary in 1930: vm. = vármegye (county), keevm. = közigazgatásilag egyselőre egyesített vármegye (county administratively unified), MH 1933

01 =	Abaúj-Torna vm.	10 =	Győr, Moson és Pozsony keevm.	19 =	Szabolcs és Ung keevm.
02 =	Bács-Bodrog vm.	11 =	Hajdu vm.	20 =	Szatmár, Ugocea és Bereg keevm.
03 =	Baranya vm.	12 =	Heves vm.	21 =	Tolna vm.
04 =	Békés vm.	13 =	Jász-Nagykun-Szolnok vm.	22 =	Vas vm.
05 =	Bihar vm.	14 =	Komárom és Esztergom keevm.	23 =	Veszprém vm.
06 =	Borsod, Gömör és Kishont keevm.	15 =	Nógrád és Hont keevm.	24 =	Zala vm.
07 =	Csanád, Arad és Torontál keevm.	16 =	Pest-Pilis-Solt-Kiskun vm.	25 =	Zemplén vm.
08 =	Csongrád vm.	17 =	Somogy vm.		
09 =	Fejér vm.	18 =	Sopron vm.		

A	j. = járás (district), rtv. = rendezett tanácsú város (corporate town), szfv. = székesfőváros (royal seat and capital), thjv. = törvényhatósági jogú város (municipal town).
B	1910–1930 HDI difference (100%=1910).
C	The country average of HDI in 1910 100%=0,451, while in 1930 100%=0,461
D	The difference between the relative positions of 1910 and 1930.
E	The direction of the change in position (+).

*Sources for Tables*

Databases: GHA, MÉTA

Statistical journals: AS 1934, KSH 1969, MH 1933, MSK Ús 39, 42, 46, 58, 83, 86, 93, 99 volume.

Own calculations and compositions.

\*

HDI regional differences in the area of Hungary after the Treaty of Trianon broken down by processus and towns between 1910 and 1930

ID	Name of administrative unit	A	HDI			Compared to the average HDI (%)			Relative position (order)			E
			1910	1930	B (%)	1910	1930	C	1910	1930	D	
2.16.13	Budapest	szfv.	0.933	0.844	−9.55	206.78	183.27	−23.52	1	1	0	
2.16.09	Rákospalota	rtv.	0.635	0.731	15.17	140.70	158.78	18.07	11	2	9	+
2.16.06	Kispest	rtv.	0.673	0.729	8.33	149.19	158.36	9.17	4	3	1	+
2.16.08	Pestszenterzsébet	rtv.	0.638	0.729	14.29	141.27	158.20	16.93	10	4	6	+
2.16.01	Budafok	rtv.	0.575	0.728	26.66	127.42	158.14	30.72	23	5	18	+
2.16.11	Újpest	rtv.	0.662	0.691	4.49	146.60	150.10	3.50	6	6	0	
2.18.01	Sopron	thjv.	0.718	0.686	−4.40	159.04	148.98	−10.06	2	7	−5	
2.14.02	Komárom	rtv.	0.633	0.676	6.69	140.32	146.69	6.37	12	8	4	+
2.10.02	Győr	thjv.	0.687	0.670	−2.50	152.31	145.51	−6.81	3	9	−6	
2.22.01	Kőszeg	rtv.	0.653	0.636	−2.59	144.66	138.06	−6.60	7	10	−3	
1.16.11	Központi (PPSK)	j.	0.552	0.617	11.85	122.20	133.93	11.73	29	11	18	+
2.22.02	Szombathely	rtv.	0.671	0.612	−8.84	148.74	132.85	−15.89	5	12	−7	
2.09.01	Székesfehérvár	thjv.	0.623	0.603	−3.09	137.93	130.97	−6.96	13	13	0	
2.23.01	Pápa	rtv.	0.644	0.602	−6.43	142.65	130.78	−11.86	9	14	−5	
2.16.10	Szentendre	rtv.	0.449	0.588	30.94	99.48	127.63	28.15	108	15	93	+
2.06.01	Miskolc	thjv.	0.609	0.585	−3.99	134.95	126.96	−7.99	14	16	−2	
1.18.01	Csepregi	j.	0.597	0.581	−2.57	132.22	126.23	−5.99	15	17	−2	
1.22.03	Sárvári	j.	0.582	0.576	−1.07	129.06	125.10	−3.96	18	18	0	
2.03.02	Pécs	thjv.	0.581	0.572	−1.50	128.70	124.22	−4.49	19	19	0	
2.10.01	Magyaróvár	rtv.	0.572	0.571	−0.23	126.77	123.92	−2.85	24	20	4	+
1.22.05	Szombathelyi	j.	0.578	0.570	−1.28	127.99	123.80	−4.19	20	21	−1	
2.16.12	Vác	rtv.	0.540	0.567	4.93	119.71	123.08	3.37	33	22	11	+
2.08.04	Szeged	thjv.	0.544	0.564	3.57	120.56	122.35	1.78	32	23	9	+
1.18.04	Soproni	j.	0.545	0.562	3.00	120.85	121.97	1.11	31	24	7	+
2.04.01	Békéscsaba	rtv.	0.393	0.562	43.06	86.99	121.94	34.95	158	25	133	+
1.10.01	Magyaróvári	j.	0.577	0.561	−2.76	127.83	121.80	−6.03	22	26	−4	

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			1910	1930	B (%)	1910	1930	C	1910	1930	D	
1.24.02	Balatonfüredi	j.	0.571	0.557	-2.44	126.49	120.91	-5.58	25	27	-2	
2.11.05	Debrecen	thjv.	0.644	0.557	-13.56	142.74	120.89	-21.85	8	28	-20	
1.16.06	Gödöllői	j.	0.480	0.549	14.38	106.34	119.18	12.84	74	29	45	+
2.15.02	Salgótarján	rtv.	0.515	0.548	6.46	114.01	118.93	4.92	46	30	16	+
1.23.02	Enyingi	j.	0.584	0.545	-6.77	129.44	118.25	-11.20	17	31	-14	
1.18.02	Csornai	j.	0.519	0.542	4.41	114.92	117.57	2.65	43	32	11	+
1.22.01	Celldömölki	j.	0.529	0.541	2.22	117.30	117.48	0.18	37	33	4	+
2.24.02	Zalaegerszeg	rtv.	0.595	0.541	-9.04	131.78	117.44	-14.33	16	34	-18	
1.16.17	Váci	j.	0.524	0.541	3.12	116.15	117.37	1.21	39	35	4	+
1.10.04	Tósziget-csilizközi	j.	0.491	0.538	9.65	108.71	116.79	8.08	70	36	34	+
1.18.03	Kapuvári	j.	0.491	0.538	9.39	108.88	116.70	7.83	69	37	32	+
1.10.03	Sokoróaljai	j.	0.516	0.537	3.99	114.40	116.57	2.17	44	38	6	+
1.21.06	Völgységi	j.	0.530	0.536	1.19	117.44	116.44	-1.00	36	39	-3	
2.23.02	Veszprém	rtv.	0.551	0.536	-2.59	121.99	116.42	-5.56	30	40	-10	
2.13.05	Szolnok	rtv.	0.465	0.534	14.94	103.03	116.03	13.00	89	41	48	+
1.22.06	Vasvári	j.	0.505	0.531	5.29	111.82	115.36	3.54	53	42	11	+
1.14.02	Gesztesi	j.	0.504	0.527	4.66	111.58	114.42	2.84	56	43	13	+
1.22.02	Körmend-németújvári	j.	0.523	0.524	0.23	115.93	113.85	-2.08	40	44	-4	
2.13.03	Kisújszállás	rtv.	0.577	0.523	-9.46	127.86	113.43	-14.43	21	45	-24	
1.21.04	Simontornyai	j.	0.526	0.522	-0.72	116.45	113.28	-3.17	38	46	-8	
2.14.01	Esztergom	rtv.	0.537	0.520	-3.19	118.91	112.80	-6.11	35	47	-12	
1.14.03	Tatai	j.	0.475	0.518	9.04	105.31	112.52	7.21	78	48	30	+
1.03.01	Baranyavári	j.	0.505	0.516	2.26	111.80	112.02	0.22	54	49	5	+
2.13.04	Mezőtúr	rtv.	0.492	0.515	4.78	108.91	111.82	2.91	68	50	18	+
1.09.04	Székesfehérvári	j.	0.560	0.515	-8.03	124.08	111.81	-12.27	28	51	-23	
1.21.01	Dombóvári	j.	0.500	0.515	2.98	110.78	111.77	1.00	59	52	7	+
1.16.07	Gyömrői	j.	0.462	0.512	10.73	102.44	111.14	8.70	92	53	39	+
1.23.04	Veszprémi	j.	0.483	0.510	5.52	107.08	110.71	3.63	73	54	19	+
1.04.04	Oroszházi	j.	0.449	0.509	13.29	99.58	110.54	10.96	106	55	51	+
2.08.03	Hódmezővásárhely	thjv.	0.567	0.506	-10.82	125.59	109.75	-15.84	27	56	-29	
1.04.05	Szarvasi	j.	0.510	0.504	-1.14	112.95	109.42	-3.53	48	57	-9	
2.16.02	Cegléd	rtv.	0.497	0.502	1.04	110.09	108.99	-1.10	64	58	6	+
2.17.01	Kaposvár	rtv.	0.498	0.501	0.70	110.31	108.84	-1.47	61	59	2	+
1.16.13	Monori	j.	0.446	0.500	12.05	98.87	108.55	9.68	111	60	51	+
1.15.06	Szobi	j.	0.476	0.499	4.69	105.50	108.22	2.72	77	61	16	+
1.10.02	Pusztai	j.	0.466	0.497	6.68	103.23	107.90	4.67	88	62	26	+

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			1910	1930	B (%)	1910	1930	C	1910	1930	D	
1.09.05	Váli	j.	0.500	0.494	-1.17	110.68	107.18	-3.50	60	63	-3	
1.17.09	Tabi	j.	0.540	0.494	-8.55	119.57	107.14	-12.43	34	64	-30	
1.23.01	Devecseri	j.	0.496	0.493	-0.68	109.87	106.92	-2.94	66	65	1	+
1.08.03	Mindszenti	j.	0.399	0.492	23.31	88.45	106.86	18.42	153	66	87	+
2.24.01	Nagykanizsa	rtv.	0.519	0.492	-5.18	114.95	106.80	-8.15	41	67	-26	
1.04.01	Békési	j.	0.461	0.489	6.14	102.14	106.22	4.09	94	68	26	+
1.06.06	Putnoki	j.	0.450	0.489	8.69	99.64	106.12	6.48	103	69	34	+
1.23.03	Pápai	j.	0.508	0.488	-4.08	112.64	105.86	-6.78	49	70	-21	
2.07.01	Makó	rtv.	0.504	0.485	-3.79	111.62	105.22	-6.40	55	71	-16	
1.21.05	Tamási	j.	0.501	0.483	-3.51	111.00	104.94	-6.06	58	72	-14	
2.12.01	Eger	rtv.	0.429	0.483	12.78	94.96	104.94	9.98	124	73	51	+
1.04.02	Gyomai	j.	0.447	0.482	7.68	99.10	104.56	5.46	110	74	36	+
1.03.05	Pécsváradi	j.	0.479	0.481	0.42	106.08	104.38	-1.70	75	75	0	
1.16.04	Biai	j.	0.462	0.479	3.82	102.33	104.09	1.76	93	76	17	+
1.16.16	Ráckevei	j.	0.477	0.476	-0.23	105.62	103.25	-2.37	76	77	-1	
1.24.03	Keszthelyi	j.	0.470	0.475	1.01	104.23	103.17	-1.07	83	78	5	+
2.08.02	Szentes	rtv.	0.503	0.474	-5.64	111.38	102.98	-8.40	57	79	-22	
1.03.03	Mohácsi	j.	0.450	0.473	5.26	99.65	102.78	3.13	102	80	22	+
2.11.04	Hajduszoboszló	rtv.	0.460	0.473	2.87	101.94	102.74	0.81	96	81	15	+
1.24.11	Zalaszentgróti	j.	0.464	0.473	1.96	102.77	102.68	-0.10	90	82	8	+
1.06.04	Miskolci	j.	0.463	0.473	2.18	102.55	102.67	0.12	91	83	8	+
1.24.09	Tapolcai	j.	0.452	0.473	4.56	100.18	102.63	2.46	99	84	15	+
1.09.03	Sárbogárdi	j.	0.487	0.473	-2.98	107.92	102.59	-5.33	71	85	-14	
1.16.15	Pomázi	j.	0.428	0.472	10.41	94.73	102.49	7.76	125	86	39	+
2.19.01	Nyíregyháza	rtv.	0.472	0.472	0.00	104.47	102.36	-2.11	81	87	-6	
1.11.02	Püspökladányi	j.	0.467	0.471	0.96	103.40	102.29	-1.11	87	88	-1	
1.17.05	Lengyeltóti	j.	0.449	0.471	4.73	99.54	102.15	2.61	107	89	18	+
1.16.05	Dunavecsei	j.	0.495	0.470	-5.03	109.73	102.11	-7.63	67	90	-23	
2.16.07	Nagykőrös	rtv.	0.512	0.470	-8.23	113.41	101.98	-11.44	47	91	-44	
1.24.08	Sümegi	j.	0.452	0.470	3.98	100.05	101.93	1.89	100	92	8	+
1.07.05	Torontáli	j.	0.356	0.469	31.79	78.84	101.81	22.97	169	93	76	+
1.21.03	Központi (Tolna)	j.	0.515	0.469	-9.07	114.16	101.72	-12.44	45	94	-49	
1.09.02	Móri	j.	0.421	0.467	10.86	93.25	101.29	8.04	137	95	42	+
1.17.02	Csurgói	j.	0.506	0.464	-8.24	112.02	100.71	-11.31	52	96	-44	
1.17.03	Igali	j.	0.485	0.464	-4.33	107.42	100.70	-6.72	72	97	-25	
1.22.04	Szentgotthárd-muraszombati	j.	0.445	0.464	4.21	98.55	100.63	2.08	113	98	15	+

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			1910	1930	B (%)	1910	1930	C	1910	1930	D	
1.09.01	Adonyi	j.	0.450	0.462	2.50	99.80	100.24	0.44	101	99	2	+
1.24.07	Pacsai	j.	0.415	0.458	10.24	91.95	99.32	7.37	142	100	42	+
1.23.05	Zirci	j.	0.427	0.457	6.91	94.65	99.15	4.50	127	101	26	+
1.24.10	Zalaegerszegi	j.	0.443	0.454	2.51	98.08	98.51	0.43	115	102	13	+
2.13.02	Karcag	rtv.	0.568	0.452	-20.45	125.79	98.04	-27.75	26	103	-77	
1.17.06	Marcali	j.	0.475	0.451	-4.91	105.20	98.01	-7.19	79	104	-25	
1.24.05	Nagykanizsai	j.	0.443	0.451	1.76	98.25	97.96	-0.29	114	105	9	+
1.24.06	Novai	j.	0.394	0.450	14.37	87.24	97.77	10.53	157	106	51	+
1.05.01	Berettyóújfalusi	j.	0.427	0.450	5.39	94.62	97.71	3.09	128	107	21	+
2.16.03	Kalocsa	rtv.	0.471	0.450	-4.45	104.34	97.69	-6.65	82	108	-26	
1.15.01	Balassagyarmati	j.	0.461	0.450	-2.39	102.12	97.66	-4.46	95	109	-14	
1.07.03	Központi (CsÁT)	j.	0.421	0.450	6.72	93.38	97.64	4.26	136	110	26	+
2.11.03	Hajdunánás	rtv.	0.496	0.449	-9.39	109.90	97.58	-12.33	65	111	-46	
1.05.05	Sárréti	j.	0.412	0.449	8.94	91.27	97.42	6.15	146	112	34	+
1.14.01	Esztergomi	j.	0.425	0.447	5.26	94.13	97.08	2.95	131	113	18	+
1.01.04	Szikszói	j.	0.445	0.446	0.18	98.61	96.79	-1.81	112	114	-2	
1.15.02	Nógrádi	j.	0.450	0.444	-1.16	99.62	96.47	-3.14	104	115	-11	
1.01.05	Tornai	j.	0.450	0.444	-1.16	99.60	96.46	-3.14	105	116	-11	
1.17.07	Nagyatádi	j.	0.473	0.444	-6.13	104.71	96.31	-8.40	80	117	-37	
1.17.01	Barcsi	j.	0.470	0.443	-5.83	104.13	96.09	-8.04	84	118	-34	
1.03.02	Hegyháti	j.	0.439	0.442	0.65	97.36	96.01	-1.35	120	119	1	+
1.03.07	Szentlőrinci	j.	0.497	0.441	-11.27	110.11	95.73	-14.37	63	120	-57	
1.06.07	Sajószentpéteri	j.	0.441	0.440	-0.27	97.67	95.44	-2.23	117	121	-4	
1.06.05	Ózdi	j.	0.417	0.437	5.02	92.29	94.97	2.68	139	122	17	+
1.21.02	Dunaföldvári	j.	0.427	0.434	1.54	94.70	94.22	-0.48	126	123	3	+
1.17.04	Kaposvári	j.	0.454	0.434	-4.39	100.51	94.16	-6.35	97	124	-27	
2.02.01	Baja	thjv.	0.453	0.433	-4.36	100.26	93.95	-6.31	98	125	-27	
1.15.05	Sziráki	j.	0.405	0.432	6.84	89.69	93.89	4.20	149	126	23	+
1.05.04	Derecskei	j.	0.469	0.432	-7.81	103.91	93.86	-10.04	86	127	-41	
2.25.01	Sátoraljaújhely	rtv.	0.497	0.432	-13.08	110.16	93.82	-16.34	62	128	-66	
1.04.06	Szeghalmi	j.	0.413	0.432	4.46	91.54	93.70	2.16	144	129	15	+
1.16.03	Aszódi	j.	0.398	0.431	8.18	88.22	93.51	5.29	155	130	25	+
2.03.01	Mohács	rtv.	0.422	0.430	1.87	93.52	93.35	-0.18	135	131	4	+
1.25.04	Tokaji	j.	0.415	0.428	2.92	92.05	92.82	0.78	141	132	9	+
1.01.01	Abaujszántói	j.	0.414	0.426	2.97	91.74	92.56	0.82	143	133	10	+
2.08.01	Csongrád	rtv.	0.334	0.426	27.60	74.00	92.52	18.52	176	134	42	+
1.16.08	Kalocsai	j.	0.448	0.425	-5.14	99.22	92.22	-7.00	109	135	-26	

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			1910	1930	B (%)	1910	1930	C	1910	1930	D	
1.01.03	Gönci	j.	0.398	0.423	6.11	88.26	91.76	3.50	154	136	18	+
2.12.02	Gyöngyös	rtv.	0.274	0.421	53.76	60.64	91.37	30.72	194	137	57	+
1.24.01	Alsólendvai	j.	0.508	0.420	-17.20	112.48	91.26	-21.22	50	138	-88	
1.16.09	Kiskőrösi	j.	0.387	0.420	8.57	85.69	91.15	5.46	159	139	20	+
1.16.12	Kunszentmiklósi	j.	0.416	0.418	0.62	92.15	90.85	-1.30	140	140	0	
1.13.03	Központi (JNSz)	j.	0.372	0.418	12.55	82.37	90.84	8.46	164	141	23	+
1.03.04	Pécsi	j.	0.438	0.417	-4.77	97.09	90.59	-6.49	121	142	-21	
1.17.08	Szigetvári	j.	0.423	0.417	-1.38	93.67	90.52	-3.16	133	143	-10	
1.13.04	Tiszai alsó	j.	0.417	0.416	-0.21	92.46	90.40	-2.05	138	144	-6	
1.05.02	Biharkeresztesi	j.	0.425	0.415	-2.48	94.24	90.05	-4.19	130	145	-15	
1.06.02	Mezőcsáti	j.	0.409	0.415	1.37	90.61	90.00	-0.61	147	146	1	+
1.03.06	Siklósi	j.	0.519	0.414	-20.10	114.92	89.97	-24.95	42	147	-105	
1.05.03	Cséffanagyszalontai	j.	0.413	0.413	0.03	91.52	89.70	-1.82	145	148	-3	
2.16.14	Kecskemét	thjv.	0.423	0.412	-2.61	93.81	89.52	-4.29	132	149	-17	
1.02.03	Jánoshalmi	j.	0.422	0.412	-2.36	93.58	89.52	-4.05	134	150	-16	
1.07.01	Battonyai	j.	0.383	0.412	7.77	84.77	89.51	4.74	160	151	9	+
1.15.04	Szécsényi	j.	0.380	0.412	8.55	84.13	89.48	5.35	161	152	9	+
1.02.02	Bajai	j.	0.404	0.411	1.65	89.52	89.16	-0.36	150	153	-3	
2.13.06	Túrkeve	rtv.	0.439	0.410	-6.64	97.37	89.07	-8.30	119	154	-35	
1.25.03	Szerencsi	j.	0.432	0.409	-5.35	95.73	88.77	-6.95	123	155	-32	
1.16.02	Alsódabasi	j.	0.371	0.407	9.67	82.28	88.41	6.13	165	156	9	+
2.15.01	Balassagyarmat	rtv.	0.442	0.404	-8.54	97.87	87.70	-10.17	116	157	-41	
1.01.02	Encsi	j.	0.406	0.403	-0.88	90.00	87.41	-2.59	148	158	-10	
1.07.04	Mezőkovácsházi	j.	0.301	0.398	32.25	66.68	86.41	19.73	191	159	32	+
1.04.03	Gyulai	j.	0.302	0.397	31.52	66.81	86.10	19.29	189	160	29	+
1.16.01	Abonyi	j.	0.341	0.396	15.96	75.65	85.96	10.31	175	161	14	+
1.12.03	Hatvani	j.	0.365	0.395	8.18	80.93	85.79	4.85	167	162	5	+
1.12.06	Tiszafüredi	j.	0.427	0.393	-7.81	94.52	85.38	-9.14	129	163	-34	
1.06.03	Mezőkövesdi	j.	0.354	0.391	10.21	78.52	84.80	6.27	171	164	7	+
1.12.02	Gyöngyösi	j.	0.347	0.390	12.19	76.97	84.61	7.64	174	165	9	+
1.06.01	Edelényi	j.	0.404	0.388	-3.95	89.49	84.22	-5.27	151	166	-15	
2.11.01	Hajduböszörmény	rtv.	0.507	0.388	-23.60	112.38	84.13	-28.25	51	167	-116	
1.15.03	Salgótarjáni	j.	0.311	0.381	22.29	68.98	82.65	13.68	184	168	16	+
1.25.02	Sárospataki	j.	0.348	0.377	8.49	77.07	81.93	4.86	173	169	4	+
1.12.01	Egri	j.	0.326	0.377	15.80	72.13	81.84	9.71	179	170	9	+
1.02.01	Bácsalmási	j.	0.398	0.376	-5.42	88.12	81.66	-6.46	156	171	-15	

ID	Name of administrative unit	A	HDI			Compared to the average HDI (%)			Relative position (order)			E
			1910	1930	B (%)	1910	1930	C	1910	1930	D	
1.13.06	Tiszai közép	j.	0.372	0.375	0.76	82.45	81.40	-1.05	163	172	-9	
1.13.02	Jászsági felső	j.	0.314	0.370	17.87	69.49	80.25	10.76	183	173	10	+
1.13.05	Tiszai felső	j.	0.400	0.368	-8.10	88.66	79.84	-8.82	152	174	-22	
1.08.01	Csongrádi	j.	0.239	0.368	53.61	53.04	79.83	26.79	201	175	26	+
1.13.01	Jászsági alsó	j.	0.355	0.367	3.24	78.69	79.60	0.91	170	176	-6	
1.16.14	Nagykátai	j.	0.264	0.366	38.36	58.59	79.43	20.84	197	177	20	+
1.20.02	Fehérgyarmati	j.	0.373	0.363	-2.73	82.68	78.80	-3.88	162	178	-16	
1.20.04	Vásárosnaményi	j.	0.320	0.361	12.93	70.90	78.45	7.55	181	179	2	+
1.24.04	Letenyei	j.	0.357	0.361	1.10	79.09	78.35	-0.74	168	180	-12	
2.11.02	Hajduhadház	rtv.	0.440	0.360	-18.09	97.40	78.17	-19.23	118	181	-63	
1.19.01	Dadai alsó	j.	0.366	0.358	-2.11	81.10	77.79	-3.31	166	182	-16	
2.21.01	Szekszárd	rtv.	0.469	0.357	-23.99	103.99	77.45	-26.54	85	183	-98	
2.04.02	Gyula	rtv.	0.318	0.355	11.56	70.46	77.01	6.56	182	184	-2	
2.16.05	Kiskunhalas	rtv.	0.434	0.354	-18.56	96.20	76.77	-19.43	122	185	-63	
1.07.02	Eleki	j.	0.311	0.349	12.18	68.85	75.69	6.83	185	186	-1	
2.13.01	Jászberény	rtv.	0.333	0.348	4.77	73.68	75.64	1.96	177	187	-10	
1.16.10	Kiskunfélegyházi	j.	0.267	0.345	29.03	59.20	74.84	15.64	196	188	8	+
2.16.04	Kiskunfélegyháza	rtv.	0.270	0.343	26.79	59.85	74.36	14.51	195	189	6	+
1.25.01	Bodrogközi	j.	0.320	0.338	5.39	70.98	73.30	2.32	180	190	-10	
1.20.01	Csengeri	j.	0.301	0.337	11.88	66.66	73.07	6.41	192	191	1	+
1.05.06	Székelyhídi	j.	0.332	0.334	0.52	73.65	72.55	-1.11	178	192	-14	
1.08.02	Kiskundorozsma	j.	0.301	0.333	10.39	66.78	72.23	5.45	190	193	-3	
1.12.04	Hevesi	j.	0.354	0.332	-6.19	78.36	72.03	-6.34	172	194	-22	
1.11.01	Központi (Hajdu)	j.	0.310	0.331	7.03	68.60	71.94	3.34	186	195	-9	
1.19.02	Dadai felső	j.	0.302	0.331	9.48	66.93	71.80	4.86	188	196	-8	
1.12.05	Pétervásári	j.	0.253	0.325	28.49	56.06	70.57	14.52	199	197	2	+
1.19.09	Tiszai	j.	0.306	0.294	-4.07	67.91	63.83	-4.08	187	198	-11	
1.19.03	Kisvárdai	j.	0.290	0.275	-5.01	64.22	59.77	-4.45	193	199	-6	
1.19.07	Nyírbátori	j.	0.225	0.255	13.64	49.81	55.46	5.65	203	200	3	+
1.20.03	Mátészalkai	j.	0.256	0.251	-1.80	56.72	54.58	-2.14	198	201	-3	
1.19.08	Nyírbogdányi	j.	0.220	0.240	9.02	48.82	52.15	3.33	204	202	2	+
1.19.05	Nagykállói	j.	0.240	0.210	-12.39	53.17	45.64	-7.53	200	203	-3	
1.19.06	Nyírbaktai	j.	0.226	0.209	-7.58	50.10	45.37	-4.73	202	204	-2	
1.19.04	Ligetlaji	j.	0.148	0.149	0.86	32.71	32.32	-0.38	205	205	0	