STUDIES

Structural and administrative implications of the Trianon Peace Treaty, 1920*

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World War I re-organised European power and territorial relations. The victors (Entente member countries) emerged from the war with significant territorial gains, while the losers (Central Powers) suffered considerable losses and the Austro-Hungarian Monarchy was dissolved. The political-territorial power structure of the Monarchy was extremely complex. The aim of this study is to present how state and territorial administrations were reorganized in the newly independent Hungary. The dissolution of the Monarchy led to the dismantling of the multi-ethnic and quasi-federal state of historical Hungary. While the Hungarian government recognised the secession of Croatia-Slavonia, it firmly opposed the detachment of other territories; notwith-standing, by the end of December 1918, various nationalities (Slovaks, Romanians, Serbs) had formed quasi-blocks in Hungary and proclaimed their secession. Hungary became a sovereign state after losing the majority of the territory of the Kingdom of Hungary (71.4%) and 63.5% of its population. Defeat in the war was the major factor behind the country's disintegration that neither the civil democratic revolution and transformation nor the bloody internal proletarian dictatorship were able to reverse. The Trianon Peace Treaty simply sanctioned the changes that had already taken place through international treaties and international law. The territorial administrative division of the new Hungary was completely distorted due to the truncated cross-border counties. The 1923 territorial correction was no more than an attempt to merge the truncated counties and county fragments. This study is based primarily on cartographic analysis.

Keywords:
World War I,
Austro-Hungarian Monarchy,
Kingdom of Hungary,
territorial disintegration,
multi-ethnic successor states,
Trianon Peace Treaty,
public administration in the Kingdom of Hungary,
distorted territorial division

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Introduction

The effects of the global and European political and territorial transformations triggered by the Great War (1914–1918) sent shockwaves through the entire continent, with the most dire consequences for the Austro-Hungarian Monarchy (AHM) and historical Hungary (Kingdom of Hungary, or Hungarian Empire as referred to by statistical press or official documents). Due to mounting internal national and ethnic pressure and the decisions of external victorious powers, the AHM was rapidly dismantled in October 1918. Similar processes triggered the dissolution of the Kingdom of Hungary.

The defeated countries were not invited to participate in the discussions and decisions on the most crucial territorial issues during the Paris Peace Conference taking place on 18 January 1919. The conditions of the peace treaty presented to a defeated Hungary in March 1919 were rejected by the pro-Entente government of Mihály Károlyi, which transferred power to the social democrats. The latter, in collaboration with the imprisoned communists concluded an agreement on the joint government on 21 March 1919.

The powers behind the brutal internal proletarian dictatorship were not willing to negotiate with the leaders of the peace conference with weapons at their feet or hands held up, instead seizing weapons to defend the territory of the country (and cement the proletarian dictatorship). Despite partial victories, they were ultimately defeated by the Entente-backed armies of the successor states led by Entente officers. On 1st August 1919, the leaders of the dictatorship robbed the country of significant wealth and fled to Vienna.

Most of the country (including Budapest) came under Romanian military occupation. The Entente powers, as a sign of their condemnation of the systematic robbing of the country, ordered the evacuation of Romanian troops from Budapest and subsequently, the entire country. After the arrival of Miklós Horthy in Budapest, the special interim government did not receive diplomatic recognition by the Entente and the Peace Conferences, which were only willing to recognise a government that implemented their directly and indirectly formulated demands. The Peace Treaty octroyed upon Hungary was eventually signed on 4 June 1920, and enshrined into the constitution in 1921.

The Peace Treaty contained extremely harsh provisions in territorial, population, economic, and military terms. A veritable tragedy, it was nonetheless recognised as the condition of the integration of a defeated Hungary into the new European political and territorial order.

The events after the autumn of 1918 led to the dissolution of both the AHM and historical Hungary. The primary event that sealed the fate of the AHM was the war defeat. (Generally, victorious states are not subject to dissolution or truncation.) Trianon was not the cause for the partition of the major part of the country or the

'circumcision' of the former state corpus (the new state border did not overlap the old state border along any of its sections), it simply granted international legal recognition to changes that had already taken place.

The changes 'recognised' by the Peace Treaty thoroughly transformed existing relations in a wide array of sectors and subsystems prevalent in pre-1918 Kingdom of Hungary. However, the focus of this paper is limited to a review of state and administrative restructuring and its underlying causes.

Territorial administrative division of Hungary and statistics

Throughout the development of Hungary, akin to other states, the statistical monitoring of the constitutional organisation of the state and the changes of state territory have been inextricably linked to the history of the state and public administration. This connection and its obvious consequences were already visible in the era of 'private statistics' and became increasingly evident and transparent with the setting up of a state statistical office.

The AHM's particular constitutional structure ruled out the possibility of a unified imperial system of statistics; the partner countries compiled statistical surveys and censuses relevant to their respective territories. Since the 1867 Compromise, HCSO has rigorously kept track of how the country's 'constitutional territorial structure' was changing (Havas 1869). Within the field of statistics, new statistical notions describing territorial entities and divisions were elaborated which nonetheless respected the existing public-law (constitutional) 'components' and the administrative nomenclature. Settlements, districts, and municipalities were treated as the natural frameworks for the assembly, processing, and publication of statistical data (Edelényi Szabó 1928).

The development of the modern Hungarian state created a pressing demand for the harmonisation of historical concepts with those of the dualist era. The concept and territorial unit of the 'Hungarian Empire' already emerged in a monograph of János Hunfalvy (1863), a period when the Hungarian political elite rejected the unconstitutional status of the territorially dismembered country. (Trained as a lawyer, Hunfalvy also gave statistical lectures and is known for the institutionalisation of modern Hungarian geography.) In the post-Compromise era, the 'Hungarian Empire' became a highly delicate spatial concept, statistically speaking. Despite not gaining official recognition, it was a frequently used term in the statistical discipline and cartography.

The 1867 Austro-Hungarian Compromise, the subsequent Hungarian-Croatian Settlement of 1868, the Rijeka Agreement, and the preservation of a Military Borderland created a complex, multi-level political construction with significant territorial statistical implications. The then CSO took the text of the Austro-Hungarian Compromise Law as a basic point of departure in the treatment of the

'Croatian-Slavonic-Dalmatian countries' as a single statistical unit at the time of publication of the 1870 Census and the compilation of the place-nomenclature from the 1870s.

The occupation (1878), and especially, the annexation (1908) of Bosnia and Herzegovina further complicated political-power relations and their territorial dimensions (Szabó 2008). Bosnia, not being annexed to either party, was brought under the control and administration of the Joint Minister for Finance. Debates between the Austrian and Hungarian governments on the status of Bosnia were launched in the course of World War I. This had ecclesiastical and religious implications, leading to the recognition of the Islamic religion as a historical denomination in 1916.

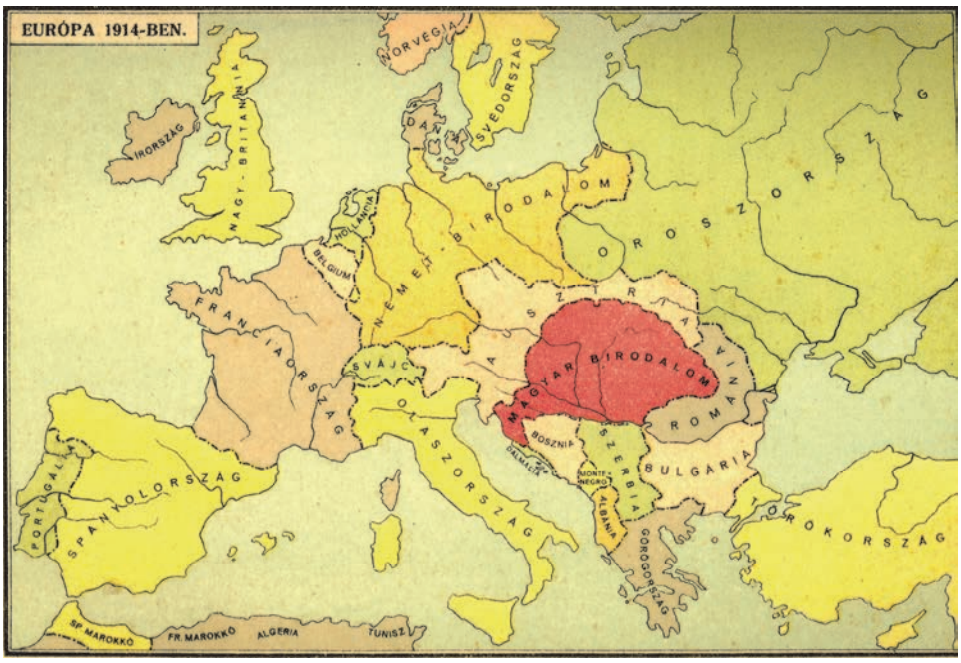
Contributions to Hungarian state geography and 'state statistical geography' (see Kogutowicz–Hermann (1913) had already emerged in the pre-World War I era. The objective of these works relying on contemporary (English, French, German) state statistical literature was to adapt the existing analyses on Austria, Bosnia-Herzegovina, and Hungary in the Hungarian context. (The cited studies treat the three components as autonomous 'countries' and contain no synthesizing statements at the level of the AHM.) Contemporary Hungarian geography and politics were particularly keen to emphasise the European grandeur of the country by pointing out that if Hungary was a fully independent state (the analyses of the Hungarian State Statistics and the Hungarian Institute of Geography covered 24 European countries in 1914) and thus a subject of international law, it would rank 6th in terms of its territory and 7th in terms of its population, among the European countries.

Imperial Europe and the AHM

The territorial structure of Europe in 1914 was dominated by empires and macro-states (Figure 1). Given the multi-ethnic character of contemporary imperial structures, what distinguishes the AHM from fellow empires is not multiethnicity, but the highly complex nature of its public law relations and the lack of any significant colonies.

Figure 1

Imperial Europe and the Austro-Hungarian Monarchy in Europe, 1914



Source: Magyar Nemzeti Szövetség (1943).

Evaluations of the public law (constitutional) status of the AHM and Hungary – with its various territories enjoying full autonomy – by the contemporary society of lawyers (see Balogh 1901, Beksics 1896, Concha 1895) and later historical analyses (Beér–Csizmadia 1966, Gratz 1934, Molnár 1929) are by no means uniform. Characterisations range from a 'simple personal union' through 'federal state' to 'de facto real union'. Despite its recognition as a constitutional monarchy, the effective role and influence of the Austrian Emperor and the Hungarian Monarch Joseph Franz extended well beyond the confines of a 'normal' constitutional monarchy.

Against the backdrop of a dominant imperial structure, the creation of various alliances between macro-states and great powers had already commenced with the intent to redraw European power relations. The AHM joined the Europe-wide battle as a member of the German-led Federation of Central Powers. (The chief objective of the Great War was the redistribution of power and territory in Europe. Their global redistribution would have been a natural outcome of the German victory.)

The Kingdom of Hungary in the Monarchy

According to the most widespread view in contemporary Hungary, the Kingdom of Hungary was a sovereign country within the Monarchy linked to Austria – besides the personal union – through 'common affairs' (foreign, military affairs, and the underpinning finances). The Hungarian-Croatian Compromise of 1868 settled the internal power and political status of the 'fellow country', granting it almost full internal autonomy.

Fundamental decisions on internal administration were made in the early and mid-1870s. The liberal Hungarian government abolished feudal territorial autonomies, and following the organisation of counties in the Military Border Region, the county system was generally adopted across the territory of Hungary and Croatia-Slavonia (Figure 2).

Figure 2

Administrative division in the Kingdom of Hungary, 1918

Source: Takács (1939).

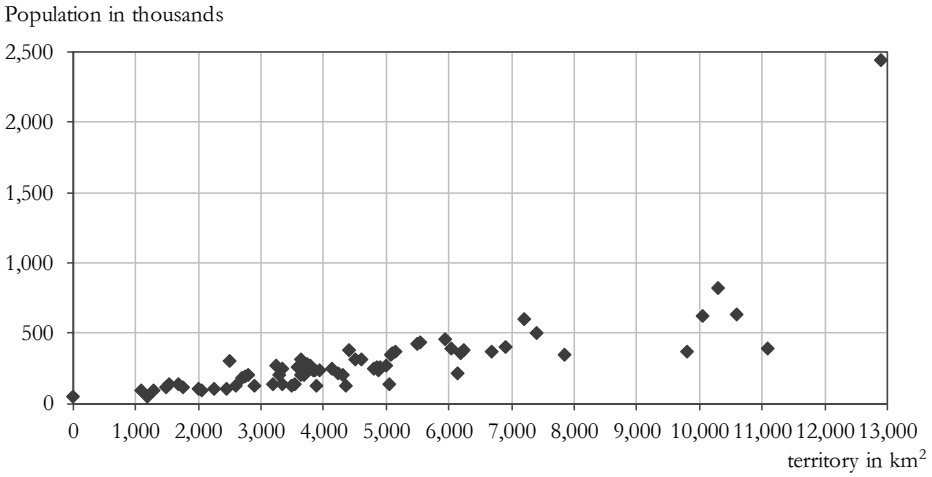
According to the Hungarian Statistical Yearbooks (1916, 1917, 1918), Hungary in 1918 was comprised of two public law entities (Hungary, the city of Rijeka, and its district), with Croatia-Slavonia forming an autonomous constitutional entity. Hungary's internal territory was divided into 63 counties, Fiume and its districts, 27 municipalities, 112 corporate towns, 443 districts, 2,701 district notaries, 2,176 large villages, and 10,196 small villages. The statistically recorded number of heathlands, yards, and other inhabited areas was 17,083.

Croatia-Slavonia was divided into 8 counties, 4 municipalities, 13 other towns, and 70 districts. The organisation of its municipal administration was considerably different from that of Hungary due to its subdivision into political municipalities. A portion of the political municipalities (156) formed a single tax district, while the rest (389) were organised into several tax districts. The total number of recorder units was 7,189.

Counties were characterised by huge disparities in terms of territory, population, (Figure 2) number of settlements, etc. A county's position was determined by its administrative functions and not by the size of its territory or population. The county system in 1918 was explained by historical factors on one hand and reform measures of Dualist era liberal Hungarian governments on the other (with an eye on the Great Plain area under Turkish rule throughout 150 years in particular.) In terms of their size, the smallest counties of Upper Hungary (comprising of small basins) were no larger than the districts of the large counties of the Great Plain. Pest-Pilis-Solt-Kiskun County (a de facto historical conglomeration of counties) constituted a unique structure in the central part of the country according to 1910 data in terms of the size of its area (12,034 km^2), population (1,029,246 persons), and the structure of internal distances (the distance of the southern settlements from Budapest, the county seat, was irrationally large, evoked as an alarming example by almost every contemporary administrative reform proposal). In my work, I use the 'calliper method' to illustrate this peculiar role of distance (Hajdú 2001), that is, by drawing a circle with Budapest at the centre from the outermost part of the county and supposing that this distance is still deemed acceptable or functional by the public administration; this alone would have enabled the administration of the entire country from a single county seat.

Figure 3

Differences in the territorial and population size of the counties (including municipal towns), 1918



Source: Hajdú (2001).

The distinct treatment of counties and municipal towns in terms of municipal administration is a unique feature of the administrative division of both parts of the Hungarian Empire. In 1910, the vast majority (318,297 km^2) of the 325,411 km^2 territory of the Hungarian Empire belonged to counties, and only 7,114 km^2 to municipal towns. The distribution of the population shows a more balanced picture, with 18.5 million people residing in counties and 2.3 million in municipal towns.

The extension of the county-scale analysis of size to municipal towns demonstrates that the most expansive towns of the Great Plain (Szabadka, 974 km^2; Debrecen, 957 km^2; Kecskemét, 940 km^2; Szeged, 816 km^2) constitute quasi-autonomous 'small worlds' with vast internal distances. (The 1,800 km^2-large overlapping administrative territories of Szabadka and Szeged exceeded the territory of several counties.) Along with Hódmezővásárhely (761 km^2) in the vicinity of Szeged, we gain the picture of a single, coherent urban area marked by the presence of extensive rural and homestead-dominated spaces.

While the Statistical Yearbook provides data on the size of the territory and population in the summary row titled 'Hungarian Empire', no data is available on public administration. This is probably due to the autonomous status of public administration within the domain of internal affairs in Hungary and Croatia-Slavonia, with all its implications on the administrative organisation of municipalities.

In Hungary, 8 statistical regions (the right bank of the Danube, the left bank of the Danube, the Danube-Tisza Interfluve region, the right bank of the Tisza, the left bank of the Tisza, the Tisza-Maros angle, Bucea, and the town and district of

Rijeka) provided the framework for the territorial classification of counties as well as for statistical analysis, with no apparent public or municipal administrative functions. Croatia-Slavonia formed a single statistical unit.

A much anticipated country study in the form of a multilingual monograph was published by Hungarian geographers in 1918 (Lóczi Lóczy 1918). The end of the war saw the release of a publication entitled 'The States of the Hungarian Holy Crown' on the historical constitutional state formation providing a 'final panoramic snapshot' before its cessation.

World War defeat, territorial re-organisation

The assassination of Archduke Franz Ferdinand of Austria, heir to the Austro-Hungarian throne, and his wife, in Sarajevo in the summer of 1914 launched the Great War, a tragic process that set Europe and, thanks to the European colonial empires, parts of the world ablaze. The Hungarian Prime Minister István Tisza fiercely opposed the declaration of war and the war itself in the course of the sessions of the Joint Council of Ministers, considering the acquisition of further ethnic territories to be against the interest of the multinational AHM and Hungary in particular; he thus attached no special importance to an eventual victory or defeat. Tisza was aware of the fact that the AHM was investing all its resources in a war without anticipating any significant territorial gains. (If there was a country whose entry into the war should have been forbidden under all costs, it was the AHM. Nevertheless, the AHM claimed responsibility for committing the 'original sin' – the war declaration on Serbia – setting all of Europe ablaze.)

During the war, the Central Powers achieved 'partial victories' and forced the defeated Russian Empire (and its legal successor) into a humiliating, truly imperialist peace treaty in Brest-Litovsk inflicting significant territorial and population losses on it. Defeated Romania was subject to a similar procedure in the course of both the interim and the 'final' peace treaty in Bucharest. Unfortunately, the case of the Central Powers and particularly the AHM was a clear demonstration of 'the winner takes what it likes' in the imperialist era.

The Great War caused immense destruction in the warring countries, with the gravest implications for the more under-resourced Central Powers. By autumn of 1918, the prospect of an imminent internal collapse and catastrophic military defeat loomed on the horizon of the Central Powers. (Menaced by defeat, Emperor Karl of Austria proclaimed the Federal Republic of Austria on October 16. Despite not being directly impacted by the re-organisation, in the eyes of the last constitutional government of the Kingdom of Hungary led by Sándor Wekerle, it clearly signalled the end of dualism.)

In October 1918, revolutionary protests erupted in the major cities of the Monarchy. On October 21, the Temporary National Assembly in Vienna – set up in

the course of the revolutionary transformation – declared the secession of Austria from the AHM. Revolutionary protests erupted in Prague (28 October), Budapest (29–30 October), and Zagreb (29 October), bringing the respective countries to a major political watershed. (The independence of the Slovenian-Croatian-Serbian state proclaimed in Zagreb on 29 October was recognised by the Károlyi government which opened an embassy in Zagreb in early November.) While each revolution produced its own vision of the unity of the state and the nation, their effective enforcement depended on strong international and military support.

On 3rd November 1918, a ceasefire agreement in Padua was signed by the AHM signalling the termination of the war. On 12 October, Austria proclaimed itself as a republic. On 13 November 1918, Hungary signed the Belgrade Military Convention (Ceasefire Convention) with the obligation of acknowledging the military demarcation line penetrating into its southernmost territories. On the same day, King Charles IV of Hungary renounced the title of King of Hungary. On 14 November, Masaryk was elected President of the Czechoslovak Republic in Prague. The Hungarian People's Republic was proclaimed on 16 November.

The Romanians of Transylvania declared the accession of Transylvania to Romania on 1 December in Gyulafehérvár. Naturally, the Hungarian residents of Transylvania were not asked to express their opinion on the decision. On the same day, Crown Prince Alexander of Serbia proclaimed the establishment of the Serbian-Croatian-Slovenian Kingdom in Paris.

The brief review provided above indicates that the new neighbouring states of Hungary (Austria, Czechoslovakia, the new Romania, and the Serbian-Croatian-Slovenian Kingdom) had sprung up by December 1918, and, with the exception of Austria, were each backed up by powerful armies and more importantly, enjoyed the support of the Great Powers. The permanent state boundaries were yet to be determined; however, the demarcation lines drawn by the Entente promised nothing good for Hungary.

From a state historical perspective, the Hungarian Soviet Republic proclaimed on 21 March 1919 can be regarded as a desperate attempt at crisis management. The leadership of the proletarian dictatorship was no longer attached to the territorial integrity of the (by then) dismantled Kingdom of Hungary (which would have been wishful thinking), but it took up arms in an attempt to defend the largest possible territory of the mother country (and thus to secure its own existence). The state structural innovations of the brutal, bloody internal dictatorship (recognition of the federal state by a provisional and later a permanent constitution, and the public administration reform) hardly enhanced the chances of an armed struggle. On 1 August, the top leaders of the dictatorship fled to Vienna, robbing significant wealth from the country to secure the continuation of their political activities.

Transformation of state (constitutional) structures

The collapse of the AHM and the dismantling of historical Hungary triggered a fundamental state restructuring. The state structure underpinning the Austro-Hungarian dualism was completely abolished in tandem with the Hungarian-Croatian state community.

On 4 June 1920, Hungary signed the Trianon Peace Treaty that simply sanctioned the changes that had already taken place. Accordingly, the Treaty of Trianon is not the cause of the destruction of historical Hungary, but solely its legitimator. Hungary became a unitary state. Demands for restitution appealed to the principle of historical-legal continuity, albeit with a limited effect. In the framework of the unitary state, against all odds, a multi-party parliamentary democracy was implemented. The full sovereignty of the state necessitated the establishment of a Hungarian Ministry of Foreign Affairs and fundamental changes were introduced in the administration of defence as well.

Transformation of state territory

It was not until the implementation of the provisions of the Peace Treaty and the cartographic visualisation of the state territorial losses that the gravity of the situation triggered by the war defeat and its termination by the Peace Treaty had become obvious to all (Figure 4, Table 1).

Figure 4

Pre-and post-Trianon territory of Hungary

Source: M. Kir. Állami Térképészeti Intézet (Hungarian State Institute of Cartography) (1933).

Table 1

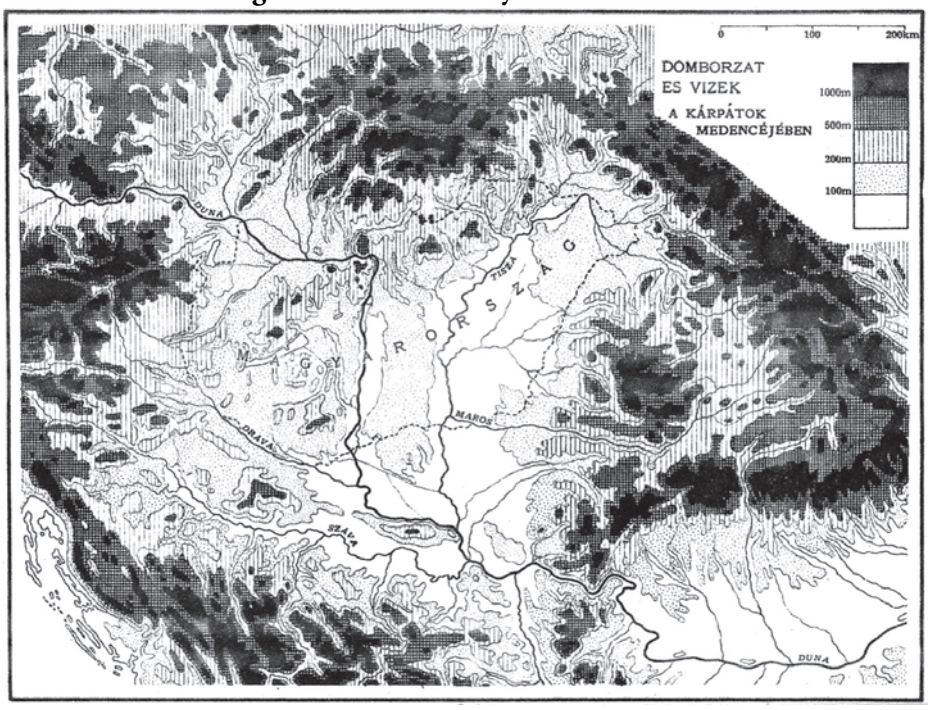
Division of the Hungarian Empire among successor states, as fixed by the Trianon Peace Treaty

According to the 1910 census				
Country	Territory		Population	
	km²	%	capita	%
Romania	102,813	31.6	5,237,911	25.1
SCS Kingdom	63,370	19.5	4,149,840	19.9
Czechoslovakia	61,646	18.9	3,516,815	16.8
Austria	4,020	1.2	292,631	1.4
Poland	589	0.2	24,880	0.1
Italy	21	0.0008	49,806	0.2
Severed territories (total)	232,459	71.4	13,271353	63.5
Remaining in Hungary	92,952	28.6	7,615,134	36.5
Hungarian Empire	325,411	100.0	20,886,487	100.0

Source: Census of 1920, Section VI, Summary of final results. Budapest, CSO, 1929.

Figure 5

Orographic and hydro-geographic features of the new Hungarian state's territory in the bottom of the basin



Source: Bátky–Kogutowicz (1921).

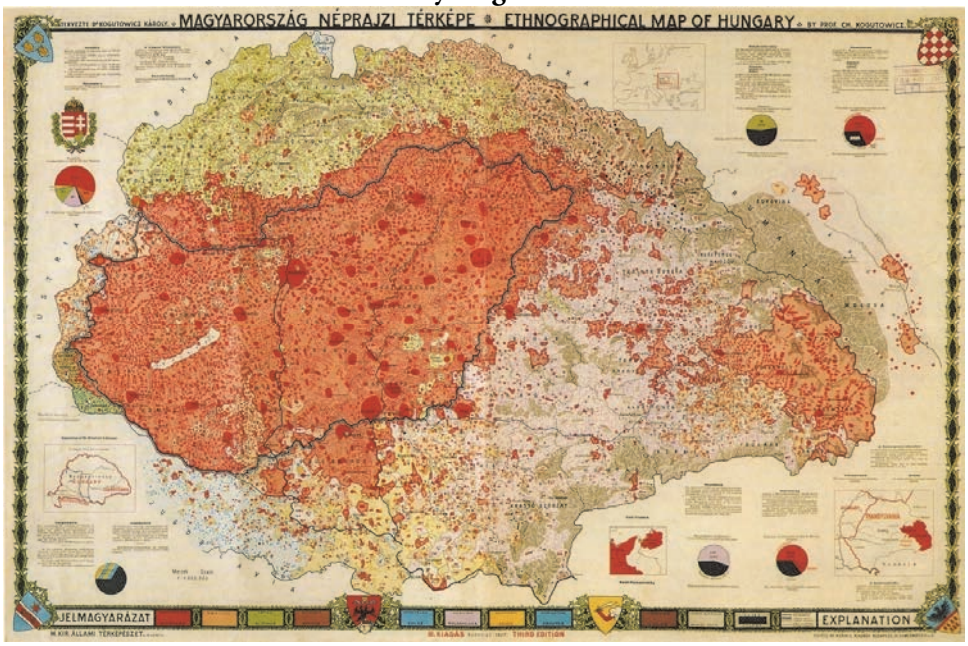
The new state boundaries determined by the peace treaty detached 71.4% of the territory of the Hungarian Empire of 1918 (Buday 1921, Cholnoky 1921, Edvi–Halász 1920). As a primary consequence of territorial losses, the new state was transformed from an almost single basin country to a country in the bottom of a basin (Figure 5).

Transformation of the state's population structure

The transformation of multi-ethnic Hungary into the region's most homogeneous country in terms of population was effected through the transfer of one-third of the Hungarian ethnic population to the successor states. The new state borders were almost exclusively confined to the ethnic settlement area of the Hungarian nation (Figure 6).

Figure 6

Trianon borders and the settlement area of the Hungarian nation according to Károly Kogutowicz



Source: Kogutowicz (1927).

Transformation of the local and territorial system of public administration

The provisions of the Belgrade Military Convention would have enabled the preservation of the Hungarian territorial and municipal administration; however, in Transylvania and Southern Hungary, the occupying victorious states (Romania and the Serbian-Croatian-Slovenian Kingdom) first disabled, and later, liquidated the Hungarian character of local and territorial public administration. The majority of the previous Hungarian state and local government officials were expelled from the occupied territories. (Taking oath of allegiance and acquisition of new citizenship were the basic criteria of public employment.) The territory of Upper Hungary was subject to similar procedures.

At the end of 1919, the country was subdivided into 34 counties, 11 municipalities, 36 corporate towns, 164 districts, 722 district notaries, 1,006 large villages, and 2,490 small villages. The number of heathlands, yards, and other inhabited areas was 9,086. An unprecedented scale of disparities in terms of territory, population, and administrative organisation came to characterise the counties due to the large number of truncated borderland counties and county fragments.

Figure 7

Territorial re-organisation of public administration in the aftermath of the Trianon Peace Treaty

Source: Bátky–Kogutowicz (1921).

In the midst of growing uncertainty, the expelled or exiled county administration relaunched its activities in the not occupied territories of Hungary. The fleeing of the Baranya county administration from the occupied town of Pécs to Sásd (in January 1919) is a striking example. The jurisdiction of the 'truncated county' extended to 87 municipalities and about 50 thousand inhabitants. In 1919, the tiny subcounty was comprised of 2 districts, 18 district notaries, 85 small villages, and included 56 statistically registered heathlands, yards, and other inhabited areas.

Following the birth of the Soviet Republic, the county directorate of the dictatorship was also transferred to Sásd. The Baranya county administration moved back to Pécs shortly after the withdrawal of the Serbian troops at the end of August 1921.

An examination of the territorial and settlement data corresponding to the administrative changes demonstrates their extreme severity, as indicated by the scale of territorial fragmentation and uncertainties characterising the borderland areas of the new state, especially prior to the negotiation and implementation of the Peace Treaty.

The implementation of the 1920 Population Census encountered serious obstacles amidst growing uncertainties. No population census could be conducted in the territories under Serbian occupation, meanwhile, data assembly was completed in Western Hungary.[1]

To signal their ephemerality, the state and municipal administrative organs of the county seats to be severed were transferred to new temporary county seats (Bátky–Kogutowicz 1921, pp. 179–181.).

Abaúj-Torna county seat from Kassa to Szikszó,
Arad county seat from Arad to Elek,
Bács-Bodrog county seat from Zombor to Baja,
Bereg county seat from Beregszász to Tarpa,
Bihar county seat from Nagyvárad to Berettyóújfalu,
Gömör and Kishont from Rimaszombat to Putnok,
Hont county seat from Ipolyság to Hont, later partially to Nagymaros
Komárom county seat from Komárom to Újkomárom,
Szatmár county seat from Nagykároly to Mátészalka,
Torontál county seat from Nagybecskerek to Kiszombor,
Ung county seat from Ungvár to Záhony,

In case of the annexation of Sopron, Csorna was designated as a potential county seat.

[1] The unprecedented number of footnotes prepared by the CSO to complement the data published in statistical yearbooks, the 1920 Population Census, and place nomenclatures give us a clear indication of the scale of uncertainties characterising the period between 1919 and 1921.

The new county seats – as constrained solutions – were unable to substitute the former ones in most respects. This applies even to Baja, the most developed town among the new county seats.

Constrained correction of the county territorial administrative structure, 1923

Prior to the correction, the territorial administrative division of the country was comprised of 34 counties, 12 municipalities, 38 corporate towns, 161 districts, 713 district notaries, 1,015 large villages, and 2,408 small villages. The Peace Treaty came into force with its enactment in 1921 and the exchange of ratification documents. The new situation had to be acknowledged by the political elite of the country, the county leaderships, and the citizens alike. From an administrative, economic and financial point of view, the unsustainability of severely truncated counties became increasingly apparent. Political and policy debate on the issues of truncated counties and county-level territorial reform were quite limited, with two notable exceptions (Benisch 1923a, 1923b and Prinz 1923).

As noted by Benisch, the truncation of the country and the annexation of minority-populated territories created an entirely new situation for administrative reforms. In the new context, ethnic issues no longer had to be taken into consideration, which was a greenlight for the rational re-organisation of public administration. Benisch suggested reducing the number of counties from 34 to 24. Assuming the permanence of the Trianon borders, he planned to extend the reform to counties unaffected by border changes (Hencz 1973).

Benisch fixed the optimal average population size of counties at 250,000 as a guiding principle of his reform proposals that were also attentive to transport modalities (primarily railway). He sought to gain credibility for his ideas on the introduction of the proposed 24 counties. The county-level reform was to be complemented with the settlement of the territorial delimitation of districts. Benisch, already notorious in administrative and political circles, provoked enormous outrage among the leaders of the counties to be truncated. Envisioning a 'county Trianon' triggered by the reform led to a wholesale rejection of Benisch's ideas by the county leaders.

Gyula Prinz studied the pre-reform position of the county-level administration and county seats in terms of transport geography. He designated the position of almost each county seat (excluding 'shadow county seats', such as Kiszombor). He prepared one- and two-hour isochrone maps for each county seat, and demonstrated the irrationality of the existing system of county seats and centres that took neither the size of the population nor the costs into account.

To determine the size of counties, Prinz sketched isochrones for one- or two-hour railway transit for each of the 24 new county seats that he designated. In his

view, the new territorial division of counties and their centres was rational, and was capable of fulfilling the interests of the state, the counties, and the population in general. A greater proportionality in the territorial division of Transdanubia and the Great Plain was also among the objectives of his reform proposal.

In his regional administrative reform concept, in addition to Budapest functioning as the centre of a Central region extending from north to south, he identified Győr, Székesfehérvár, and Pécs in Transdanubia, and Szeged, Debrecen, and Miskolc in the Great Plain, as ideal macro-regional centres. Prinz, unlike Benisch, was unknown in administrative and political circles, thus his draft received no objection (Hajdú 2000).

Eventually, the governmental majority provided a temporary solution for counties torn asunder by the border, by silently merging the county fragments remaining in Hungary.

Figure 8

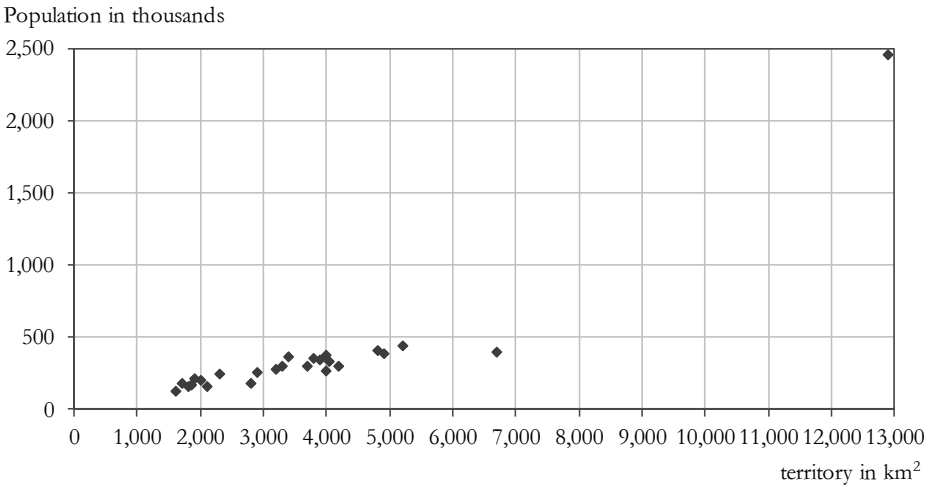
Hungary's administrative division after the 1923 territorial correction

Source: Hajdú (2001).

A glimpse at the extent of territorial correction indicates that Trianon put a major obstacle for territorial administrative reform. Large and intact 'inner counties', in order to protest against their truncation, claimed that the Trianon tragedy of the country should not lead to the 'Trianon of the counties.'

Figure 9

Differences in the territorial and population size of the counties (including municipal towns), 1923



Source: Hajdú (2001).

By the end of 1923, the Hungarian Statistical Year Register had registered 12 municipalities, 41 corporate towns, 161 districts, 734 district notaries, 1,038 large villages, 2,376 small villages, and 9,161 statistically recorded heathlands, yards, and other inhabited areas.

Conclusions

WW1 military defeat sealed the fate of the igniter, the Austro-Hungarian Monarchy, and the Trianon Peace Treaty changed the state of the country in every aspect.

The war led to the demise of historic Hungary. Hungary gained independence and sovereignty as a new nation-state, became unitary in terms of state structure and radically transformed its central state administration.

The ethnic composition of the state's population underwent a fundamental transformation, from a multi-ethnic country to one of the most homogenous states in the region.

The new state borders resulted in counties, districts, towns, and villages being split into two or more parts.

The settlement network also changed fundamentally and Budapest became more important than before.

Counties remained key stakeholders in the organisation of territorial administration. In 1923, the Hungarian political elite had neither the courage nor the will to undertake more than a temporary merging of the truncated counties and

county fragments, preferring not to tamper with the counties left intact by Trianon. This indicates an obvious connection between the transitional nature of the territorial administrative division and the outspoken claims for territorial revision.

Acknowledgement

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Estimating regional inequalities in the Carpathian Basin – Historical origins and recent outcomes (1880–2010)*

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This article aims to provide a general picture of the patterns of regional inequalities in the Kingdom of Hungary before its dismemberment. It also compares the location of the economic peripheries with areas dominated by national minorities and traces the changes in these patterns up until 2010 in modern Hungary and the successor states. We hypothesise that beyond the issues about land, suffrage, and minority, the issue on regional differences should also be considered as these might enhance or mitigate such differences, thereby either strengthening or weakening the internal cohesion of the state and the society. The second part of the paper investigates whether regional differences diminished in the broader region due to the regional development policies of the successor states – considering that, unlike in the 1910s, both the regional development planning and the notion of 'social equality' became a central part of economic policies. To analyse the above-mentioned questions, the GISta Hungarorum (1880–1910) database and the recent statistical data for Slovakia, Romania, and Hungary (2000–2010) were evaluated at settlement level.

Keywords:
regional inequalities, comparison of 1910 and 2010, Trianon boundaries, centres and peripheries, database, GIS

Introduction

Historical research usually tends to focus on vertical structures (such as society: Vörös 1979, Gyáni–Kövér 2004), and even if the territorial approach is applied[1], regional differences often remain in the shadow for historians, partly due to their lack of interest and their limited skills in using quantitative approaches (Geographical Information Systems and statistics). However, we are strongly

* The study is an edited version of a presentation held on 16 October 2019 at the conference "Trianon 100 – Consequences of the Treaty in the context of statistical analyses".

[1] At local scale see for example, Timár 1993. There were several attempts for implementing regional approach for the whole country, see Nagy (2003), Katus (1966), and Benda (2006).

convinced that a different approach might help revising and reinterpreting old results and statements. Geographers, who usually tend to emphasise territorial approach (Nemes Nagy–Tagai 2011), have rarely attempted to carry out historical research (except Győri 2006, Győri–Mikle 2017, Beluszky 2000) because of the weak accessibility to systematically organised historical data and the lack of historical interpretative knowledge. We assume that the combination of these two scientific disciplines and the introduction of new methods and approaches – both to history and geography – may be promising either when long term impacts of political decisions and socioeconomic processes are investigated or old statements and *topoi* are challenged and re-evaluated.

A statistical evaluation of recently created historical databases (project GISta Hungarorum)[2] may highlight the consequences of *sectoral development policies* (such as industrialisation and export-oriented agriculture) in an era when systematic *regional planning* hardly existed and regional inequalities were considered as natural consequences of the division of labour within a country. Governments of the past could be accused of neglecting certain regions by the subsequent generations of historians.[3] However, according to the Williamson (1965) hypothesis, inequalities within social classes and regions tend to increase during the initial phase of capitalism regardless of the differences in economic policies, whether it is liberal or centralising (or both). Could this be a good excuse for politicians who ignored regional problems? Would this assumption justify economic policies that exploited the peripheries, rendering them as suppliers of raw material and workforce while neglecting the development of industrial branches with higher added value? Was the spatial pattern of development between 1867–1910 balanced at all, or did it show territorial patterns? If it is the latter case, were there any large peripheral regions (and where were these), or was the picture rather mosaic-like? Were towns able to exert positive effects on their surroundings or was their dynamic development ineffective in this respect? Did regional differences coincide with ethnic boundaries, thus contributing to the increase in socio-political tensions and the destabilisation of historical Hungary or did the existing development patterns instead mitigate ethnic tensions? Why did the local elite perceive modernisation equal to 'magyarisation'?[4] Did the target areas of government-initiated development policies coincide with the peripheries identified by our method(s),[5] were these interventions successful, and if so, where? These are questions yet to be answered by historians. We try to answer these using geographers' tools and instruments in the first part of this article.

[2] http://www.gistory.hu/g/hu/gistory/gismaps

[3] Balaton Petra (2010, 2016) considers the evolution of peripheries in Hungary as the direct result of the government policy. This conviction was rare among Hungarian historians before 1945.

[4] This term was used by the historians of the successor states instead of 'nationalising policies' with a negative connotation. It is still frequently used even in regional planning (see: Bosák 1991, Pavlínek 1995).

[5] This means they were not mistargeted.

In short, the first part of the study discusses the patterns and causes of regional inequalities of development in the Kingdom of Hungary in 1910. One may question why such investigations are significant. There is a strictly professional and a political reason for this. First, by tracing the historical patterns and the background of differences, historians can contribute to a better understanding of the present problems. A region that was not a periphery 100 years ago now becoming a periphery implies the failure of the development policies (which sometimes failed to consider the historical roots of the problems because of the lack of studies on the theme). Similarly, a region that was a periphery 100 years ago, and continues that way even now also means that the efforts (if any) to overcome underdevelopment were either inadequate or misdirected, and failed interventions have serious costs. *Thus, knowledge of the development patterns of the past may help assess the efficiency of modern development policies and also help reducing costs by selecting adequate intervention tools and areas.*

The second reason is that the 'natural' evolution of 'growth poles' and peripheries had been interrupted by an external (and irreversible) interference into the system (the border changes in 1910), providing many centres of development and development policies over the last 100 years. Such a restructuration would imply a change in the pattern of peripheries. Nonetheless, the question of how the pattern of underdeveloped areas changed in the last century due to regime and border changes (and why) is a politically sensitive one. Although it might generate debates, it is still relevant to articulate questions such as – are underdeveloped regions the same as 100 years ago or are there any changes in spatial patterns; are successor states better owners of the acquired regions (in economic and not in national terms), than Austria-Hungary; were they able to improve the situation (was it their intention at all?) or was their economic intervention inefficient?

To check the changes and answer the above questions, in the second part of the study, the present-day differences in the development level were compared to those of 100 years ago. Given that we had no established knowledge or preconception on the nature of inequalities in the beginning of the 20th century, we may select from the following alternatives. 1. There were no remarkable regional differences in 1910, and that differences increased in the last hundred years (although such an outcome would not legitimise the economic necessity of Trianon); 2. There were no remarkable regional differences in 1910, and these differences did not change or decrease; 3. There were serious disparities in 1910, and the situation worsened; and 4. There were serious disparities in 1910, but tensions have been reduced thanks to the conscious development policies pursued in the successor states. Such an outcome may reason (retrospectively) the dissolution of a historical Hungary not only from ethnic but also from socioeconomic aspects (Demeter 2018a). The question to be answered in the second part by comparing historical patterns of development with present-day regional inequalities is – which scenario proves to be realistic? In short, the second part of the study investigates whether the differing

regional policies of the successor states were able to (1) overprint the patterns of historical heritage; and (2) mitigate regional inequalities in development levels by 2010 both within the state and compared to the former core, that is, Budapest.

Methods and problems of measuring regional inequalities in 1910

Among the causes of Trianon, one may enumerate social problems, ethnic tensions, and the questions on land and suffrage, but regional inequalities are rarely mentioned. Our point of view is that beyond the aforementioned problems, regional differences could also increase (or mitigate) these tensions. These factors could be superimposed on each other through synergism or could decrease the mutual impact. A region dominated by national minorities and also characterised by economic backwardness would show more symptoms of dissatisfaction than a prosperous 'ethnic region' (for the term and delimitations see Katus 1966). Further, if the population recognised that regions dominated by ethnic Hungarians were more prosperous, it would have easily led to the conviction among the representatives and historians of minority groups that 'magyarisation' went parallel to modernisation.[6] In other words, if socioeconomic fault lines coincided with ethnic boundaries, this would mean a greater destabilisation factor than ethnic boundaries not coinciding with peripheries, which weakens internal cohesion. Recent literature in other countries also emphasises the role of economic inequalities, beside nationalism, in the destabilisation of a state for the modern period (Pavlínek 1995).

Based on more than 7 million data processed within the framework of project GISta Hungarorum[7], four researchers (two historians and two geographers) were assigned with the task to identify the peripheral regions of historical Hungary in 1910 (Pénzes 2018, Demeter 2018b, Jakobi 2018, Szilágyi 2018). The objective of having scholars representing diverse scientific disciplines was to promote methodological diversity and scientific independence.

The first problem was how to measure the development level. The delimitation of peripheries can nowadays be done using numerous methods, although these do not always show coinciding results (Pénzes 2014). Therefore, it is questionable whether (and how) these could be adapted or adjusted to the situation of 100 years ago. The Gross Domestic Product (GDP) or Human Development Index (see Egri–Táczos 2018) data were not measured that time, either at the district or the settlement level. Furthermore, the utilisation of GDP at the regional level has been questioned in the literature (Ilieva 2011, Ianoş et al. 2013). Historical HDI can be calculated retrospectively but only at the district-level (Szilágyi 2018). However, for

[6] Gellner (1983) stated that nationalism was essential to achieve economic progress of the state.

[7] www.gistory.hu/g/hu/gistory/otka – website of OTKA K 111 766. Principal investigator: Demeter, Gábor.

GDP, such a resolution is a futile effort.[8] Nevertheless, calculating district-level HDI is a significant step forward compared to the method applied by Győri and Mikle. [9] Besides data levels and accessibility, another problem is that of the method to be used. [10]

Using a single variable leads to the question of which one to use. Each variable might show a unique feature and assessing the correct one is an issue. Different variables might lead to different historical interpretations. A good example of this problem is discussed below. If we consider direct tax/capita as an indicator of government pressure on the local population, the resulting picture confirms the perspective of Hungarian scholars, that is, minority regions were not overloaded. Compared to Bačka and the Bánát inhabited by Serbs and Germans, or the central plains inhabited by Magyars, Transylvania, Ruthenia, and Upper Hungary (Felvidék) were not overtaxed at all (Figure 1). This means that our neighbours' statement regarding the economic oppression/exploitation from the centre (Pascu 1984, Podrimavský 2011, Pop-Bolovan 2013)[11] can be challenged. However, the situation is entirely different if we consider another variable, the pattern of the settlement wealth/capita (symbolising the economic power of local communities and not of individuals; Figure 2). The picture is just the opposite − in Upper Hungary, Subcarpathia (Kárpátalja), and in numerous parts of Transylvania, the economic power was feeble, whereas it was extremely high in the Saxon lands and the Bánát region. Therefore, in many cases, the ethnic and economic boundaries overlapped and the results seem to confirm the statement of the successor states' historians, who stress that regions inhabited by ethnic minorities in historical Hungary were in an unfavourable situation. Thus, this conflicting result needs to be examined.

A realistic picture can only be gained if burdens are compared to income levels. Thus, the two maps in Figure 1 and Figure 2 had to be divided (Figure 3) to obtain a more balanced view. Though settlement wealth/capita values are not income data, it may fit into the purpose of the investigation. One may also use net cadastral land

[8] Not even the famous country-level GDP measurements of Maddison (2001) remained unchallenged for our region and the Balkans (for a thorough analysis, see Demeter 2014). Schulze's latest GDP estimations for Austria-Hungary (2000) focus on development trends and not on regional patterns. Good (1998) provided regional level data for Austria-Hungary, but only for the 1880s.

[9] Though the referred research remained at the district level, Szilágyi used complex indicators to assess development levels and used 1930 as a new time horizon not processed by Győri and Mikle.

[10] There is no generally agreed method for the selection of variables as the determining factors may differ from region to region and the level of investigation (Manic et al. 2012, Ancuţa 2010, Ilieva 2011, Ianoş–Heller 2006). Therefore, most studies use PCA. However, this is not the most adequate method in temporal comparisons as (1) the role of variables might change; thus, a Principal Component Analysis for 1910 and for 2010 might lead to different results leaving incomparable variables in the datasets. (2) Proxy variables existing for both periods might be filtered out because they do not show normal distribution in one of the time horizons to be compared. Therefore, one has to choose either this statistically more sophisticated method or the overlay of the variables (proxies). If the latter is used, then the variables for the different time horizons can be used in mirror.

[11] There are other, more balanced approaches (Mitu 2017).

income of settlements from 1909. Though this did not contain income values for husbandry, these are available for the districts and counties.[12]

The second problem is that agrarian incomes did not completely cover the income structure − in some places their relevance dropped below 50% of the total revenues due to the higher share of industrial and tertiary activities. Another problem is that the average values of income/capita at settlement level did not convey anything about the internal differentiation of a settlement (i.e. the distribution of income between owners and producers, large estate holders, smallholders, and agrarian wage labourers). However, as we did not have better alternatives (industrial income was not given at the settlement level), we decided to use these variables.

The picture obtained from both maps (Figures 3–4) shows that most of Upper Hungary north of the transversal railway line was overburdened; the same was true for Subcarpathia and most parts of Transylvania (except Székely Lands and the Saxon region), but the burdens on Bácska (Bačka) and the Bánát were low compared to the earnings, though both were multi-ethnic regions. This means that the opinion of the historians of the successor states is not invalid, and their statements regarding the inferior position of ethnic peripheries can be partly verified (Kováč 2011, Hronský 1998, 2001*;* Pop−Bolovan 2013).[13] Partly, because some of the regions showed differences based on the two maps (Székely Lands, Caraş-Severin, the Plains in NW-Hungary, and Southern Transdanubia); some regions dominated by Hungarians were also among the backward areas, while some regions dominated by ethnic minorities were also among the developed areas. However, this still means that in some cases, economic fault lines did coincide with ethnic boundaries.

More interestingly, not only indicators of wealth but also some variables indicating health conditions showed this pattern.[14] The share of whooping cough, measles, and scarlet fever in total deaths (traditional death causes) was high in Upper Hungary, Subcarpathia, and western Transylvania (Figure 5a), similar to Figures 3–4. Thus, economic disparities had social aspects as well (tuberculosis was more frequent in lowland areas dominated by Hungarians; however, without more in-depth investigation, one cannot decide whether it is due to modernisation and higher population density or because of higher subsurface water level).

The *same patterns recurred in other economic sectors besides agriculture*. The pattern of changes in industrial firms looked similar to the pattern of death causes, though peripheries (inhabited mainly by minorities) received more financial support for industrialisation than the centre between 1900 and 1910. This resulted in the concentration of industry, and thus many of the smaller firms were closed down

[12] See the collection of László Katus and Mariann Nagy in the county tables of GISta Hungarorum database.

[13] Contemporary works rather focus on the lack of political achievement. It was the marxists who emphasised economic and social backwardness (beside other aspects).

[14] Myrdal (1963) proved that the analysis of development could not be based on economic variables alone.

during these years (Figure 6). In contrast, in the central parts of the country the growth was more even, balanced (traditional industry declined in the German-Hungarian-Croatian Burgenland and in the Hungarian-dominated S-Baranya too). The fact that the areas dominated by Hungarian-speaking population were in a more favourable situation in regard to the stage of industrialisation also (Table 1),[15] may be the reason for the statement expressed by the historians of the successor states that modernisation and nationalisation (Magyarisation) went hand in hand (see also Pénzes 2018).

Table 1

Relationship among development level, ethnicity, and religion

Development deciles	Industrial earners% (Regional Development Index of : Pénzes 2014)	Proportion of population able to speak Hungarian, % Győri-method (2006)	Proportion of Roman Catholics, % RDI	Proportion of Protestants, % RDI	Proportion of Greek Catholics and Orthodox, % RDI
Lowest	5.8	3.3	51.0	8.1	34.9
2.	6.4	9.2	48.0	13.1	31.7
3.	7.0	24.2	51.9	12.6	28.7
…					
8.	12.5	65.0	45.7	15.6	26.2
9.	16.5	67.3	47.0	16.5	21.1
Highest	34.7	66.9	54.9	13.4	11.2
Total	17.3	54.6	49.2	14.3	23.8

Note: data from Pénzes (2018).

Another specific feature is that in the regions classified both as underdeveloped and dominated by ethnic minorities, it was usually the governing parties supporting the system of 'Ausgleich' who won the elections in 1867, while in the modernising Hungarian Great Plains it was the opposition (the 48er parties) that usually won, though they were never in power (except for 1905–1910). Therefore, they were not responsible for the prosperity of the region (Pap 2014, 2016). On the other hand, despite being in power for 50 years, the governing party of the two Kálmán and István Tisza could not (or was not willing to) generate any economic progress in the (mostly) peripheral regions where they usually won the elections. Furthermore, though Prime Minister Bánffy stated in 1899 that the electoral census (based on land tax) was lower in these peripheries, implying that a Slovak or a Romanian might get the right to vote more easily than a Hungarian (Gerő 1988), this also proved to be a incorrect statement. If we compare the value of the census with the agrarian incomes, most of the territory of the country falls into the interval of 15–20% (Figure 5b). Thus, there was no intentional differentiation regarding the

[15] Their leading role in agriculture has already been discussed.

electoral census between the communities speaking different languages. However, there were some exceptions –the value of the census measured to land income was higher in the whole Transylvania (including not only the Romanian but also Saxon and Székely counties), NW Upper Hungary (which was an ethnically Slovakian region, the homeland of Andrej Hlinka and the site of the Csernova massacre),[16] and Subcarpathia. Therefore, these were not only regions dominated by ethnic minorities – and at the same time economically backward areas – but were also suffering from lower electoral (thus political) representation. However, this was also true for the ethnically Hungarian (and German) S-Transdanubia, where the census was also high compared to the land incomes and excluded the agrarian daily wage labourers – who worked on the land of large-estate owners – from the elections (S-Transdanubia was characterised by such estates. Peasant participation in elections was more balanced in the Körös-Maros region [Viharsarok], which was also dominated by large estates, but the census and land tax compared to income were not as high as in S-Transdanubia).

The sometimes contradictory and at other times coinciding results of the pattern analysis of cartograms containing one or two variables led us to test *a series of diverse methods based on more complex approach* (applied in regional science) to derive more established and balanced conclusions. Testing several methods was also reasonable for general methodological purposes.[17]

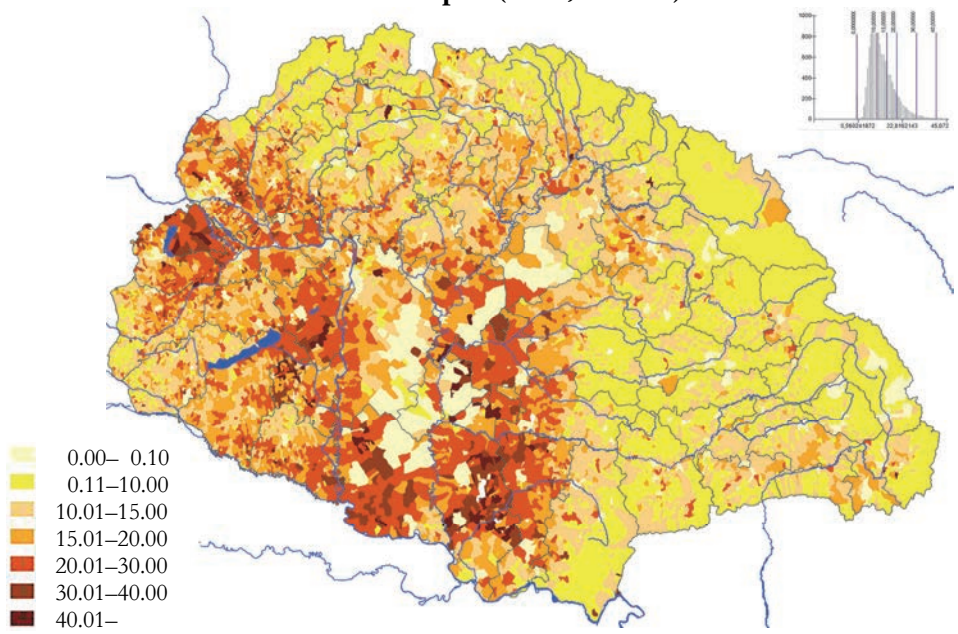
Thus, an investigation similar to the formerly mentioned district-level attempt of Győri and Mikle was also carried out at the settlement level by Zsolt Szilágyi (2018; the same six variables were used). Another investigation used the LISA (Local Indicator of Spatial Association) method to trace the connectedness of developed and underdeveloped regions (Jakobi 2018). The third investigation adopted the method elaborated for the recent data structure and development trends by János Pénzes (2014), which was based on the identification of independent variables (PCA; Pénzes 2018). Finally, the superposition of cartograms containing single indicators was also tested. All the methods and set of aggregated indices were applied to substitute GDP (Ianoş et al. 2013). The variables used in these investigations are shown in Table 2, which also draws our attention to the interesting fact that the set of common variables was low in some cases. Details on the results of the investigation based on the PCA of input variables can be read in the article of János Pénzes (2020).

[16] For the occasional connection between development levels and the places of outburst of tensions in forms of physical violence see: Demeter 2019.

[17] See footnote 10.

Figure 1

Direct taxes/capita (1909, Kronen)



Note: data is missing for some cities in the plains.

Figure 2

Settlement wealth / capita (1909, Kronen)

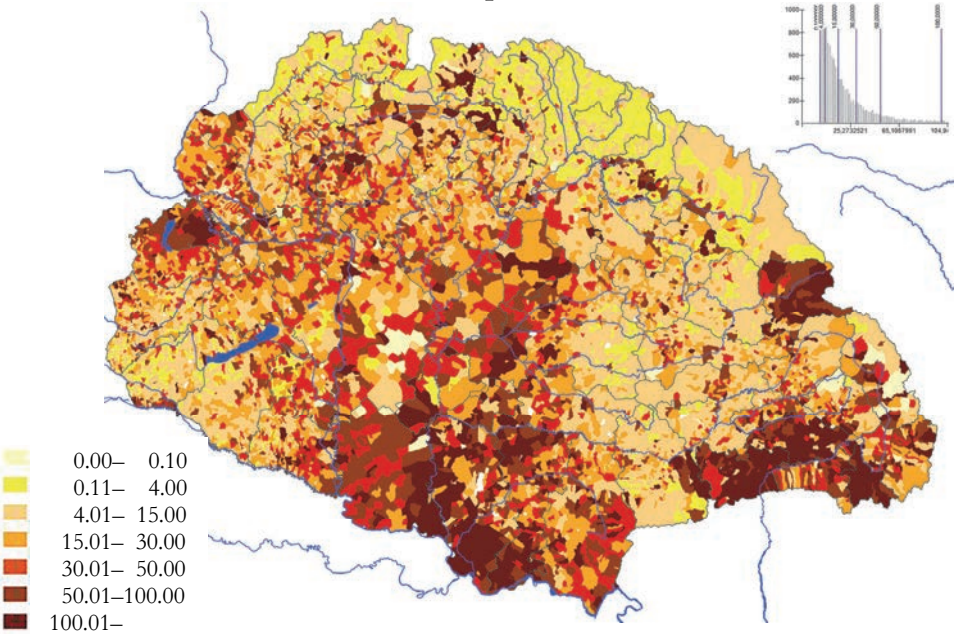


Figure 3

State burdens (direct taxes) compared to settlement wealth (1909)

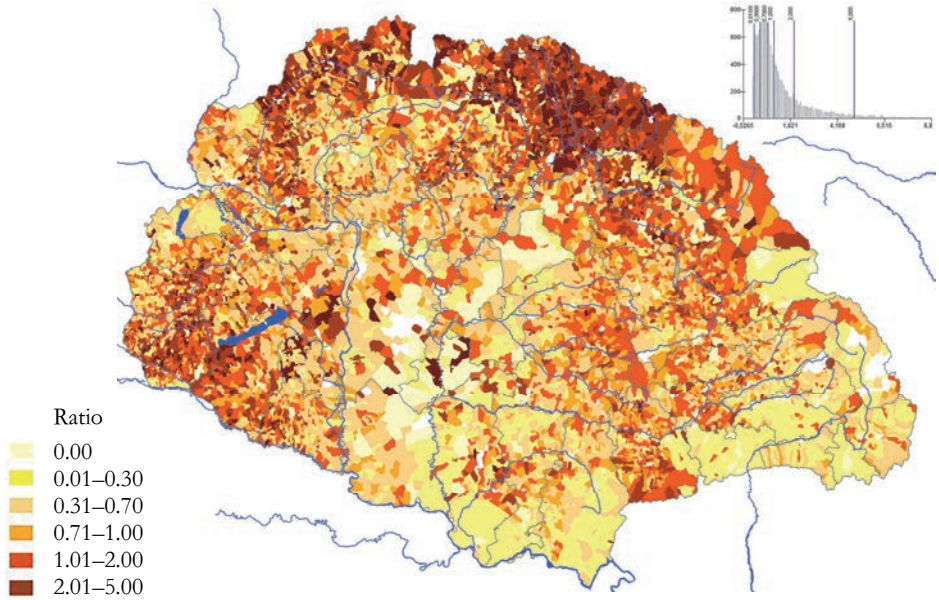


Figure 4

Direct taxes compared to agrarian incomes (1 = 100%)

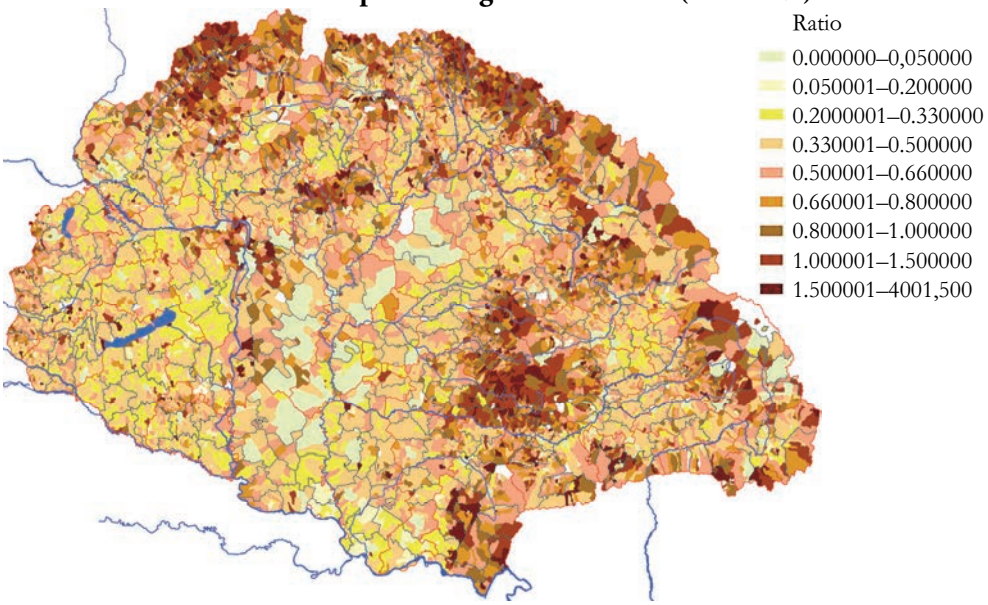


Figure 5a

The total share of measles, scarlet fever, and whooping cough in total deaths (%, 1901–1910, yearly average)

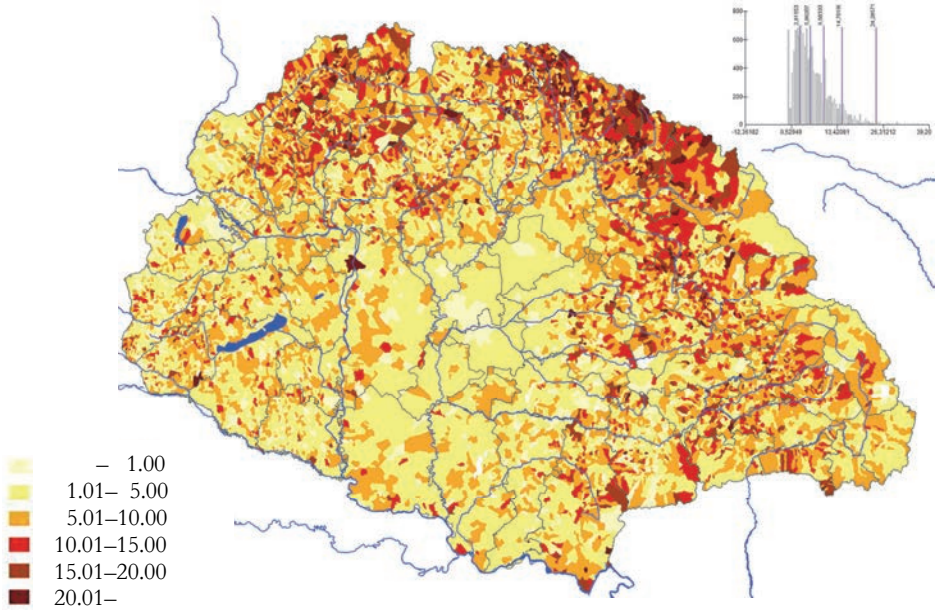


Figure 5b

The value of electoral census (based on land tax) compared to income from crops in 1900 (1 = 100%)

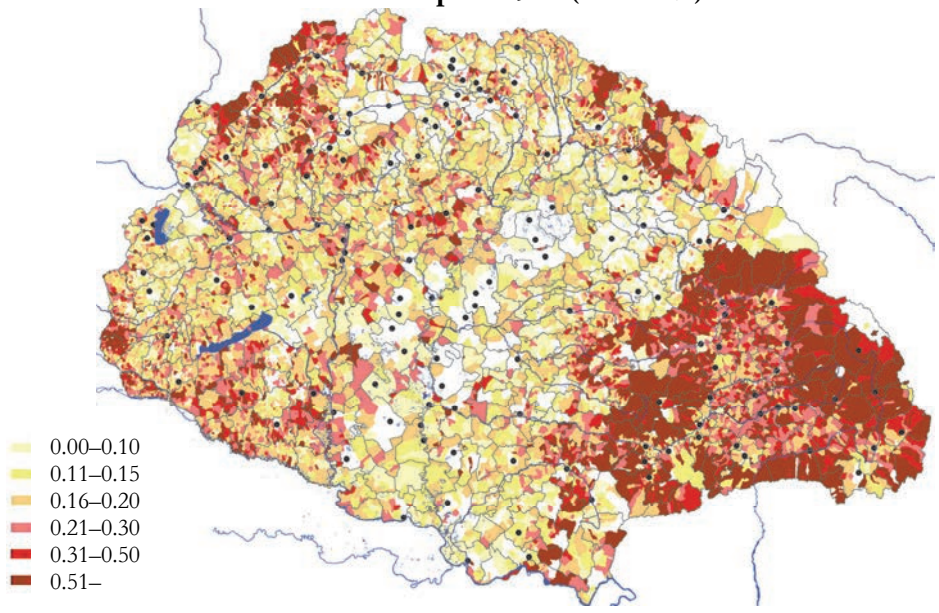


Figure 6

Change in the number of industrial firms at the settlement level (including small-scale industry with one worker) between 1900 and 1910

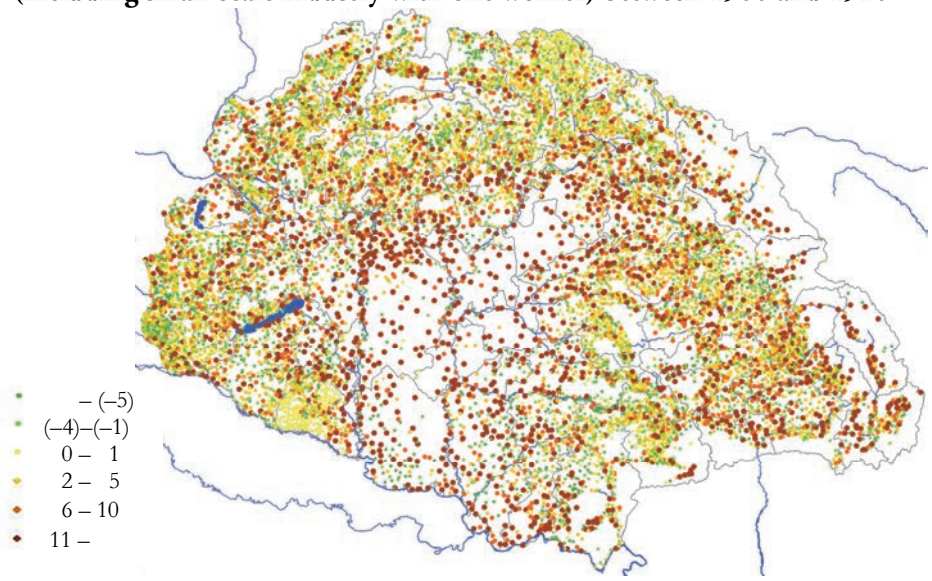


Table 2

Indicators used in different investigations to delimit cores and peripheries* (2018)

Szilágyi, Zsolt (5)	Pénzes, János (6)	Demeter, Gábor (27, then 12)
Literacy rate above 6 years, 1910		Literacy rate, 1910
Deaths receiving medical treatment (%), 1910		Deaths receiving medical treatment, %
Houses of good quality (%), 1910		Houses of poor quality, 1910
Migration rate, 1901–1909		Migration rate, 1901–1909
Earners in industry and tertiary (%), 1910	Industrial earners, %	Industrial earners
		Tertiary earners, %
	Infant mortality	Death rate or infant mortality
Győri, R. and Beluszky, P.	Earner/non-earner ratio	Earner/non-earner ratio
	Cadastral net income per inhabitant	Cadastral net income per inhabitant
	Direct state burden per capita, 1909	Direct state burden per capita, 1909
	Net income of settlements per capita	Net income of settlements per capita
		Agrarian transports, t/1000 prs
	derived from the variables by PCA	Distance from railway, m, 1890
		Smallholders compelled to search for daily wage labour %, 1910
		Overlay of single maps, aggregation

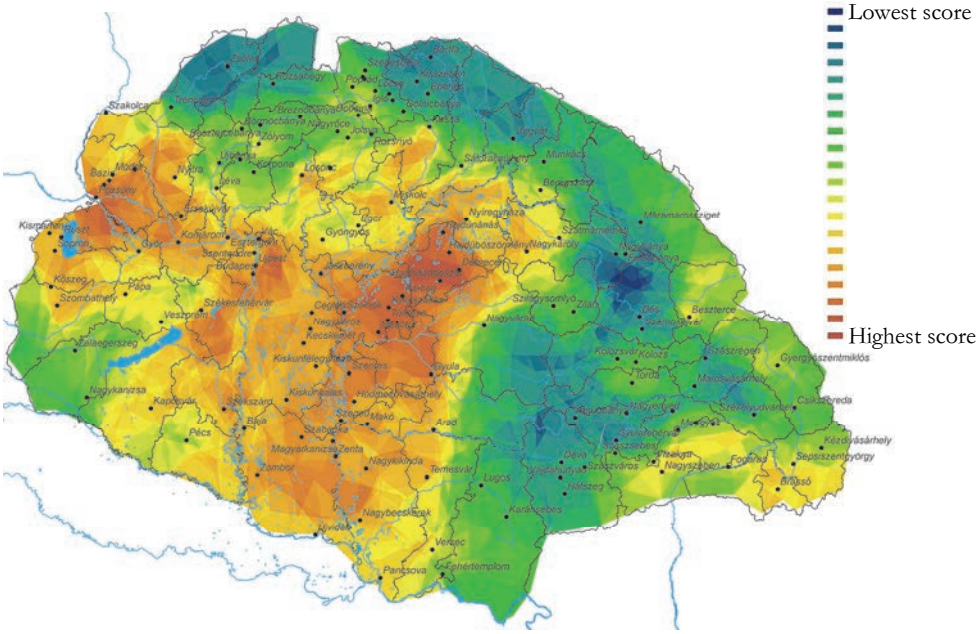
* The same indicator pairs occurring in different investigations are positioned next to each other.

Regional patterns of development level in 1910

Surprisingly, despite the methodological differences, peripheral regions were almost the same regardless of variable numbers and methods (except the method elaborated for the modern needs [Pénzes 2014], which drove us to the conclusion that the criteria and interpretation of backwardness changed significantly between 1910 and 2010). This indicates that *backward regions were stable and well-traceable in historical Hungary*. This also implies that *government policies were unable (or unwilling) to overcome this problem*. Nonetheless, the evolving regional division of labour – workforce and raw material vs processed goods – was neither against the concept of liberal nor against the centralising economic policies; and this type of division of labour did not make possible the diminishing of evolving disparities. The analysis of other cartograms created within the frames of the project GISta Hungarorum (Demeter 2019) proves that the effect of industrial centres on their broader surroundings was rather limited.[18] Although drawing the workforce from the rural background, and thus mitigating demographic pressure, no real development in living standards was achieved in these zones. By 1910, *the development pattern of the industry remained mosaic-like – except for Budapest – and its effect was sporadic*.

Figure 7

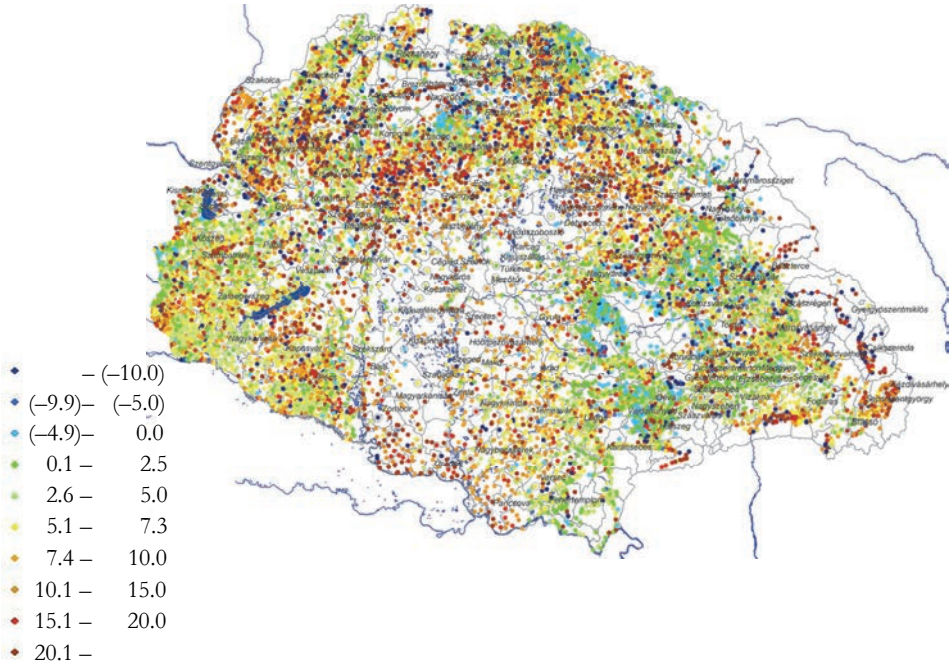
Aggregated development level in Hungary in 1910 based on 27 indicators



[18] According to the theory of 'unbalanced growth', industrialisation as a strategy to diminish territorial gaps had evident limits (Hirschman 1958).

Figure 8

Aggregated dynamism of development in Hungary between 1880 and 1910 based on 6 variables



While analysing the spatial pattern of regional inequalities, we also differentiated between variables indicating the dynamism of development (Figure 8) and the stage of development (Figure 7) because these are considered two different aspects of development. Based on the changes in the values of economic variables between 1880 and 1910, the *dynamism of development* was outstanding in the Délvidék (Bačka and Bánát) and along the Danube-axis in N-Transdanubia and good in the Budapest-Szolnok region and east from the river Tisza. The northern Upper Highlands, Subcarpathia, and western Transdanubia were not only underdeveloped but also showed weak dynamism. Thus, the difference between developed and underdeveloped regions during the 1880–1910 period increased. If demographic indicators are also included in the set of variables representing the dynamism of development (such as migration rate, which also refers to the attractiveness of a place), then Bačka is overtaken by the northern Tiszántúl, and the northern Transdanubian axis is substituted by southwestern Upper Hungary. The surroundings of Kolozsvár/Cluj-Napoca were also dynamically developing. The northern part of Székely Lands – though generally a backward area – was developing, while the Saxon lands were developed but stagnating areas (the lack of significant industrial investments [Figure 6] contributed to this pattern in the latter region). The map also confirms that in some cases *state intervention* brought some

relief (see the so-called 'Székely action') and decreased the backwardness at least from the macro-perspective, while in other areas (unfortunately, mostly in regions dominated by minorities), it *proved futile* (the Ruthenian action failed). Though intentional (ethnic) discrimination should not be assumed behind this outcome of events (for such actions, see Braun 2017, Balaton 2016, 2017), the ambivalent results did not increase the trust of minorities towards the central government (anyway, the locations of state intervention and peripheries identified by us often coincided, which meant that *the government was aware of the regional inequalities*).

The *static map* illustrating the development stage of the regions of the country based on the aggregated values of 27 single variables (created by overlay method) showed the following patterns: the surroundings of Budapest, Debrecen, and Bratislava/Pozsony seemed to be the most developed in 1910 (the latter included the more traditional-rural Moson County too, due to the proximity of Vienna, Győri 2006), which were connected through the Budapest-Szolnok axis and the Danube-axis as 'bridges'. This strip continued towards Pécs and in the Danube-Tisza Interfluve and the northern part of Bačka, furthermore including parts of Békés County inhabited by Slovaks. Miskolc and the Kassa (Košice)–Rozsnyó (Rožnava)–Losonc (Lučenec) zone along the transversal railway were also in favourable position regarding their development levels but these were isolated from the core areas. The traditional mining towns in Central Slovakia showed only average performance. From Transylvania, only Nagyszeben/Sibiu and Brassó/Braşov were able to emerge from the underdeveloped background (but based on their dynamism they were not among the first; Eger in Hungary was in a similar situation). The position of Medgyes/Mediaş and Kolozsvár/Cluj-Napoca was only favourable within Transylvania. However, compared to the Hungarian towns, they were not developed (though were emerging quickly according to the dynamic map).

In the present territory of Hungary Zala and Nógrád Counties and the Szatmári-Tiszahát were the least developed. The situation in Nyírség was a bit favourable, although it was still among the backward regions, while the Cserehát, Bihar and the future Tisza-tó region (now considered as peripheries) were not among the most underdeveloped. The northern parts of Upper Hungary, Subcarpathia, and West-Transylvania accompanied these backward regions considering the area of historical Hungary.

The general picture allows us to challenge the existence of the West–East slope (which is a characteristic of the modern period, i.e. in the present area of the country) as differences in development levels show a concentric pattern rather than a sloping one. Furthermore, sometimes fault lines and fractures (sudden drops in development levels) occurred – for instance, along the Nagyvárad/Oradea–Szatmárnémeti/Satu Mare line and in the neighbourhood of Trencsén (Trenčín), Ungvár (Užhorod), and Losonc (Lučenec) along the transversal railway line, and even between the Székely Lands and the Saxon region in Transylvania. *The future (1920) political boundaries almost coincided with the economic fault lines in Transylvania*: *the*

union of Transylvania and Hungary did not result in the mitigation of socioeconomic differences between 1867 and 1910. The future boundary between Czechoslovakia and Hungary (1920) also almost coincided with the fault line, which was located north of the transversal railway line, at the Slovakian-Hungarian ethnic contact zone. These urban centres located along the railway line were essential for the viability of Slovakia, and therefore were attached to it (the East–West railroad could not be the sole reason as there were other railway connections between Bratislava and Košice). *The accession of this market line to Slovakia contributed to the maintenance of the original division of labour (raw material vs processed stuff) in these regions despite the establishment of a new political formation*.

The *picture we obtained is in sharp contrast with the general topoi of the economically unviable Hungary after* 1920.[19] The mutilated Hungary was composed of the most developed regions. In other words, those regions were detached from the country which would have required substantial additional sources for development purposes that the centre – being economically exhausted after the war – did not have (the loss of Bačka is an exception from the general scheme). The loss of industrial centres and raw material sources might be a disaster for the processing industry of the centre. Still, a comparison of the maps showing the general development level and that illustrating the agrarian incomes proves that the remainder of the country was primarily determined by the development level of the agricultural sphere, and that the local urban centres were based on the utilisation of agriculture.[20]

To summarise our results concerning the situation in 1910, the following conclusions can be made:

The location of peripheral regions was stable in 1910, regardless of the method applied and the number of variables involved. This methodological independence of the results helps when the number of applicable methods is limited for other time horizons (the structure of the database did not allow us to use diverse methods for 2010; however, the method chosen for the 2010 investigations was available for 1910 too, which made our investigations comparable).

The general picture obtained for 1910 suggests the following:

(a) The centralisation (and nationalisation) of the economy resulted in a special division of labour in Hungary: workforce and raw material vs processed goods. By 1910, this asymmetric interdependence manifested in development levels too. Sometimes, the central government even encouraged this dichotomy (Balaton 2010a, 2010b, 2016 and 2017). Regional inequalities were considered as natural consequences of the division of labour within a country at that time, regardless of the pursued economic policy.

[19] This *topos* has already been challenged by Gyáni (2002) and lately (in macroeconomic terms) by Tomka (2011, 2013 and 2014).

[20] Therefore, for this part of the region, the collapse of grain prices in 1929 was the key problem to cope with and not the loss of raw material and workforce. Industrialisation was accelerated only after 1930.

(b) Early government interventions were not always successful – the different outcome of the Ruthenian and Székely 'actions' is highlighted even by macroeconomic data on the maps (Figures 7–8). The target areas of government-initiated development policies coincided with the peripheries identified by our method, indicating that our classification was correct. The problems were often mistreated and government interventions were unable to bring relief for larger regions. The Hungarian ethnic character of the Székely Lands as the intervention area (though it suffered from massive emigration to Romania: Makai 2018) suggested hidden government discrimination against the underdeveloped areas. This unproven preference was strengthened by the failures of other actions targeting areas dominated by ethnic minorities.

(c) The boundaries of developed regions coincided with the Slovakian-Hungarian language border and the Ruthenian-Hungarian language border. This phenomenon weakened the internal cohesion of the country and strengthened national movements. (this pattern does not stand for Bačka and Bánát, which were among the most developed, despite being multi-ethnic regions). Our maps suggest that the administrative unification of Transylvania with Hungary failed to initiate real economic integration. The future political boundary between Romania and Hungary (Ér Valley) was also located along a fault line.

(d) The main towns were unable to exert positive effects on their broader surroundings. Industrialisation was also unable to improve the rural background's general socioeconomic features. This increased the migration towards the towns with better performance.

(e) This implicitly means that modernisation performed better in regions where Hungarian was spoken (such as the concentration of new industrial firms show, Figure 6 and Table 1). Thus, modernisation programmes were not always welcomed by national minorities as these were considered to be the instruments of 'Hungarianisation'.

The question is, can any government(s) be considered responsible for these differences, or was it merely a natural consequence of liberal economic policy pursued by most of the countries at that time? According to the Williamson (1965) hypothesis, at the beginning of the capitalist transformation, inequalities would naturally increase not only in social but also in spatial terms, regardless of the economic policies pursued. Therefore, does this mean that practically there is no one to blame for the economic division of the country? Hungarian scholars had accused Habsburg economic policy doing the same, when creating the internal customs boundary in 1754, rendering Hungary into a producer of raw materials and products of low added value. We do not want to analyse the truth in these accusations and statements. However, if the Hungarian scholars' opinion on this topic is discussed, it is evident that similar allegations of the historians of the successor states regarding their nations' economic position in Greater Hungary

should not be refused *ab ovo*. If by the beginning of the 20th century, the geographical periphery also became an economic periphery (just think about the situation before the 18th century, when Upper Hungary was the most developed region, and the Great Plains were devastated by Ottomans) without any official establishment of similar barriers as in 1754, the question that naturally arises is why would this happen, and who is responsible for that?

The Tobler hypothesis of regional science can provide a clue to the problem. The hypothesis states that neighbouring districts should be similar to each other under normal conditions (Tobler 1970). If there is a great disparity, for example, in the development level between neighbouring areas (thus sudden fault lines and fractures tend to appear instead of gentle sloping), it means an anomaly, which is either caused by the non-interventionist policy of the governments or is a direct result of the applied economic policy. In other words, if fault lines appear, the responsibility of decision-makers cannot be denied. We have already proved that there were fault lines along the transversal railway towards Slovakian and Transylvanian villages (broadening our scope further, similar fault lines appear between Austria and Hungary, and Czech Lands and Slovakia in the 1930s even at district-level: Demeter et al. 2018, Faltus 1983, Bartlová 1988). In fact, the blooming of Budapest to overshadow Vienna had a high price, which had to be paid by the part of the country inhabited predominantly by national minorities.

Regional inequalities in the Carpathian Basin 100 years later

In the next few paragraphs, we investigate whether the successor states were able to resolve the above outlined problems and whether their regional development policies affected positively or negatively the areas inhabited by the new national minorities. Increasing or persisting inequalities or merely the shifting of backward regions would mean that their regional policies were no better than those in Hungary 100 years ago. At the same time, the general diminishing of differences (only if it is parallel to the general improvement in development levels) might be the desired outcome that would legitimise Hungary's dismemberment in the eyes of the posterity.

The main methodological problem regarding such investigations is the accessibility to data. First, the character of the census has changed over time. Second, even if there is a common set of variables for the timespan, their meaning and content might change ([Kramulová–Zeman 2013] e.g. literacy rate has an indicative role in modernisation in the 19th century; however, by the end of the 20th century, it lost its importance and might have been substituted by 'computer literacy', which is not collected or published by all of the successor states at settlement level). This brings us to the third problem, that is, data harmonisation. The structure of the census not only changed over time but also differed from country to country, making a comparison harder.

Fourth, not even the system of territorial units remained the same, which made data visualisation more problematic, as new base maps (using the same scale and reference system as earlier) had to be created (Slovakia and Hungary kept the settlement level structure in the census as was in 1910, but Romania adopted the system of communes, a unit composed of several villages). This meant that these territorial adjustments had to be identified first, then recoded in order to visualise data.

Fifth, even variables referring to similar phenomena might differ marginally in their content, and these had to be adjusted too (unemployment measured with respect to total population or unemployment measured with respect to the population of working age gives different outcomes). These problems naturally implied that while the maps themselves − showing the level of development in 1910 and in 2010 − can be technically overlaid on each other because of the common features, the changes in development level cannot be calculated automatically. The application of modern statistical approach to delimit peripheries is also limited because methods elaborated to quantify differences in recent times cannot always be adapted or adjusted to that of data of a hundred years ago.

In other words, instead of calculating the changes in aggregated development level (for example, by dividing the 2010 and 1910 values for the same settlement), we investigated how the spatial patterns of (under)development changed over time, measured with respect to the actual development level of the once imperial centre, Budapest.[21] This method was rather useful because we were not only unable to cover all the regions but also reproduce all the variables for 2010, which were used in 1910. Bačka / Vojvodina and Subcarpathia were omitted from the investigation because of the low number of available common indicators and the lack of high-resolution statistical data (we managed to find only district-level data for both areas, which would result in not more than 40 territorial entities for Vojvodina and 15 for Subcarpathia).[22] As the significance and the content of variables changed over time, constant variable structure is not a requirement in case of such investigations. However, to be at least methodologically consistent in visualisation, we used similar methods as we did in 1910 (aggregation of normalised single variables, overlay method) to identify peripheral regions in 2010.

Finally, the following single variables were selected, visualised on individual maps, then aggregated. The whole dataset was normalised for the three countries

[21] In other words, we rather compared patterns of inequalities and relative development measured to the centres, than the rate of development between 1910 and 2010 for each settlement.

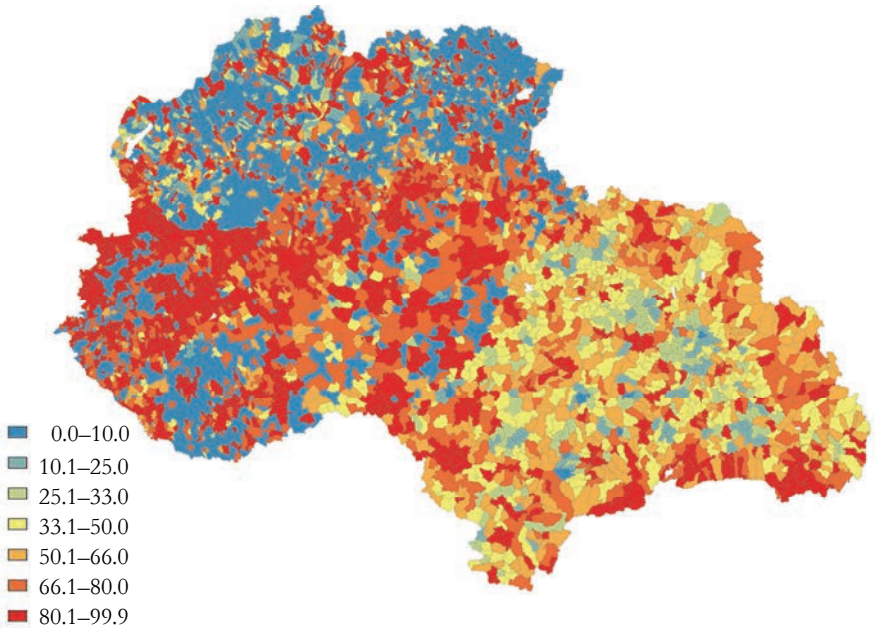
[22] Furthermore, the incorporation of Serbia would reduce our dataset to 6 indicators instead of 10, as we lacked certain data (% of unemployed, population with degree).

and was thus considered as one entity for this examination. Indicators[23] similar to those used in the investigation for 1910 are italicised.[24]

- the proportion of houses built between 2001 and 2010 measured as a share of total dwellings
- *the proportion of the population who finished only (or failed to finish) primary school*
- the proportion of the population with a degree (higher education)
- the proportion of those unemployed in total population
- the proportion of those employed in total population
- *the migration rate between 2001 and 2010 (average)*
- *the ageing index (correlates with death rate)*
- *the proportion of houses connected to the sewerage system*
- the number of persons/household (household size)
- *income / capita*

Figure 9

Proportion of houses joined to the sewerage system, 2010



[23] The variables used for the 2010 investigation were similar to those used by Ianoş et al. (2013), though the latter used a different method (PCA) and their investigation was carried out at county level for the whole Romania.

[24] Data source for Slovakia: Statistical Office of the Slovak Republic, DATAcube: https://slovak.statistics.sk
for Romania: TEMPO Online, http://statistici.insse.ro:8077/tempo-online/#/pages/tables/insse-table;
for Hungary: Hungarian Central Statistical Office, National Regional Development and Spatial Planning Information System, National Tax and Customs Administration. For GIS-basemap:
https://ec.europa.eu/eurostat/web/nuts/nuts-maps and
https://ec.europa.eu/eurostat/web/gisco/geodata/reference-data/administrative-units-statistical-units/countries

In the following pages, we briefly analyse the maps based on single indicators (and the problems that arose during the visualisation process) to illustrate patterns before the final overlay.

Sewerage rate (Figure 9) was especially high in Hungary along the Vienna-Bratislava-Budapest axis. High values continued to appear along the directions defined by larger towns connected by motorways or central railroads. In general, Hungary showed the best performance among the three countries analysed. In Slovakia, the average value was lower − only Upper and Central Slovakia showed some progress − while southern Slovakia was lagging behind the European Union norms. In Romania, the picture is more versatile and mosaic-like, though the general situation is not good at all. However, according to the census, other facilities beyond the general public sewerage system also exist here, and this differentiated the dataset. Therefore, mediocre values within the settlements were more common in Transylvania, while in Slovakia or Hungary, the distribution of the values concentrates around either 0% or 100%.

Unemployment rate (Figure 10a) was difficult to adjust for the three countries because the censuses used three different variables for various periods of the year (summer or winter data are not equivalent and this may also influence the pattern). Finally, we adjusted the unemployment rate to the total population. The lowest rates were measured in western Slovakia, West-Hungary, Southwest-Transylvania, and Northeast-Transylvania (Benedek et al. 2018), while extreme values characterised Eastern Slovakia, the ethnic contact zone along the Székely Lands, and the central parts of the Hungarian Great Plain along the Tisza river, the Nyírség, the northern borderlands including the Cserehát, and Baranya along the Drava River. The former three and the latter two regions can be characterised by the excessive number of Roma (and young-aged) population.

The share of employed (Figure 10b) is not a direct complementary set of the unemployed because neither subset contains the proportion of pensioners and those who participate in education. Originally, both the share of employed and unemployed is measured with respect to the population of working age. However, to harmonise the different variable values, we measured both with respect to the total population, which legitimises the usage of this variable. According to the results, Slovakia can be divided into two parts along an SW–NE line. In Hungary, Southern Transdanubia, Southern Heves, the Nyírség, Borsod, and the Bihar region showed the least progress. Not surprisingly, this correlated well with the patterns of unemployment. In Transylvania, the employment rate was generally higher in the Székely counties and the mountainous regions. The values were also relatively favourable along the Hungarian border and in Bistriţa-Nasaud.

Figure 10a

Unemployment rate (2010, in % of total population)

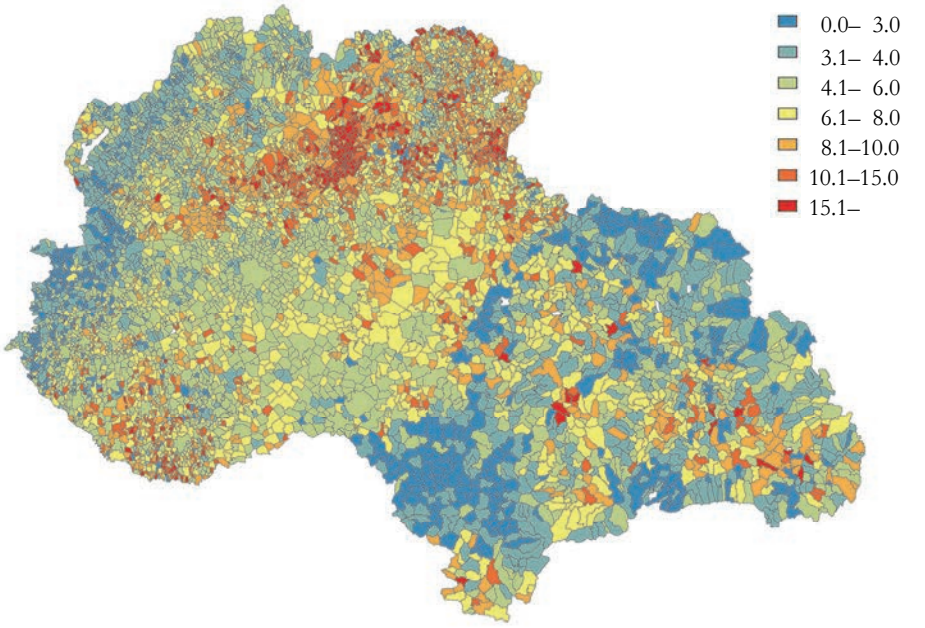
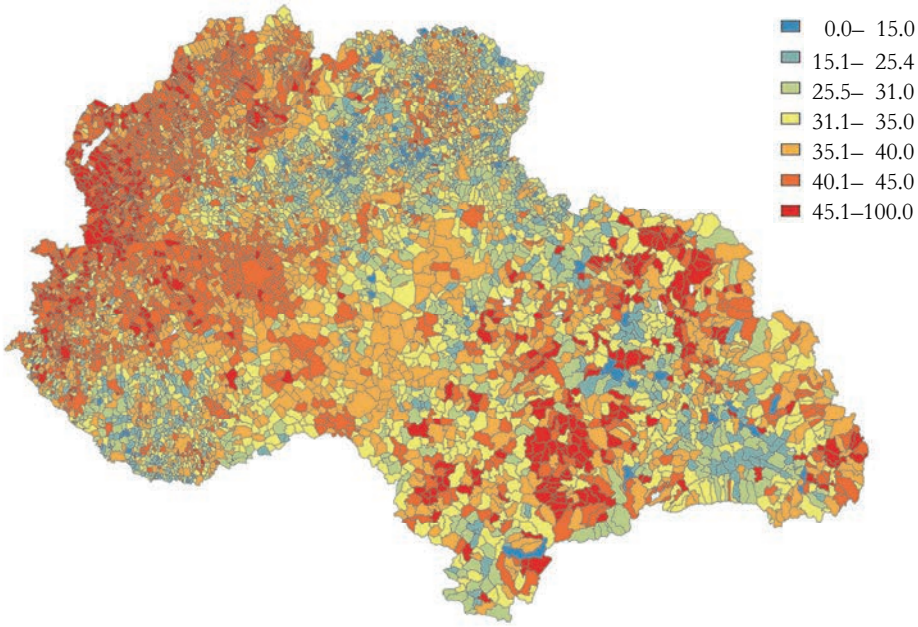


Figure 10b

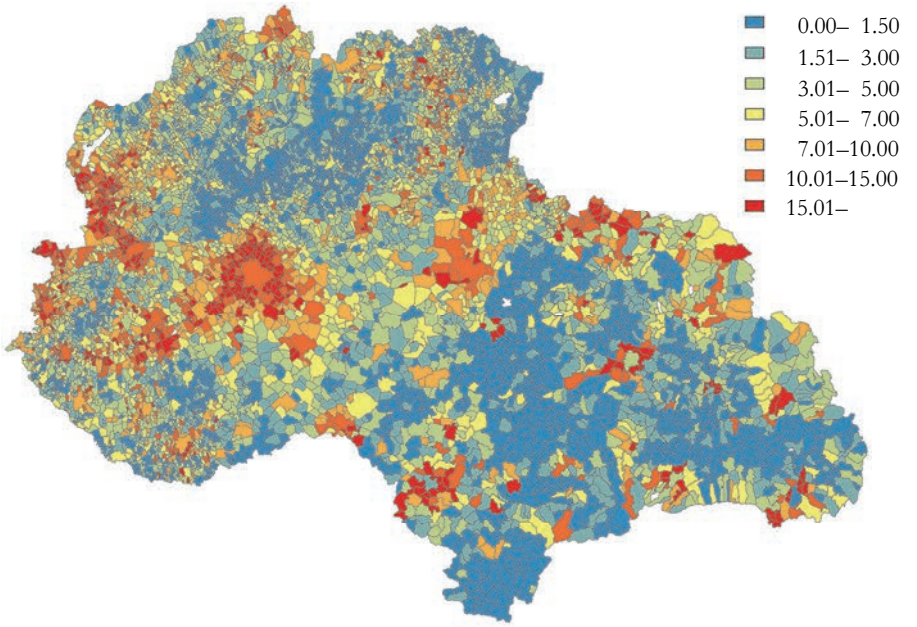
Employment rate (2010, %)



The pattern based on the *proportion of new dwellings* (Figure 11) was applied to delimit the real cores of the developing/developed regions. It is bound to urban centres such as Bratislava, Győr, Budapest, Debrecen, Oradea, Timişoara, Cluj-Napoca, and Braşov, which emerge from their almost homogenous matrix (background).

Figure 11

Share of new houses built between 2001–2010 in the total (%)



Migration rate (Figure 12) indicates a similar pattern (Novotný–Pregi 2018). However, the correlation between the two variables is not evident because there are regions that are characterised by great migration surplus, although the number of new dwellings, at the same time, is meagre. It is very interesting that while villages in Hungary are characterised by negative migration balance along the Hungarian–Slovakian borders (Lennert 2017), the other side of the border – more or less Hungarian in character – shows better performance (though still not good enough to attract people), partly due to the maintenance of 'forced' ruralisation, which is not considered in Hungary as a viable form of living. The positive balance in N-Csallóköz is a result of the vicinity to the capital and not the vitality of the local communities. In Transylvania, the mountainous zones are net sinks (nevertheless, this does not automatically mean a general decrease in population, as net reproduction rate is not encouraging).

Population density per household (Figure 13) was supposed to represent welfare (and not merely family size) in our approach. In some regions, the high values correlate well with the frequency of the Roma population (which is also indicative of the

general level of welfare). The Hungarian Great Plains were characterised by a small number of inhabitants per house, which also differed from the average family size of the region, thus referring either to (e)migration processes or the higher share of empty houses.

Figure 12

Migration rate (yearly average, 2001–2010)

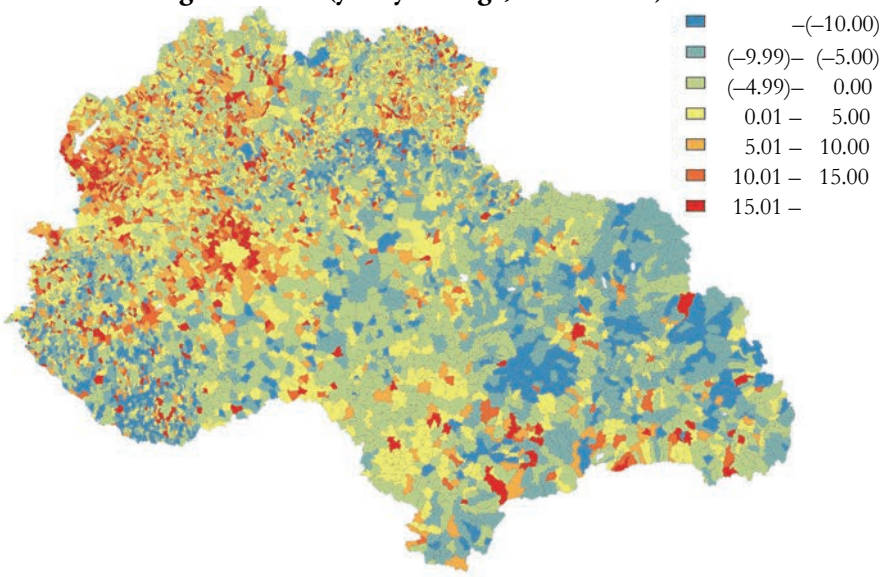
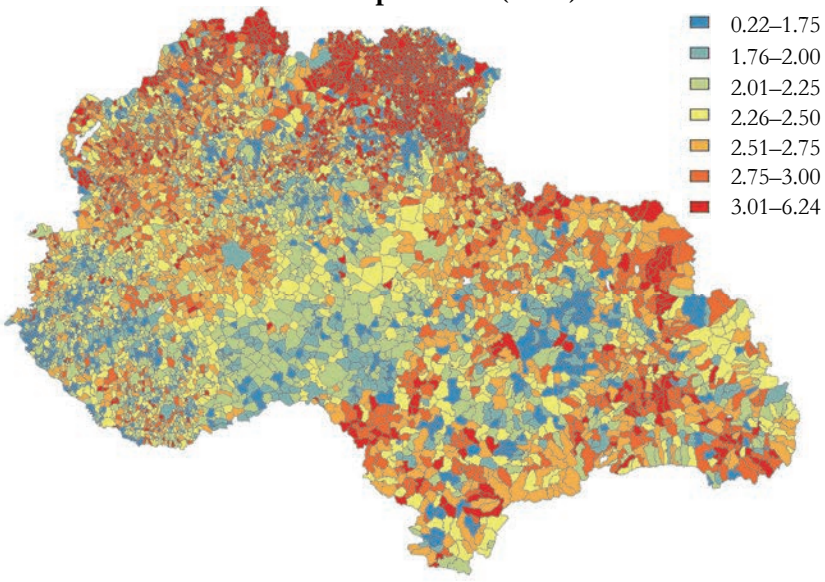


Figure 13

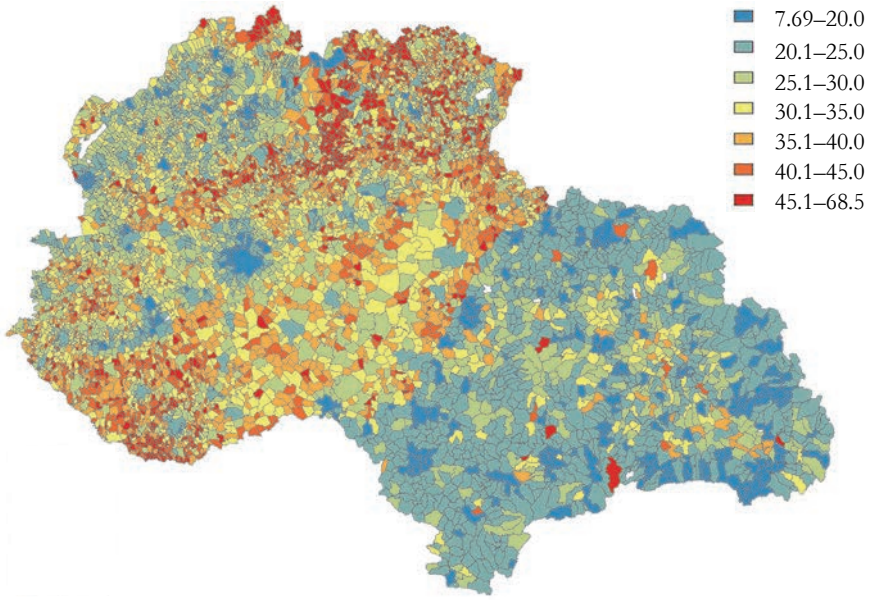
Inhabitants per house (2011)



The *share of population with only primary schools finished* (+ *without any qualification*; Figure 14) represents unfavourable tendencies in education (see: Pénzes et al. 2018b), which divided Hungary into two parts along an SW–NE line. In Slovakia, this phenomenon characterises the ethnically Hungarian South-Slovakia and the easternmost part of the country regardless of ethnicity (where the Roma population is increasing). In Transylvania, the values are smaller because their statistics measure this group to the set of people above 10 years (instead of seven in Slovakia and Hungary). Furthermore, the Romanian educational structure differs from that of the Hungarian, as primary schools in Romania comprise a pre-school class and four others, while in Hungary, it is composed of eight classes. Despite this, the NW–SE zone showing unfavourable conditions in the centre of Transylvania – along the Hungarian settlement zone – is still remarkable.

Figure 14

Population with only primary education and without primary education over 7 years (in Romania over 10 years, 2010, %)

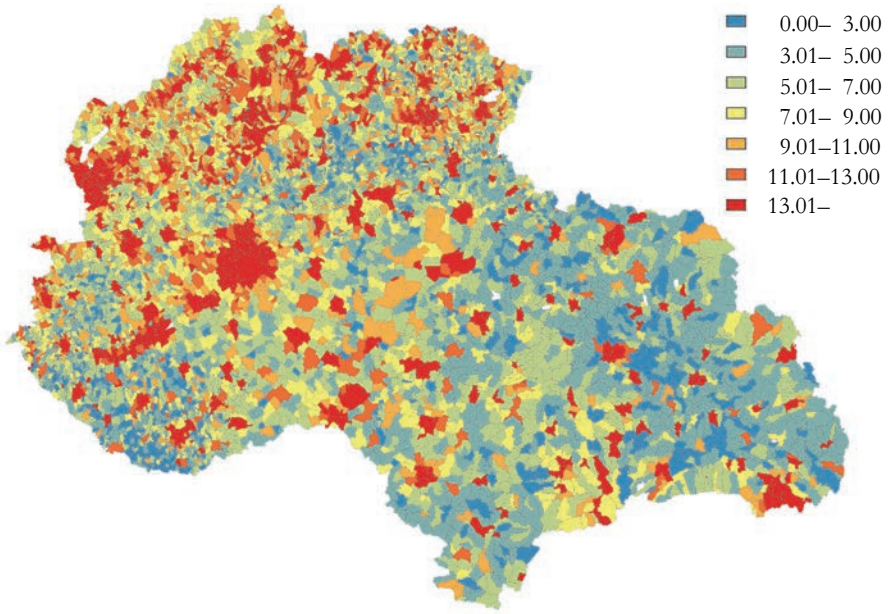


The *share of persons with a degree* (Figure 15) also draws the attention to the role of urban communities, which perform better in Slovakia and Hungary because here, beyond the towns, their attraction zone also shows favourable tendencies (Košice, Bratislava, Central Slovakia). This pattern also indicates the extent of agglomerations (Lake Balaton, Budapest) (Németh–Dövényi 2018). On the other hand, in Transylvania, the process of relative deconcentration did not yet occur in urban centres – the surroundings of the larger towns were hardly characterised by highly

educated people. Transylvanian towns (except Braşov) are still in the phase of concentration and unable to sustain rural lifeforms.

Figure 15

The share of population with a higher education degree (2010, %)

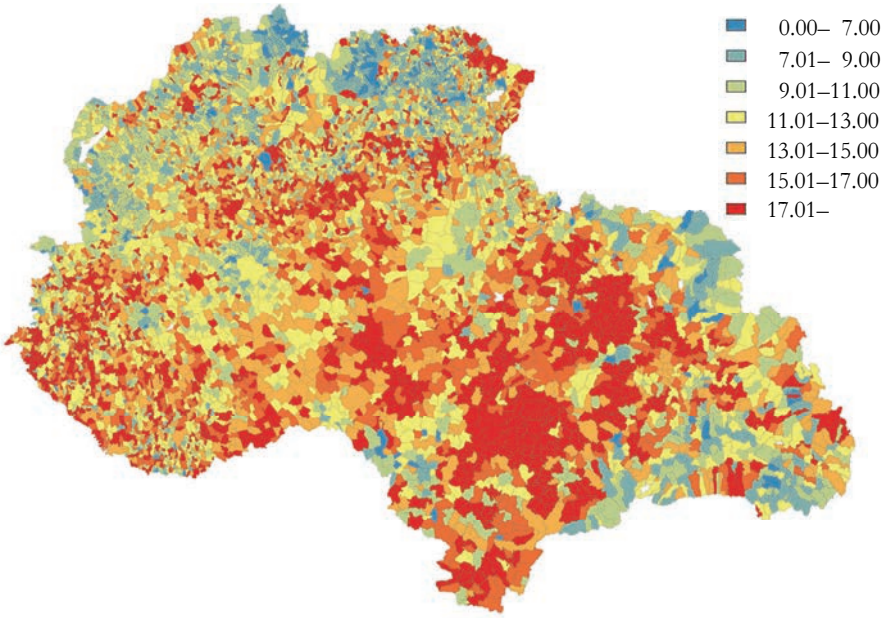


Ageing index and death rates show very similar patterns (see Kulcsár–Brown 2017) (Figure 16).[25] In Hungary, the ageing index is regionally high, and only the zones with increasing Roma population show the sign of postponed ageing. In Transylvania, the central mountainous parts showed the worst picture, while in Slovakia, it was the western part where the number of people above 60 was high compared to those under 20. However, these regions still indicated better conditions than most of Hungary. It is also worth mentioning that ageing index was quite favourable along the Hungarian border not because of the high fertility of the ethnic Hungarians but because of the Gipsies (Pénzes–Pásztor 2014, Tátrai 2014, Pénzes et al. 2018a). This presumption is confirmed by the similar situation in Eastern Slovakia, where the ageing index was also favourable, except the eastern EU border with Ukraine (Mušinka et al. 2014).

[25] Ageing index was substituted by the death rate in the cumulative investigation because of its easier interpretation. High death rates simply refer to weak health conditions.

Figure 16

The spatial pattern of the death rate (2001–2010)



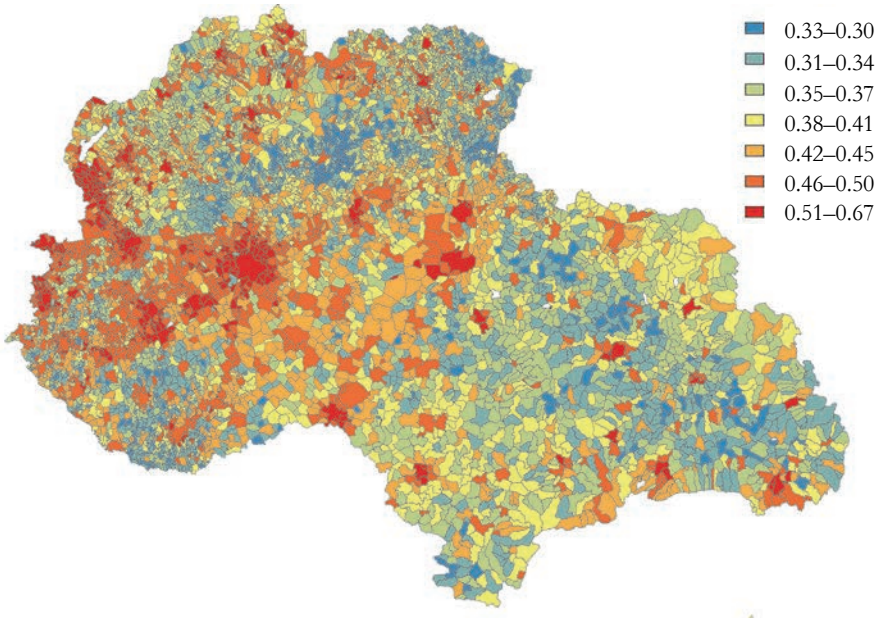
Finally, a hard variable, namely income per capita – which was challenging to find and adjust – was also used (some stats published gross data, others reported net data, implying that values had to be converted to Euro from national currencies; population data was required to derive per capita figures; for Slovakia, we had only district-level data, obtained from Datacube; some data were from the age of the great decline after 2008, etc.). In Slovakia, an NW–SE slope can be observed (mentioned earlier in several cases), with the addition that ethnic Hungarian populated districts generally had lower measurable incomes than Slovakian ones. In Hungary, the NW parts of the country between Bratislava and Budapest showed outstanding values, accompanied by the border region towards Austria, Lake Balaton, and the areas located along M6 and M3 motorways. In Romania, the better situation of Kolozsvár/Cluj and Torda/Turda, the Temesvár/Timişoara and the Bánát area, and the Nagyszeben/Sibiu–Brassó/Braşov axis (the former Saxon lands) was demonstrated by Török and Benedek (2018). However, if settlement income per capita is used instead of personal income per capita, these tendencies could not be traced, and the patterns are more mosaic-like (though the formerly mentioned centres can be identified).

To proceed with comparison, a common dataset was created containing all entities of the three countries where all variables were normalised (thus, the highest value represent the highest from among the three countries). Subsequently, variable values referring to positive phenomena were added to each other, and those

representing unfavourable tendencies (unemployment rate, death rate, proportion of uneducated, etc.) were subtracted from the sum. The final aggregated sum was visualised on a complex map (Figure 17).

Figure 17

Aggregated development level based on the 10 single variables in the 2000s



This aggregated map proves that there were significant changes between 1910 and 2010 in the area of present-day Slovakia (former Upper Hungary). NW-Slovakia, which was among the most backward regions according to all calculations in 1910, became one of the most advanced areas not only in present-day Slovakia but also in the entire investigated area (it is also confirmed by the results of Halás 2008). Parallel to this, the region along the Nové Zámky-Levice-Lučenec-Košice transversal railway line, which was dominated by the advance of Hungarian-speaking population and was among the developed regions in 1910, became a shadow-zone in modern Slovakia by 2010.[26] Czechoslovak regional politics directed resources to regions inhabited by Slovaks – NW-Slovakia (military enterprises of the Váh valley: see Pavlínek 1995) early in the 1930s (Vršecký 2015) − and neglected regions inhabited by Hungarians.[27] Becoming a border region did not help either as trespassing was limited before 1990/2004. Neither did the Slovakian way of

[26] On the other hand, by 2018 it showed better performance than the Hungarian side in Nógrád and Borsod Counties.

[27] Industrial population decreased by 25% in East and the central parts of South-Slovakia (Häufler 1984).

regionalisation after 1990 contribute[28] to the improvement of the borderlands (Buček 2002). The trends during 1945–90 were very similar to the process in 1880–1910 when modernisation (urbanisation, industrialisation) meant Hungarianisation (i.e. accommodation of and adaptation to the ruling nation), while Slovakian and Ruthenian language prevailed in backward rural areas. The same happened to ethnic Hungarian regions 100 years later (in towns with significant industrial investments, such as Galanta, Rožnava, Lučenec, Levice or Braşov, Oradea and Cluj, where the proportion of Hungarians decreased faster[29] than in urban shadow-zones, such as Královsky Chlmec, Velké Kapušany, Tornal'a, or Carei, Salonta, and Cehu Silvaniei). In some instances, underdevelopment could give relative protection to ethnic 'refuge areas'. However, on the other hand, it also implied ageing and the emigration of mobile (and younger) strata (and their subsequent assimilation), thereby further aggravating the situation.

When did this change in territorial patterns begin? Financial data of the settlements in Subcarpathia and SE-Slovakia suggest that it began early in the 1930s – in 1938/39, when Hungary temporarily regained the region, most of the settlements had to ask for financial support from the state (the value of which exceeded the average value in Hungary or SW-Slovakia/Csallóköz), while in 1910, this strip showed a positive balance according to our maps.[30]

Regarding other changes, the process of accelerated ethnic replacement of Germans with the Roma did not affect the general level of development positively. On the contrary, Eastern Slovakia could not keep up with the western parts. Thus, a certain levelling took place between E-Slovakia and S-Slovakia. Northern Slovakia (Tatra Mts.) became more developed in these 100 years, while the mining cities of Central Slovakia managed to maintain their positions.

The situation (development levels compared to Budapest, the former centre) did not improve in Transylvania, although certain changes (shifts in patterns) can be observed. From the methodological perspective, it would have been correct to compare the development levels to Bucharest also, to illustrate how Transylvania's development level was changing between the two political–economic centres. Unfortunately, the Romanian census in 1910 was not detailed enough to serve as a basis of comparison. Such investigations are only possible from 1930 onwards. Thus, a thorough comparison of development levels under the Hungarian rule and after is not possible. The general trends remained – the region was underdeveloped in 2010 compared to Budapest, and the decision-makers in Bucharest could not reduce the backwardness compared to the former core areas.

[28] The refusal of creating regions based on ethnicity was indoctrinated that economically viable, 'functional' regions have to be created – this territorial division did not promote the formation of transboundary cooperation between Hungarian-speaking zones (on the other hand, the Hungarian side was also in structural crisis).

[29] The extermination of Hungarian speaking Jews (Oradea) also contributed to the decrease in Transylvania.

[30] See map: KSH (1943, p. 115.).

The second general feature is that towns managed to maintain their better performance but were still unable to exert influence even on their close surroundings in 2010 (unlike Bratislava or Budapest) − similar to 1910, as we highlighted when industrial development in historical Hungary remained isolated with no real effect on the source places of the resettled labour force. A new phenomenon is a decline in areas inhabited formerly by Saxons by 2010 (Török 2017, 2018), while the Székely counties showed intermediate levels of development (compared to Budapest). Thus, their economic situation in 2010 was not worse in general than in 1910. These changes modified spatial patterns too – while in 1910 the most backward regions were located along an N–S strip, by 2010 this transformed into an NW–SE strip. Though the effects of industrial investments in the socialist era in Reşiţa, Petroşani, and Timişoara were neither long-lasting nor always positive, the changes were enough to put this area into a better position than Central-Transylvania in 2010 (Szilágyi 2012). The latter region (Mezőség, Kalotaszeg, Szilágy) together became the most underdeveloped regions, including the ethnic contact zone between Romanians and Hungarians, which is often characterised by the higher frequency of Gipsies (Szilágyi 2016; Horváth–Kiss 2017), especially in zones abandoned by Saxons (Bottlik 2002).

As for Hungary, the periphery in Zala County disappeared in 1910, while the situation in S-Transdanubia (which did not perform well even in 1910) further worsened. Nógrád and Szatmár remained among the backward regions, as in 1910, while the internal periphery in the Mátra Mts. disappeared (Szűcs−Káposzta 2018), although the internal periphery around the Lake Tisza became more explicit (Rozgonyi-Horváth 2018). New peripheries – definitely as a consequence of the redrawn borders – also emerged (and suffocating) such as southern Bihar and the Cserehát (Kóti 2018, Faluvégi 2020), and after the collapse of the socialist industrialisation, the region of Ózd (this backward area also extends into Slovakia in the Rima Valley).

A general examination of the three countries as a whole illustrates that the most developed areas were around Budapest, along the Bratislava–Győr–Sopron line towards Budapest, the Budapest–Balaton zone, and along other motorways towards Miskolc, Szeged, and Pécs. A relatively developed zone is between Szeged–Arad–Timişoara–Oradea–Debrecen–Nyíregyháza (relatively, because only the surrounding strip of backward Romanian villages make them to seem developed, and this situation is confirmed by the weak communication lines between them – there is no direct N–S railway or motorway either between Nyíregyháza–Debrecen–Szeged or along the Tisza river). The connections between the Romanian and Hungarian cities are also weak (the direct bus between Debrecen and Oradea has recently been cancelled). Sibiu and Braşov, the Tatra Mts., and the Váh valley are the remaining developed regions within the Carpathian Basin. The former two regions were developed even in 1910.

Conclusions

The topic discussed above can be relevant from three different aspects. First methodologically, given that historians tend to deal with vertical structures (society) and neglect horizontal diversity. The implementation of a regional approach in historical research may help confirm or challenge established statements or long-debated questions by offering a new approach. Besides the traditional approach that focuses on the issue of suffrage, land, and minority as primary determinants of the collapse of historical Hungary, a new factor was added − patterns of regional inequalities − that could exacerbate these tensions if peripheries coincided with settlement areas dominated by ethnic minorities.

Second, our study enables researchers to assess the efficiency of the different regional development policies (different political systems) over the last 100 years. By analysing the origins and causes of lagging, history can contribute to the better operation of regional policies, thereby decreasing its costs.

Third, our article is a contribution to the ongoing debate between Hungarian scholars and scholars of the successor states over the socioeconomic performance and living standards in the different regions of dualist Hungary. The analysis of the spatial patterns of regional inequalities and their changes in the long run may put the regional policy of dualist Hungary in a different perspective compared to the regional policies of the successor states. These were no better than the one adopted in Hungary. Instead of eliminating territorial differences, both pre-war and post-war development policies contributed to their strengthening, often to the detriment of national minorities with weakened political representation.

The peripheries of Hungary in 1910 were stable regardless of the method and the number of variables used. The evolution of these peripheries was due to a special regional division of labour, which resulted in 'uneven and unbalanced' development (term: Hirschman 1958). Neither liberal nor centralising government considered these trends as a failure but as a natural by-product of general development. Nationalisation (i.e. the dominance of one language) was also considered essential to achieve economic development (better efficiency) of the state. These imply that different priorities were pursued at the beginning of development policies than those pursued later. The elimination of internal inequalities was not among the priorities in 1910 – in fact, it was considered as a fuel to increase the development level of the state in general until it triggered emigration processes or culminated in the outburst of tensions against the central government. Therefore, it is not surprising that the first few direct regional state intervention programmes were not always success stories − the know-how did not exist and only those local initiatives were tolerated that were supposed to be useful for the whole state. In other words, any development of peripheries were not supposed to risk the development of the centre and initiatives to the detriment of the core areas or central goals were not welcome.

Despite the administrative integration of Transylvania to Hungary its economic integration was not successful. Backward regions in 1910 often (but not exclusively) coincided with the settlement area of ethnic minorities. Thus, ethnic tensions, social problems and regional inequalities had a synergic effect in destabilising the country.

It is worth mentioning that modern development planning with different priorities (focusing on the elimination of the gaps and dichotomies)[31] was not successful in overcoming the prejudices towards the ethnic minorities, and in general they failed to eliminate the differences despite the conscious (and not *ad hoc*) planning.

Besides the changing governmental priorities, the new boundaries also contributed to the restructuration. In present-day Slovakia, formerly developed regions along the transversal railway − mainly Hungarian in character − deteriorated, while the once backward regions of NW-Slovakia and N-Slovakia inhabited by Slovaks became advanced. In Transylvania, the N–S zone of underdeveloped regions transformed into a zone with NW–SE strike, partly due to the ethnic replacement of Saxons with Romanians and Gipsies, and partly due to the investments in the heavy industry during the socialist era in SW.

Those who raise criticism towards regional development policies or government ideas of the 1900s should not forget that the recent situation is not substantially better in terms of regional inequalities. Although even backward regions showed progress over the last hundred years, we focused on the patterns of inequality and not on the rate of development. This could be a research topic for another article.

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[31] Modern development planning partly relied on Hirschman's (1958) approach, according to whom any development should be based on the existence of territorial gaps.

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The impact of the Trianon Peace Treaty on the border zones – an attempt to analyse the historic territorial development pattern and its changes in Hungary*

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The multidimensional approach of territorial development is applied in the research. A composite indicator created for the present situation and named 'territorial development index' was adapted to the Hungarian historical data from 1910 on the LAU 2 level. The effects of the Trianon borders were observed on the basis of the comparative analysis of the historical and present development indices. The common methodological basis provided the opportunity to compare the outputs of the computations.

Some of the underdeveloped areas along the present state border of Hungary have existed even before the demarcation of the Trianon borders (dominantly along the Eastern-Slovakian border, the Northern part of the Romanian border and along the Slovenian border). Large scale disparities existed at the beginning of the 20th century which decreased significantly by 2016. The general tendency of convergence influenced the border zones as well – both closing up to the Hungarian average and within-region convergence could be measured. Contrary to this, the geographical concentration of the most underdeveloped settlements (the lowest quantiles of the settlement ranking) became visible along the Eastern-Slovakian, the Ukrainian, the Romanian and the Croatian sections of the border zone. The former hinterlands of the large towns along the Hungarian-Romanian

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border tended to face negative tendencies in their development paths. The settlements in the border zone characteristically stepped forward along the Slovenian, Austrian and Western-Slovakian border sections.
The results tended to draw the attention to the spatial polarization process because significant parts of the underdeveloped territories located along the borders did not exist prior to 1920. Furthermore, the increasing concentration of disadvantaged settlements in the border zone was not only the direct effect of the creation of the new state boundary but the cumulative result of multiple disadvantageous ongoing social processes. However, the border – undoubtedly – has had a significant role in the conservation and strengthening of the negative tendencies. At the same time, developed zones – more or less independently of the new borders – became more developed by 2016 (especially along the Western and North-western part of the state border).

Keywords:
border areas,
composite indicator,
spatial inequality,
spatial pattern,
territorial development

Introduction

The effects of state borders on territorial development are complex including several possible negative or positive factors depending on the local circumstances together with the geographical and historical context.

This issue has been expressively emphasized in Central Europe where new state borders were drawn as the result of the Trianon Peace Treaty. Border areas are often characterized by peripheral symptoms and these are basically attributed to the border location.

In the current paper, the effects of the newly demarcated state borders of the Trianon Peace Treaty on territorial development were investigated in the present area of Hungary. One of the most important issues was 'how to detect the territorial development pattern and its inequalities within the country in historic context'. The objective of the paper was to apply a methodology for the calculation of territorial development in 1910 that could be compared with the actual situation. A recently published dataset of the historic Hungary (from the period before World War I [WWI]) provided adequate background for the computations. The comparative analysis focusing on the border zone tried to discover the territorial development levels in 1910 and to detect the most important changes in the spatial pattern of Hungary. The altering development path came to light with the segmentation of the

border zone. The author – as a geographer – put the emphasis on the investigation of the spatial characteristics of the territorial development.

General characteristics of territorial development

Development is a complex phenomenon which has several aspects: from the one that refers to the act of making the area more useful or more productive of useful things to the development of people who reside in a given area, and it is often associated with the idea that places and their inhabitants can reach higher stages of organization (Dunford 2009).

Regional (and spatial) development is clearly a multidimensional concept with a great socioeconomic variety tdetermined by a multiplicity of factors (Nijkamp–Ambreu 2009). The variety of factors taken into consideration depends on the technological and infrastructural conditions, the available and consumable resources, the social and political context (Gyuris 2014) and the attitude of policy makers (Nagy–Koós 2014). All of these components represent long (or even short) term changes and great geographical diversity that makes the comparative analyses especially difficult and hypothetical.

A significant number of studies dealing with the issue of territorial development are available (with different focus on the most and least developed areas). The rest of the studies differ from each other regarding the following issues (Pénzes 2015):

- the issue of spatial aggregation which means the territorial level relied upon in the study;
- the temporal issues – time coverage of the study and the decision about static or dynamic approach;
- the dilemma of indicators involved expressing the development – one indicator (e.g. gross Domestic product [GDP]) or multivariate indicators;
- the selection of methodology applied during the creation of the multivariate indicator (it is not relevant in the case of one observed variable);
- the setting of threshold values – separating the developed or underdeveloped spatial units.

The listed issues are responsible for the limited comparability of territorial development studies based on lower territorial level especially between different states (Pénzes 2013, Tagai et al. 2018). The detection of temporal (historic) changes in the territorial development is also rarely observed within the studies due to the limited access to spatially detailed historic datasets (few exceptions inter alia Musil–Müller 2008, Győri–Mikle 2017, Szilágyi 2018a). However, these temporal comparative analyses might have an essential contribution in detecting territorial processes in historical context, which is especially important in the case of the newly formed border areas (after the Trianon Peace Treaty).

Borders and their effects on the territorial development

State borders significantly influence the spatial processes in various forms. In general, borders are perceived as features acting as a constraint rather than an incentive upon the operation of spatial systems (Reichman 1993). Borders often appear as barriers having important effects on regional development (Geenhuizen et al. 1996). The different barriers, obstacles distort the market networks, divide the potential spatial markets, thus causing economic losses. Taxes introduced at the state borders could be compared to the elongation of distances in an economic sense (Lösch 1962). As a result, decrease and discontinuity can be observed in the number and intensity of activities (Houtum 2000, Czimre 2006, Pásztor 2014a). An increase in the expenditures might occur due to the higher risk for investments in the case of border areas in insecure political situations (Hansen 1977, Ratti 1993).

These are the primary causes why border regions are frequently described as underdeveloped areas and can often be affirmed empirically (Petrakos-Topaloglou 2006), especially in Central and Eastern Europe (Erkut–Özgen 2003, Süli-Zakar 2014). Borders of the countries of Central and Eastern Europe have been changed many times in the course of the past centuries, and have broken again and again the process of development. Certain border areas – including Eastern-Hungary – can be described as real peripheries from geographical and economic point of view (Gorzelak 1996, Nemes Nagy 1996, Baranyi et al. 1999, Baranyi 1999, Lőcsei–Szalkai 2008, Szakálné Kanó et al. 2017, Papp et al. 2017, Alpek et al. 2018, Alpek–Tésits 2019, Kóti 2018, Pénzes et al. 2018, Rozgonyi-Horváth 2018, Lennert 2019). This so-called external periphery of Hungary can be regarded as a traditional backward area (Pénzes 2015, Szilágyi 2015) where the unfavourable situation strengthened after WWI due to the appearance of new state borders and protectionism, import substituting industrial developments, lack of connections between new states (Süli-Zakar 1992). Before the change of regimes in Central Europe and the European integration process, barrier and filter functions dominated the state borders and created significant obstacles regarding cross-border co-operations (Ratti 1993).

However, as a result of the integration process, border areas might become contact zones where the open border generates connections between the two sides of the border (this is the third function – according to Ratti 1993). The 'melting' of national borders can help to re-establish former spatial relations, as their barrier function decreases; in this manner their contact zone-role may become stronger. Besides, opening national borders also help social cohesion by increasing the mobility of people or creating the possibility of it (Erkut–Özgen 2003). An open border area might attract investments that profit from the different characteristics of the other side of the state border (differences in wages, taxes, restrictions, consumption customs etc.). A certain development level is necessary to induce

economic interactions, while a considerable gap between the development levels of the neighbouring territories can also be an obstacle in the cross-border co-operation and imbalanced territorial development (Van der Velde–Wever 2005, Baranyi 2007, Pásztor 2014b). Consequently, border regions may be put in a state of flux by their changing economic role through the reallocation of activities and opportunities (Topaloglou et al. 2005). Positive effects of borders – even during the period of barrier and filter dominance – accumulate in the close neighbourhood of border crossing points (Pénzes 2007, Tagai et al. 2008), but the anticipated stimulating effect of newly opened border crossing points on the local economic development has proved really limited along the underdeveloped border areas – see inter alia Kiss (2000).

The delineation of the border area is not unambiguous due to the unsure character of the territorial extension of the zone itself (however the state border is fixed enough as a line in the geographical space). Border zone is the part of space influenced directly and significantly in its social and economic life by the existence of a state border (Hansen 1977). The delineation of the border area is a typical research topic within the regional analyses due to its emphasized relative character (Dusek 2004). Several approaches may be collected on the basis of the special literature (Papp 2019).

The investigation of borders, border areas and cross-border co-operations became an important research issue among Hungarian researchers after the regime change (Hardi 2015, Pete 2018).

In the current paper the 20 km broad strip along the Hungarian state border is highlighted as it is one of the most frequently used distance category (Houtum–Eker 2015, Papp et al. 2017) and it is appropriate for the investigation. As part of the current analysis, the Hungarian border areas' development levels and their changes are observed.

The territorial development index and its background

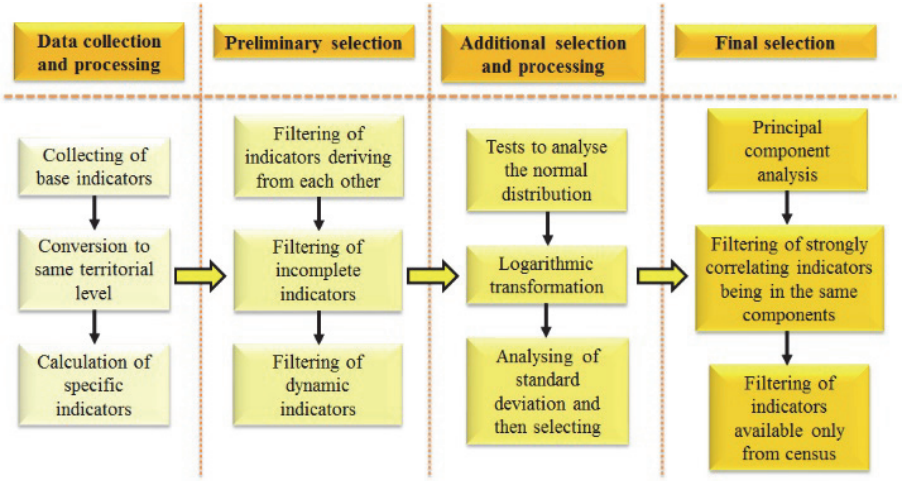
The territorial development – according to the author's viewpoint – is a multivariate phenomenon that can be expressed in several ways. After the overview of the Hungarian studies about territorial development patterns, we decided to create our own development indicator appropriate to detect the settlements in peripheral situation.

In order to find the most appropriate variables describing the social and economic disparities in Hungary, 136 different indicators were collected on the level of micro-regions (from the years of 2011 and 2012). Seven variables were selected after a systematic multi-step filtering procedure (Figure 1). This procedure included a selection of indicators by their applicability and availability (dynamic and markedly incomplete ones were not included). Test of normality was applied to find the

indicators having normal distribution. Finally, a factor analysis with principal component method has been completed in order to reduce the dimensions of variables and to filter the correlating ones. The exclusion of census data is explained by the limited temporal flexibility – annual updates cannot be realized in these cases (for more details see: Pénzes 2015).

Figure 1

The multi-step process used to select the appropriate indicators for the 'territorial development index' calculation



The following variables became part of the composite indicator calculated on the settlement (LAU 2) level:

1. Elderly dependency ratio (ratio of population over 65 years in the percentage of the population between 15–64 years), percentage;
2. Ratio of children supported by regular child protection aid, percentage;
3. Number of respiratory disease cases per capita (compared to the population over 60 years);
4. Number of inhabitants per dwelling;
5. Taxable income per capita, HUF;
6. Ratio of newly built dwellings (newly built dwellings between 2003 and 2012 in the percentage of the dwellings), percentage;
7. Average housing price, million HUF/dwelling.

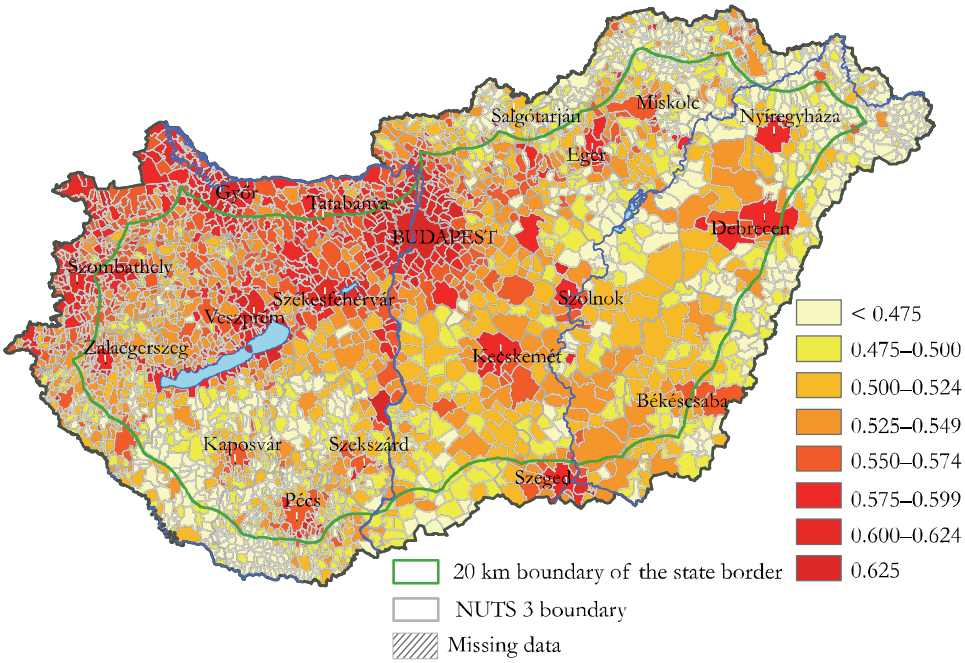
The composite indicator named 'territorial development index' was calculated by the average of the normalized values of the listed indicators – after testing different scaling and multivariate methods (e.g. standardization, normalization, discriminant analysis, cluster analysis etc.) (Figure 2).

The 'territorial development index' was updated by the datasets from 2016 and the resulted pattern of spatial disparities are confirmed by the rest of the studies

after 2010 (e.g. Nagy–Koós 2014, Koós 2015, Pénzes 2015, Kovács–Koós 2018, Tagai et al. 2018). This phenomenon evidences the 'frozen' spatial pattern in the case of Hungary after the millennium. This is the primary reason why different methodologies produced quite similar results and spatial overlapping.

Figure 2

The values of the 'territorial development index' in 2016 according to the actual LAU 2 administrative division



Source: calculated based on datasets from the Hungarian Central Statistical Office (HCSO), the National Information System of Regional Development and Spatial Planning (TeIR) and the National Tax and Customs Administration (NAV).

Territorial development pattern in 1910 – attempt to make a retrospective analysis on the example of Hungary

As part of the project GISta Hungarorum[1] an enormous amount of detailed historic datasets became available in electronic format (from the years between 1870 and 1910) ready to be analysed (Demeter–Szulovszky 2018). One of the most important challenges was 'how to detect the territorial development pattern and its inequalities within the historic Hungary' (Demeter 2018, Jakobi 2018, Pénzes 2018, Szilágyi 2018a).

[1] www.gistory.hu/g/hu/gistory/otka – website of OTKA K 111 766 Principal investigator: Demeter Gábor.

Some studies provided precedents for historical multivariate development indicators on the basis of datasets from the first decades of the 20th century (Beluszky 2000, Győri 2006, Szilágyi 2018a, Szilágyi 2018b) and important attempts were also made to detect the alteration of the spatial pattern (Győri–Mikle 2017). The objective of the current analysis was to develop a composite indicator, appropriate for making comparative analysis with the current state after 2010. The core problem of these analyses is to find the most appropriate indicators representing the 'ancient' social and economic features from territorial point of view. To find parallel indicators to the present characteristics of territorial development may lead to incorrect deductions, as some of the indicators tended to alter in their content in general and they may represent the features of disparities inadequately or inaccurately. Some of the 'old' development indicators may be criticised due to their territorially variant effectiveness to represent the local situation. Consequently, it is quite difficult to know about a given historic indicator whether it appropriately describes the development level or not. This is the reason why the investigation of the spatial pattern can be regarded as a relevant and actual research issue.

The methodology of the 'territorial development index' might have been adaptable to the analysis of the historic datasets. The most neuralgic part of the method is the finding of the appropriate variables applied to the composite indicator; however the multi-step process (see Figure 1) was regarded as useable with minor modifications. The background for the collection of base indicators was provided by the previously mentioned GIStory project. The list of the created development indicators was inspired by the cited studies which investigated the same period from the aspect of territorial development (G. Fekete 1991, Beluszky 1999, 2000, Győri 2006, Kiss 2007, Gál 2010, Demeter–Radics 2015, Szilágyi 2015, Győri–Mikle 2017). Some of the important and relevant development indicators were not included due to the territorially incomplete datasets – as these were typically urban variables (Vörös 1982, Beluszky 1999, Kókai 2017).

Demographic indicators deserved greater emphasis because these could highlight the deep structural characteristics of the society (however the deduction might be unambiguous e.g. the long lasting migration gain of the Hungarian Great Plain was the result of the resettling of the territory after the depopulation of the Ottoman period). Ethnic and religious indicators might correlate with the modernization (Beluszky 2000).

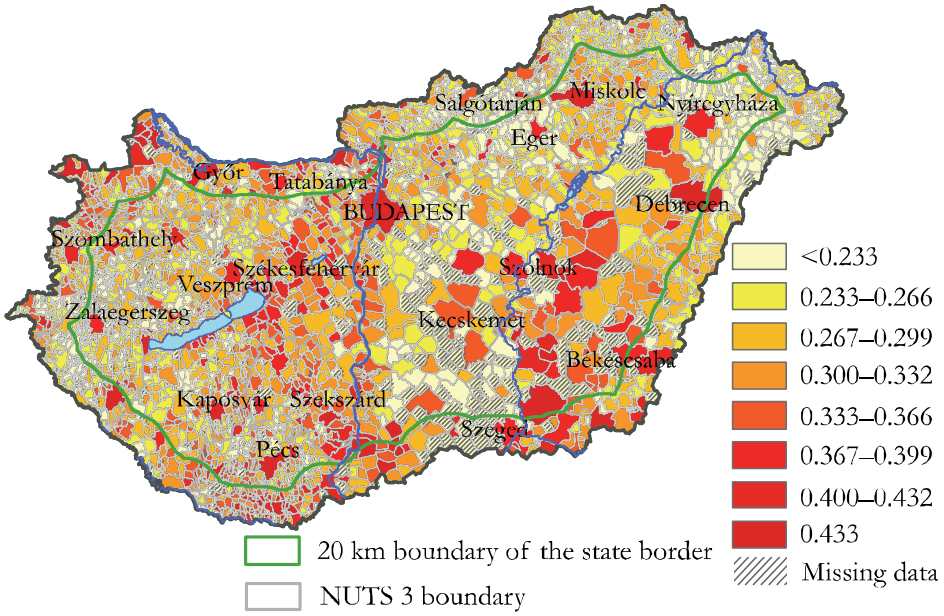
Taking these characteristics and constraints into consideration, 48 specific indicators were created from the approximately 200 base variables after the aggregation into district levels. After the systematic filtering steps (see Figure 1) 18 indicators remained to be processed by the principal component analysis. The last step of the procedure was excluded as the rest of the database was derived from census data. The selected variables represented the components mostly and the total explained variance was 83.47 percent, with a 0.638 value by the KMO-Bartlett test:

1. Infant mortality ratio within the total deaths between 1901–1910, %
2. Earner/non earner ratio per 100 inhabitants, 1910
3. Ratio of industrial earners, 1910, %
4. Cadastral net income per one inhabitant, 1910, Kronen
5. Direct state burden per capita, 1909, Kronen
6. Net income of settlements per capita, Kronen.

The normalized average values provided the 'territorial development index' from 1910 and the mapped results illustrated the spatial pattern of the historical Hungary (as seen in Pénzes 2018). In the cited paper a comparative analysis of the results took place in which the 'territorial development index' and the methodology developed by Róbert Győri (2006) were published (for details see Szilágyi 2015, Pénzes 2018). There are major differences between the results of the methodologies, but significant overlaps could also be detected. Strong correlation was proved with the size of settlements in the case of the 2 different methods and the so-called 'Győri-method' showed greater sensitivity to the population number of settlements. Both methods drew the attention to the high development level of the largest towns (with more than 20,000 inhabitants).

Figure 3

The values of the 'territorial development index' in 1910 according to the LAU 2 administrative division of 2016



Source: own calculation on the basis of the census from 1910 and taxation data from 1908 – http://www.gistory.hu.

In order to make a comparison between the historic and the current territorial development pattern, some important steps were necessary to be taken. The complete historic dataset was narrowed to the present area of Hungary and an additional significant correction of the territorial data was required with the application of GIS methods – almost 380 settlements were not officially separated and administratively created in 1910 (some of them did not exist one century ago, particularly in the region of the Great Hungarian Plain), but many settlements were attached to larger towns during the last decades. The territorial development values of these settlements were calculated regarding their population number as weight (Figure 3).

The spatial pattern of Hungary reflected major disparities with the outstanding development level of Budapest and the county seats. North-Western Transdanubia and the Budapest-Veszprém axis seemed to had been developed above average. Southern Transdanubia was also proved to be in a better situation than nowadays (especially the Ormánság). The rest of the larger towns on the Hungarian Great Plain had an above average development level – and these results partly support the statements of Pál Beluszky (1999, 2000), Róbert Győri and György Mikle (2017). However, extended and continuous underdeveloped zones could be detected in Zala and Vas counties due to their segmented structure of settlements, at the territories of the Bükk and Mátra mountains and the areas with disadvantageous characteristics for agricultural cultivation (e.g. sand covered areas of Bugac and in the Nyírség). Some of the areas which became border zone a decade later could be regarded as underdeveloped even in this period.

Border areas of Hungary in the mirror of changes during a century

Border areas of Hungary and their territorial development level

In the current study, border areas were targeted with special attention in regard to the state of their development levels before the Trianon Peace Treaty and nowadays. The formerly mentioned 20 km broad zone was created along the Hungarian side of the state border. This zone included 1224 settlements (on the basis of the administrative division from 2016) which has been reduced to 1100 considering the settlements' list from 1910.

In order to detect the changes in the territorial development levels along the state border, the border zone was segmented according to the neighbouring country (as a matter of course, this division fitted into the current sections of the state border). Each settlement was ordered to the section closest to it in the light of accessibility. According to this categorization 8 sections were separated from which

the longest border zone, the Hungarian-Slovakian one was divided into two parts (Table 1).

Table 1

Sections of the border zone along the Hungarian state border

Territorial categories	Number of settlements in 2016	Number of settlements after the correction
Austrian	179	163
Western-Slovakian	107	94
Eastern-Slovakian	332	310
Ukrainian	90	84
Romanian	156	141
Serbian	42	26
Croatian	242	212
Slovenian	76	70
Non-border areas	1 931	1 676
Hungary	3 155	2 776

Source: calculated by the http://www.gistory.hu.

The results of calculations might have been predicted by the mapped values (Figure 2 and 3), however the aggregated numbers drew the attention to the general characteristics (Table 2). The direct comparison was only hypothetic because of the differing sets of indicators but the relative values provide reasonable possibility to compare the results from 1910 and 2016 (omitted values skipped due to administrative reasons caused only negligible changes in the results). The Ukrainian border zone was the most underdeveloped along with the Slovenian section. The latter one could develop more impressively and it came closer to the national average. The most developed sections – the Serbian, the Western Slovakian and Austrian sections – reached and exceeded the Hungarian value in 1910, however the Serbian (and the Croatian) were characterized by reduced relative values. It is important to emphasize that each territorial category could improve in their absolute values and the most spectacular change was seen in the case of Budapest. The changes of the values highlighted an unambiguous and remarkable convergence between 1910 and 2016. As part of this process, a massive decrease of the relative development could be detected in the case of Budapest caused by the increased values in the rest part of the country.

Table 2

The absolute and relative values of the ‚territorial development index' and their changes in sections of the border zone

Territorial categories	Absolute values			Relative values in the percent of the national average, %		
	1910	2016	change, %	1910	2016	change, percentage point
Austrian	0.345	0.593	+71.96	100.58	104.01	+3.41
Western-Slovakian	0.356	0.606	+70.40	103.77	106.34	+2.47
Eastern-Slovakian	0.281	0.498	+77.03	82.06	87.37	+6.46
Ukrainian	0.250	0.474	+89.50	72.99	83.18	+13.96
Romanian	0.302	0.505	+67.26	88.02	88.54	+0.58
Serbian	0.374	0.569	+52.06	109.22	99.88	–8.55
Croatian	0.341	0.516	+51.29	99.52	90.55	–9.02
Slovenian	0.255	0.538	+111.03	74.42	94.44	+26.91
Non-border areas[a)]	0.307	0.557	+81.28	89.65	97.73	+9.01
Budapest	0.525	0.641	+22.01	153.27	112.46	–26.62
Hungary	0.343	0.570	+66.29	100.00	100.00	0.00

a) Without Budapest.

Source: calculated on the basis of the census from 1910 and taxation data from 1908 – http://www.gistory.hu and by the datasets from the HCSO, the TeIR and the NAV.

This long term convergence did not contradict the discovered divergence trends of spatial inequalities after the change of regime in the 1990s (e.g. Nemes Nagy 2006, Nagy 2007, Jakobi 2011, Nagy et al. 2015). Convergent periods were identified during the socialist era (e.g. Beluszky 1976, Nemes Nagy 2006) that confirmed the relevance of the convergence during the century.

The convergence was demonstrated by the spatial inequality calculations showing significantly larger within-region inequalities on the basis of the territorial development index for 1910 (Table 3). Two methods – the logarithmic weighted deviation and the Hoover index – highlighted the largest inequalities in the case of the Austrian border section that included three outstanding centres (Győr, Sopron and Szombathely). The Romanian border zone showed a South-North development slope that resulted in the second greatest values of inequalities. The Eastern-Slovakian section consisted of the largest number of settlements that typically tended to involve higher levels of within-region inequalities. The Serbian section was the most even from this point of view. The changes during the more than 100 years resulted in a significant decrease in the inequality values and the Croatian and the Eastern-Slovakian sections (on the basis of the logarithmic weighted deviation the Austrian section too) had the largest levels of inequalities (the non-border and the Hungarian national values were not appropriate to make comparisons due to their significantly higher number of spatial units – Dusek–Kotosz 2016).

Table 3

The absolute and relative values of the ‚territorial development index' and their changes in the sections of the border zone

Territorial categories	Logarithmic weighted deviation, %			Hoover index, %		
	1910	2016	change, %	1910	2016	change, %
Austrian	10.840	4.371	–6.47	9.978	3.827	–6.15
Western-Slovakian	9.624	4.048	–5.58	8.808	3.748	–5.06
Eastern-Slovakian	10.581	4.289	-6.29	9.899	3.904	–5.99
Ukrainian	9.612	4.006	–5.61	8.714	3.717	–5.00
Romanian	10.746	4.211	–6.53	9.890	3.749	–6.14
Serbian	8.371	3.062	–5.31	6.971	2.571	–4.40
Croatian	10.377	4.436	–5.94	9.723	3.954	–5.77
Slovenian	10.583	3.720	–6.86	9.681	3.438	–6.24
Non-border areas [a)]	14.042	5.042	–9.00	13.538	4.608	–8.93
Hungary	13.327	4.987	–8.34	12.704	4.536	–8.17

a) Without Budapest.

Source: calculated on the basis of the census from 1910 and taxation data from 1908 – http://www.gistory.hu and by the datasets from the HCSO, the TeIR and the NAV.

Additional territorially detailed calculations might be required for an adequate background in order to test the characteristics of the borderland – including the hypothesis about the higher level of inequalities along the state borders compared to the non-border areas (e.g. Peach 1997, Pénzes et al. 2014).

Changes in the pattern of development levels along the border areas of Hungary

The absolute and relative formula of the 'territorial development index' from 1910 and 2016 were not completely appropriate to detect the alteration of the spatial pattern and the position of settlements because the significant decrease of spatial inequalities diminished these tendencies. In order to investigate these research issues, a simplification was required. The settlements of Hungary (according to the corrected list – see Table 1) were ordered and ranked into 10 quantiles by the territorial development levels.

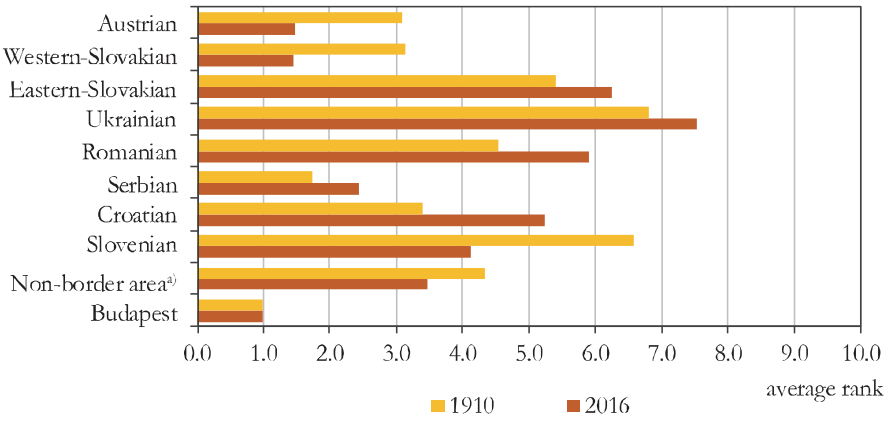
Weighted average rank was calculated to the territorial categories of the border zone on the basis of the ranked values. With the help of this simple method changes of the relative position could be detected (Figure 4).

The diagram illustrates the changes of the average values weighted by the settlements' population number (Figure 4) in which lower values represent a better situation regarding the position within the development rank and higher values mean a worse position. In the light of the results, the Austrian and Western-

Slovakian sections of the border zone had been developed even before the Trianon Peace Treaty and their average position became more favourable. However, the Serbian section could be regarded as the most developed border zone whose position weakened until 2016. This section included only 26 settlements, among them Szeged with its outstanding size and development. The most impressive change could be detected in the case of the Slovenian section where the average ranking became significantly better.

Figure 4

The average rank of settlements within the sections of the border zone in 1910 and in 2016



a) Without Budapest.

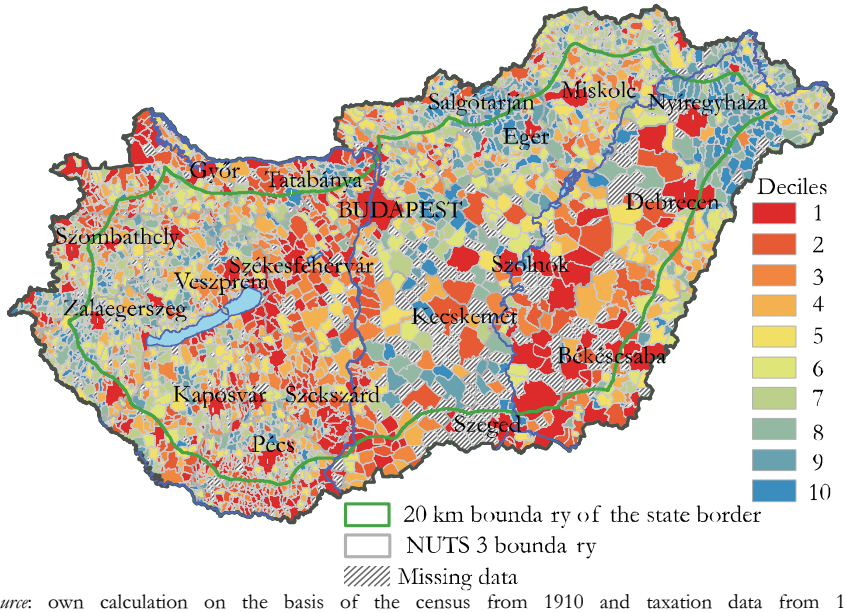
Source: own calculation on the basis of the census from 1910 and taxation data from 1908 – http://www.gistory.hu and by the datasets from the HCSO, the TeIR and the NAV.

The average values weakened in the Croatian, Romanian, Eastern-Slovakian and Ukrainian sections, out of which the Croatian one was better than the non-border area's value in 1910 but it became much worse by 2016. The other sections' position – the Romanian, the Eastern-Slovakian and the Ukrainian one – could be regarded as underdeveloped even in 1910 and this situation worsened (and became geographically concentrated).

The pattern of the deciles created from the territorial development index values were illustrated on maps (Figure 5 and 6). These maps clearly demonstrate the location of developed and underdeveloped areas within the country – disregarding the exact values of the index. The formerly listed characteristic territories – in spite of the convergence – represented a massive spatial clustering (the formation of extended developed zones versus contiguous underdeveloped areas until 2016). This visible process could be observed on the maps and it had been confirmed by the strengthened values of spatial autocorrelation since 1910 (as it was proved by Győri–Mikle 2017).

Figure 5

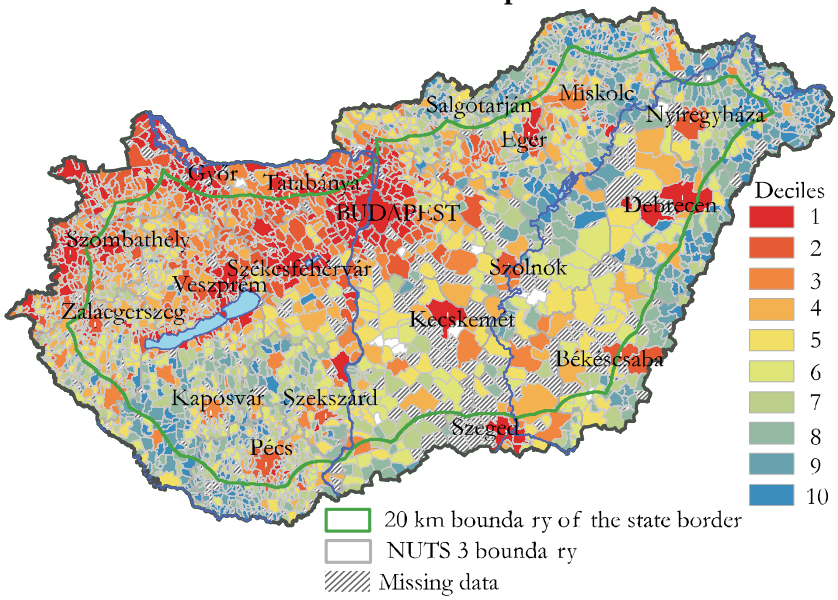
The deciles of the 'territorial development index' in 1910 according to the LAU 2 administrative division of 2016



Source: own calculation on the basis of the census from 1910 and taxation data from 1908 – http://www.gistory.hu.

Figure 6

The deciles of the 'territorial development index' in 2016

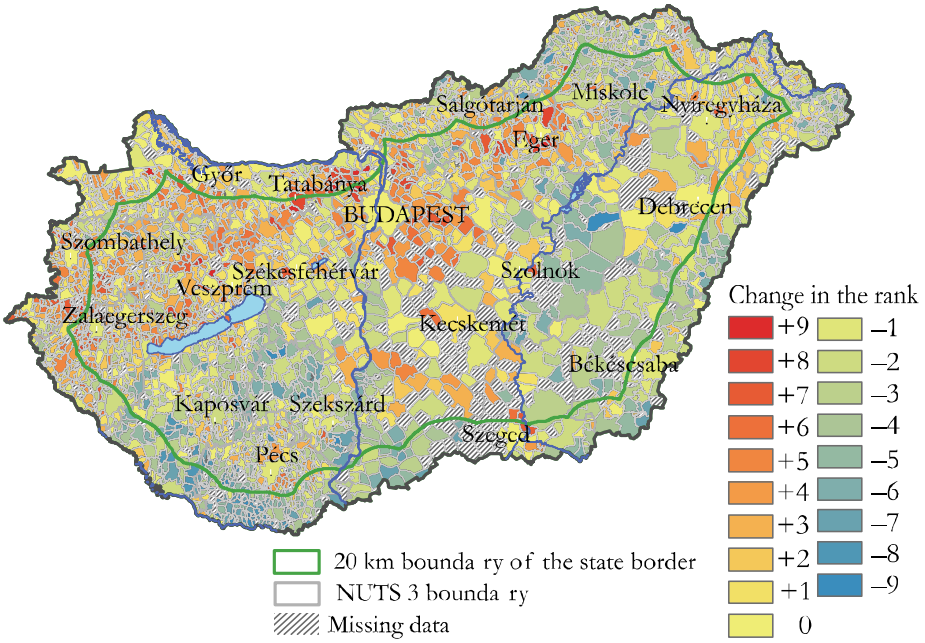


Source: calculated by the datasets from the HCSO, the TeIR and the NAV.

The changes in the rank of settlements clearly demonstrated the developing and the deteriorating territories between 1910 and 2016. This pattern illustrated on the map (Figure 7) could be adequately interpreted only with the previous maps about the development categories (Figure 5 and 6). From this point of view, the increasing impact of the large towns on their neighbours (especially Budapest) was explicitly visible. The settlements in the border zone characteristically stepped forward along the Slovenian, Austrian and Western-Slovakian sections, while the Eastern-Slovakian, Ukrainian and Romanian sections decreased in their development ranks. Groups of settlements with negative tendency could be detected in the former hinterlands large towns along the Hungarian-Romanian border – e.g. Satu Mare (Szatmárnémeti), Oradea (Nagyvárad), Arad (Arad). This pattern could not be unambiguously observed at the Eastern-Slovakian section of the border zone – e.g. in the hinterland of Košice (Kassa), however a continuous peripheral territory (Cserehát) formed by 2016. The demarcation of the state border was not the cause of every problem in the case of these areas but it had an important role in the escalation of the acute social and economic problems (Kovács 1990, Süli-Zakar 1992, Baranyi 2007, Pénzes 2015).

Figure 7

Changes in the rank between 1910 and 2016 – according to the LAU 2 administrative division of 2016



Source: own calculation on the basis of the census from 1910 and taxation data from 1908 – http://www.gistory.hu and by the datasets from the HCSO, the TeIR and the NAV.

The most obvious peripherization occurred along the Croatian border – especially in the territory of Ormánság. These characteristically underdeveloped territories could be described by several social challenges and some of them had no relationship with the existence of the state border (e.g. only-child birth control in the Ormánság caused below average natural reproduction which led to population decrease along with the significant migration related loss – see Klinger–Mikes (1965), Andorka (1970), the deportation of German population after WWII deeply affected Baranya county (Kocsis 1996; Molnár 1998) as well as the rapid increase of the Roma population during the last decades (Baranyi et al. 2003).

Conclusions

Territorial development is a multidimensional concept representing long (or even short) term changes and great geographical diversity that makes the comparative analyses especially difficult and hypothetical.

State borders significantly influence the spatial processes in various forms and the newly demarcated borders after the Trianon Peace Treaty also caused a drastic change in the circumstances of the effected territories in Hungary.

The method of the 'territorial development index' created for the recent situation could be adapted for the historical datasets as well, and detailed (LAU 2 level) results were produced. The common methodological basis provided the opportunity to compare the outputs of the computations. The limitations of the direct comparisons between 1910 and 2016 could be managed with some simplifications.

The most important findings could be concluded as follows; some of the underdeveloped areas along the present state border of Hungary had existed even before the demarcation of the Trianon borders (dominantly along the Eastern-Slovakian border, the Northern part of the Romanian border and along the Slovenian border). Large scale disparities existed at the beginning of the 20th century within the country which decreased significantly by 2016 (however the precise detection of the stages within this period lasting for more than one century require more accurate calculations). The general tendency of convergence influenced the border zones as well – both approaching the Hungarian average and within-region convergence could be measured. On the other hand, the geographical concentration of the most underdeveloped settlements (the lowest quantiles concerning the rankings of settlements) became visible along the Eastern-Slovakian, the Ukrainian, the Romanian and the Croatian sections of the border zone. Groups of settlements with negative tendency could be detected in the former hinterlands' large towns along the Hungarian-Romanian border. The settlements in the border zone characteristically stepped forward along the Slovenian, Austrian and Western-Slovakian sections.

The results tend to draw the attention to the spatial polarization process because significant part of the underdeveloped territories located along the borders did not

exist prior to 1920. Furthermore, the increasing concentration of underdeveloped settlements in the border zone was not only the direct effect of the creation of the state boundary but the cumulative result of multiple disadvantageous social processes. However, the border undoubtedly had a significant role in the conservation and strengthening of the negative tendencies. At the same time, developed zones – more or less regardless of the new borders drawn in 1920 – became more developed. Nevertheless, additional researches are required to prove these findings more adequately.

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The economic consequences of World War I and the Treaty of Trianon for Hungary*

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Hungary's post-Trianon economic situation is still discussed selectively in the literature on the subject, and the same applies to wider public discourse. Contemporary Hungarian surveys of the economic effects of the Trianon Peace Treaty focus on the loss of natural resources, implicitly assuming that raw materials and other natural resources are the main drivers of economic growth.

However, based on the traditional interpretation of Trianon's economic consequences, we cannot explain some basic facts of economic history.

As the study demonstrates, Hungary's post-Trianon economic performance was not inferior in international comparison to the relative performance observed during the period of dualism. Thus, in the medium and long term, the peace treaty did not have nearly as negative an economic impact as is commonly proposed. One of the main reasons for this is that natural resources were no longer key determinants of economic growth between the two world wars, but rather were structural changes in the economy, technological advances, and human capital that were less affected by the peace treaty.

Keywords:
Peace Treaty of Trianon, economic growth, interwar Hungary, economic history

Introduction

Historians describe and interpret the post-World War I economic situation of Hungary quite uniformly and the wider public discourse on the period does not differ much either. The great losses suffered because of the Treaty of Trianon are the starting point.[1] Hungary lost two-thirds of its territory, more than half of its population and the overwhelming majority of its natural resources; 84% of forests, 89% of

* The study is an edited version of a presentation held on 16 October 2019 at the conference "Trianon 100 – Consequences of the Treaty in the context of statistical analyses ".

[1] The longer version of the paper: Tomka (2018, pp. 47–80).

iron ore production, one-third of lignite production, the entire copper- and salt mining went to neighbouring countries. Losses in industrial capacity were great, too, although their distribution was unequal: the range spread from 89% of timber mills to 18% of the engineering industry. The economic unity of the country, as well as that of the Austro-Hungarian Empire dissolved, and the war and revolutions intensified the impact of the following economic disorganisation. This interpretation does not only consider the economic consequences of the Treaty of Trianon as severe, but – implicitly or explicitly – it also assigns extraordinary economic importance to the peace treaty, as it raised immense obstacles in the path of Hungary's economic development in the coming decades (Macartney 1937, pp. 461–462., Berend–Ránki 1966, pp. 31–35.).

This portrayal fits with the common discourse – using the term of the age – on the 'mutilation' of Hungary (Buday 1923, pp. 100–104., Magyar Reviziós Liga 1931).[2] It somehow anticipates the alleged economic failure of the period between the two World Wars, and therefore, suits the discourse condemning the Horthy-regime. This discourse seems to support the conclusion that the economic dynamism of the interval between the two World Wars is far behind the performance of the dualism era.

This interpretation of Trianon contains several real elements; however, it is mistaken in omitting essential facts established by research in economic history. The traditional interpretations of the economic consequences of Trianon do not allow us to explain – based on research on European economic convergences and divergences – that the economic performance of post-Trianon Hungary was basically the same in international comparison as the relative performance of the dualism era, although, at that time, the hardships due to the Treaty of Trianon did obviously not emerge.

Our treatise examines the economic consequences of World War I and the Trianon peace treaty in Hungary. We focus on the above-mentioned contradiction between the results of economic history and traditional Trianon interpretations. International comparisons gain a significant role as might lead to new conclusions, or at least help formulate new questions in a field of study stagnating for decades. For this purpose, we present, first, the main characteristics of the international and Hungarian scholarship on the effects of World War I and the peace treaties and specify the issues they raise. In the next section, we review how the war and the rulings of the peace treaty affected the performance of the Hungarian economy between the two World Wars. We examine separately the factors of economic growth, such as sectoral shifts, changes in capital intensity, developments in technology and human capital in Hungary, following World War I, as a valid conclusion requires familiarity with these aspects. Finally, we evaluate the results obtained in these fields and summarise the research outcomes.

[2] For contemporary discourse, see, Buday (1923, pp. 100–104.); Magyar Reviziós Liga (1931).

World War I and the effects of peace treaties on research

Understandably, academic research in the interwar period already made great efforts to analyze the economic consequences of World War I and the various peace treaties. It is important to identify the main trends of interwar scholarship, as subsequent generations of scholars adopted several outcomes of this research. At the same time, a detailed historiographical overview is not possible in this study; therefore, we concentrate on the impact of peace treaties.

The book series of the Carnegie Foundation, approximately 150 volumes published in several sub-series, fairly illustrates the efforts of the period in processing the economic and social outcomes of the war (Shotwell 1921–1937). Among the Hungarian authors of the series are Sándor Popovics (1926), János Teleszky (1927) and Dezső Pap (1934). Afterwards, too, research literature dealt en masse with the economic impacts of World War I, considering that the changes in world economy significantly contributed to the onset of the Great Depression (Aldcroft 1981, Pogány 2014).

John Maynard Keynes undertook the first comprehensive analysis of the economic consequences of the peace treaties. Keynes, briefly a member of the British delegation in the Paris peace conference, published surprisingly early, at the end of 1919, his views on the economic effects these treaties. He criticised, first, the rulings against Germany, believing that the reparations imposed upon the country will paralyse its economy, with serious detrimental effects on Europe. He suggested that the reparations should not be an extensive sum; furthermore, Great Britain and the United States should renounce them, and the Americans should not reclaim the loans granted to the other entente states during the war. Keynes essentially assigned herewith the main course of the contemporary and ensuing criticism. Other Western European observers, in particular the representatives of the defeated states, joined him in criticism. Keynes also emphasised action against economic nationalism, and urged, for this purpose, the establishment of a free-trade area; however, politicians largely dismissed these proposals (Keynes 1919, 1922).

Subsequent observers and analysts of the Paris peace settlement often highlight the negative economic impacts of these peace treaties, even though they mostly emphasise political outcomes and not economic ones. David Mitrany (1936, p. 182.) argues that the economic dislocation caused by the peace treaties was greater than the one caused by the war, as several communication and economic networks ended. Several studies also discuss the economic imbalances of the successor states (Singleton 2007, p. 32.). Derek Aldcroft states that although the peace treaties did not completely disregard economic aspects, such considerations did not fully prevail at the demarcation of the new borders. Aldcroft considers that in case of Germany and other defeated powers, the loss of natural resources was a grave consequence but not a fatal hindrance. He attributes greater negative impact to the dismember-

ment of previously economically integrated, unified industrial regions (Aldcroft 1981, p. 23.). Furthermore, Aldcroft emphasises that the rulings hampered post-war economic reconstruction (Aldcroft–Morewood 1995, p. 11.).

Keynes's several conclusions remain in mainstream scholarly literature; however, we cannot claim that international research accepted, or accepts, uniformly, the reasoning of the English economist on the economic consequences of the Paris peace settlement. Early observations noted that Keynes' predictions were inaccurate in several respects. For instance, Keynes maintained that Europe's iron production would reduce because of the peace treaties; however, as early as 1929, iron production surpassed pre-war levels by 10%. Keynes also assumed that Germany's iron and steel production would be unable to recover; however, by 1927, production had already grown by approximately one-third, considering the pre-war borders (Mantoux 1946, Heilperin 1946, pp. 930–934.). We could continue listing Keynes' miscalculations; however, we conclude instead that the British economist was too pessimistic, especially regarding Germany's economic performance. It is easy to demonstrate that Keynes strongly overestimated the negative economic impacts of the peace treaties.

Niall Ferguson (1999, p. 397.), representing more recent research, considers that the harshness of the peace terms was not without precedent and the German hyper-inflation and other economic hardships of the age were much more the results of the war than that of the peace treaties. Particularly, Sally Marks (1978) and Stephen Schuker (1985) support the idea that the Germans willingly worked towards extricating themselves from the reparations, which made economic reorganisation difficult, and not the reparations themselves. According to Sally Marks (2013), Keynes' work became one of history's most influential pamphlets, not least because few educated individuals were familiar with economics in the period, and therefore, they accepted Keynes' misinterpretations and that he neglected significant facts.

Keynes' book was translated almost immediately into Hungarian. Its influence was significant; however, the academic discourse on the economic consequences of the war and the Trianon peace treaty followed a somewhat different path here. Contemporary Hungarian economists and other social scientists emphasised that the remnants of Hungary, without the disannexed territories became almost unviable, as essential resources were missing. Furthermore, imbalances arose between productive capacity, raw material base and market demand, often complemented by the claim that these would all have a strongly negative effect on the economic viability of Europe (Földes 1928). Geography became the most frequented field of related scholarly arguments in Hungary (Hajdú 2000, Keményfi 2006). Its representatives, especially Pál Teleki, had already assisted the Hungarian delegation during the peace talks. Albert Apponyi, the head of the Hungarian delegation, laid great stress on arguments of the kind in his response of 6 January 1920 to the peace terms: 'this country is such a perfect geographical unit which is unique in Europe. … The eco-

nomic correlation of our parts….is the most absolute as the middle forms a huge agricultural plant while the outskirts contain everything necessary for the development of agriculture'. (Romsics 2000, pp. 125–133.). This line of argument repeatedly surfaced in the interwar years. Teleki (1919, 1920, 1923) and other Hungarian proponents of border revision passionately supported the notion that the historical Hungary formed an outstandingly harmonious economic unity, and after its abolition, the people of the Carpathian basin were doomed to stagnation.

The picture emerging during this era in Hungary about the economic consequences of the Trianon treaty became largely constant, as we referred to it in the introduction (Kovács-Bertrand 1997). In fact, the post- World War I Hungarian economic situation, the changed economic capabilities, and their impact, became an important part of the national self-representation and identity, following the Trianon treaty. This is clearly visible in the now thriving Trianon-themed pamphlet-literature (Ablonczy 2015).[3]

Despite several outstanding studies about the effect of the Trianon peace treaty on Hungarian political thinking, detailed and unbiased analysis about the economic consequences of the peace is rare (Romsics 2001, Zeidler 2008).[4] The comprehensive economic history by Iván T. Berend and György Ránki, published in 1966, presents the outcomes most exhaustively. Characteristically, the studies covering the economic history of the 1920s, duty-bound, spell out the negative economic effects of Trianon; however, the introduction of the new currency usually occupies centre stage in the representation of the 1920s. For instance, two-thirds of the discussion on the circumstances of the period up to the Great Depression, in a popular economic history textbook, deals with the introduction of the stable currency (Honvári 1996, pp. 350–391.). Besides public finance, related studies emphasise the import-substitution policy aiming at industrialisation and driven by economic nationalism; however, stabilisation is almost immediately followed by the Great Depression (Berend–Szuhay 1973, Honvári, 1996).[5]

Even a brief overview of the research literature makes it obvious that analyses of the economic consequences of the Trianon peace treaty generally confine themselves to the enumeration of the rulings. They present territorial changes, reparations and similar issues related to economic development, without the consideration of their actual economic outcomes. This is also an important deficiency, because the international research dealing with the economic effects of the Paris peace treaties is not free from selectivity either; however, it does correct the mentioned work of Keynes and rectifies other invalid findings established in the interwar era. On this

[3] Misbeliefs related to the peace treaties and their influence on national identity: Ablonczy (2015).

[4] For studies considering superficially the economic consequences, see Jonas (1982, pp. 529–544). For outstanding works on political responses, see, Romsics (2001). Zeidler (2008) published the most important sources and documents of the political remembrance of the peace treaty.

[5] Some other historical studies dealing with this field: Berend–Szuhay (1973); Honvári (2006).

basis, our task is to go beyond a mere review of the economic resolutions of the peace treaty and try to uncover the actual economic performance of post-Trianon Hungary.

The international comparison of economic output, such as gross national product, is considered a major tool for the assessment and evaluation of economic performance. The indicators of economic output cannot reveal all major aspects of economic change; for instance, the structural shifts among sectors or the restructuring of exports and capital flows. We do not examine these aspects in detail in this study either. Economic output is in the centre of economic analysis today and of research on economic history, as it marks the results of economic activity most comprehensively, especially, when studied in the long run. Comparison may be an effective research strategy for us – with its limitations – because it is the most feasible way to evaluate the economic impacts of the Trianon peace treaty, separating them from the consequences of the war. The war affected other countries too, which were also subjected to the evolving international economic environment. However, the Trianon peace treaty evidently had no material economic impact on these countries. Therefore, comparison may be appropriate for at least the approximate assessment of how the economic performance post-World War I Hungary was determined by the effects of the war and to what extent was conditioned by the Trianon peace treaty.

Economic growth in post-Trianon Hungary

As suggested, this study cannot deliver an overall historiographical overview; however, we note that historians and the wider public usually assumes a strong contrast between the economic performance of the era of dualism and the post-Trianon (interwar) period (Berend 2003). The former era does not appear simply as the Belle Époque or 'happy times of peace' but as a period with outstandingly dynamic economic development, in which Hungary made great advances in bridging the gap with the developed West (Schulze 2000, p. 314., Kövér 2007, p. 44–72.).[6] In contrast, the economic development of the Horthy-regime is often depicted through the lens of inflation, the Great Depression, and finally, entering the German sphere of interest. Considering systematic comparisons, this image needs revision, which might affect the interpretation of the fallout of Trianon.

[6] Based on recent research, the economic growth of the era of dualism in Hungary was not as strong as claimed by several researchers. This in itself has consequences for the traditional, sharp contraposition of the economic development of the dualism and the interwar era. We cannot examine these results thoroughly here; we only note that Hungarian economic growth was undoubtedly significant preceding World War I, although not outstanding in international comparison. GDP per capita increased from 1,092 dollars in 1870 to 2.098 dollars in 1913, that is, it almost doubled in 40 years. Schulze (2000, p. 314.); on the state of the art, see, Kövér (2007, pp. 44–72.).

One of the main conclusions of the comparative analysis of economic growth in modern Hungary is that the stark contraposition of the performance of the dualism and the interwar era is not plausible. The economic growth of the dualism only appears high when compared to the period including the years of World War I too; however, the difference is still not dramatic; growth rate of gross domestic product (GDP) per capita was at a yearly average of 1.6% between 1890 and 1913 and 1.2% between 1913 and 1939. Examining the period between 1920 and 1939, we find that growth is significantly higher, a yearly average of 2.7%. It should be noted, however, that the level of production in 1920 did not reach pre-war levels, and this distorts the results to some extent. International comparison offers a solution for such types of methodological problems, which are hardly resolvable if the analysis is restricted to one country (Tomka 2011, p. 109.).

There are several options in terms of selecting units, and periods to cover, to compare the post-Trianon economic performance of the Hungarian economy. As this study cannot tackle the methodological problems of comparison, we only state that Hungary will be compared to a sample comprising 13 Western European countries. This procedure is based on the consideration that, one the one hand, the developments in one country do not influence the outcome of the sample; on the other hand, the most significant growth impulses for the Hungarian economy at the time originated from Western Europe, which primarily transmitted leading edge American technologies, too.

At the end of the 19th century, GDP per capita in Hungary, considering the Trianon territory, represented somewhat more than a half of the average Western European level, lagging behind every country in the sample. At the beginning of the 20th century, Hungary converged in a small degree to Western Europe, and this progress culminated in the years preceding World War I, when the Hungarian level was at 60.4% of Western Europe (Figure 1, Table 1).

Figure 1

Gross national product per capita in Hungary and Western Europe

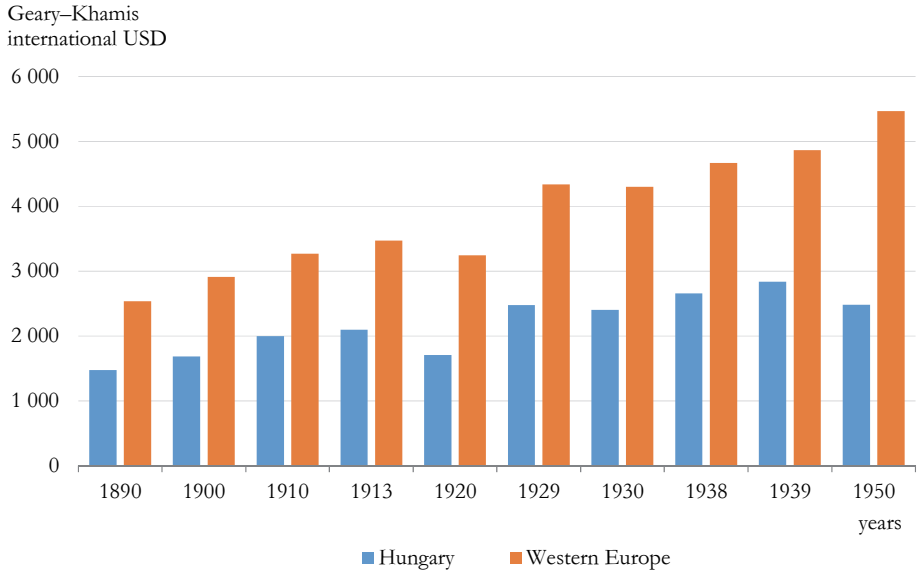

Table 1

Gross national product per capita in Hungary and Western Europe

(1990 Geary–Khamis international USD)

	1890	1900	1910	1913	1920	1929	1930	1938	1939	1950
Hungary (HU)	1473	1682	2000	2098	1709	2476	2404	2655	2838	2480
Western European (WE) average	2535	2910	3269	3474	3247	4336	4301	4667	4867	5467
HU/WE average x 100	58.1	57.8	61.2	60.4	52.6	57.1	55.9	56.9	58.3	45.4

Note: Hungary 1890–1950: post-Trianon territory; Western Europe: United Kingdom, France, the Netherlands, Belgium, Ireland, Germany, Austria, Switzerland, Sweden, Denmark, Norway, Finland, and Italy; Different dates: Ireland: 1913 instead of 1910, 1921.

Source: Author's own calculations based on the following sources: Maddison (1995b, pp. 194–195.) (Germany 1890–1950), 198. (Ireland 1890–1900).; Maddison (2003, pp. 60–61.) (Austria, Belgium, Denmark, Finland, France, Italy, the Netherlands, Norway, Sweden, Switzerland, United Kingdom 1890–1913), 62–63. (Austria, Belgium, Denmark, Finland, France, Italy, the Netherlands, Norway, Sweden, Switzerland, United Kingdom 1920–1950), 67–69. (Ireland 1913–1950), 100–101. (Hungary 1890–1950).

World War I, and the following years in particular, marked a more severe economic effect on Hungary than on most Western European countries. At the same time, in Hungary, recovery after Trianon began early and proceeded quickly. GDP per capita reached 57.1% of the Western European average on the eve of the Great Depression (1929), almost reaching the relative economic development prior to World War I. Hungary slightly surpassed this level before World War II; with 58.3% of the Western European average in 1939, the country essentially achieved pre-World War I relative level of economic development (Tomka 2011).[7]

All this suggests that Hungary's post-Trianon economic growth was considerable. The growth rate of per capita output was just slightly behind the performance of the era of dualism, and positive in comparison to the Western European economies between the two World Wars. Reconstruction following World War I was relatively quick, and it is not possible to substantiate the often-claimed extremely negative impact of the peace treaty and the territorial changes. If the economic aftermath of Trianon were as destructive as supposed by contemporaries, and as it remains commonplace in scholarly literature, then the rapid reconstruction in the 1920s could not have occurred.

The somewhat slower growth rate than the preceding period occurred in other parts of Europe, too. In these countries, territorial losses on the scale of Trianon did not occur; therefore, the change in growth rates was mostly independent of territorial changes. This is at least indirect evidence for demonstrating that economic difficulties were not primarily the result of Trianon, rather, consequences of other factors prevailing throughout Europe, most notably, World War I and the destruction of international economic relations by economic nationalisms in the interwar era.

Theoretically, it is conceivable that although the effect of Trianon was overly negative, the post-Trianon economic growth of Hungary did not diverge significantly from international trends because of the countervailing effect of one or more positive growth factors in Hungary, which did not surface in other countries. However, there is no sign of such significant factors in Hungary in the 1920s. We could consider two potential factors: the relatively moderate nature of war destruction and the import of capital. These undoubtedly played a positive role in the growth; however, they were not unique, present only in Hungary, and therefore, they do not substantially affect the results of the above comparisons.

Growth factors in the post-World War I period

Against this background, it is plausible to argue that the post-peace treaty Hungarian economy was relatively successful, because though the peace treaty had negative economic impacts, it did not influence the performance of the Hungarian economy significantly, especial-

[7] For detailed data, see, Tomka (2011, pp. 267–269., 270.).

ly in the long run. In general, the growth potential of the European economies were not determined by the magnitude of natural resources in the period between the two World Wars, but other factors, unaffected by the peace treaty, were more important. We will briefly overview some of the most significant growth factors and obtain an insight into how the Hungarian economy adapted to the evolving conditions of the 1920-1930s (Maddison 1995b, pp. 33–40., Szirmai 2005, Anderson 1991, Erdős 2006).[8] The growth factors examined here include structural changes, capital intensity, technological progress, human capital, and international economic cooperation.

1. Structural changes. The productivity levels of specific economic activities and economic sectors differ. Consequently, changes in economic sectors affect economic output: the relative decline of lower productivity economic activities in favour of higher productivity ones itself contributes to economic growth. In fact, economic growth was realised in large part by the shifts between economic sectors in the 20th century in Hungary and all over Europe (Eckstein 1955, p. 189.). Differences between sectors in production values per employee were evident in the first decades of the century in Hungary too (Table 2).

Table 2

Production value per employee in Hungary

(in 1938/1939 purchasing power pengoe)

	1900	1911–1913	1920–1921	1930
Agriculture	774	1012	507	785
Mining and metallurgy	2633	1815	1642	2245
Large-scale industry	1186[a)]	2707	2738	3188
Small-scale industry	–	923	1046	1616
Commerce	1770	1778	1398	1738
Transportation	3489	3497	nda	3487
Services	1352	1577	–	1714
Total	973	1164	902	1301

[a)] Together with small-scale industry.

Note: 1900–1913: post-Trianon territory; services include personal, government, business, educational and other services.

Source: Eckstein (1955, p. 189.).

During the process of restructuring in 1920s Hungary, the driving force of economic development was the retreat of agriculture and the growth of nearly all other sectors (Table 3). The latter group of economic activities included small-scale industry, considered a mixed category in statistics, as it contained small construction enterprises and the production of small service related firms. Home building and rent-

[8] For details, see, Maddison (1995b, pp. 33–40.); Maddison (1995a, pp. 7–131.); Szirmai (2005); Anderson (1991); Erdős (2006, pp. 9–27.).

al, as well as classic services (finance, education, health services, government activities) were also the carriers of sectoral change, and therefore, of economic growth. Although large-scale industry grew as well, the pace of change was moderate in this sector. Hungary – considering the Trianon territory – came out of the war with a larger industrial capacity than the one it entered with. For example, large-scale industry had approximately 400,000 hp machine stock in 1913, which grew to 600,000 hp by 1921 (Eckstein 1955, p. 177.). Following World War I, metalworking, machine industry and food industry faced a significantly smaller and structurally changed market. Adaptation to these changes took years and it was only partial, as enterprises could only utilise part of their whole capacities in the 1920s. The industrial boom of the second half of the decade was mainly due to the dynamics of the textile industry and that of construction – especially home building.

Table 3

Contribution to national product by sector in Hungary

(%)

	Agriculture	Mining	Industry	Small industry and construction	Commerce	Transportation	Housing services	Services
1911–1913	49.8	1.2	13.8	8.2	4.0	5.1	6.1	11.8
1924–1925	46.3	2.0	16.7	10.7	4.9	3.8	5.8	9.9
1929–1930	36.6	1.2	16.8	11.3	7.5	6.5	7.2	13.3
1931–1932	29.9	1.3	15.3	12.6	8.6	6.7	9.3	16.2

Note: 1911–1913: post-Trianon territory at current prices, as percentage of the net national product (NNP).
Source: Eckstein (1955, p. 165.).

As stated, agriculture essentially stagnated in interwar Hungary. We may look for the cause of this in global economic trends, in the prevalence of large estates in the country, and in economic policy alike. Dominant latifundia were equipped for cereal production, even if cereal price levels had an unfavourable trend due to oversupply throughout the world economy. This process of gap widening between prices of agricultural and industrial products swapped capital into industry. The customs policies of Hungarian governments also facilitated the process, keeping industrial duties high, incidentally, in line with international trends.

The loss of ground for agriculture and the development of higher productivity sectors is a structural change often accompanied by capital stock increase, improvement in human capital and expansion of international trade. These are also

important growth factors, although their exact separation from structural change effects is not always possible (Maddison 1995b, p. 40.).

2. Capital intensity. The rapid technological development of the late 19th and early 20th centuries, offered the opportunity for ever-increasing productivity. The new technologies materialised in more expensive machines and equipment, while requiring the building of costly infrastructures. Evidence from economic history suggests that high-level capital accumulation and an increase in capital stock per employee are preconditions for productivity growth (Kendrick 1993, pp. 129–145.). It is equally clear that the size of capital stock accounts for a relatively small proportion – for one-quarter, according to some estimates – in the differences between the output levels of national economies and the remaining greater part is the result of more efficient utilisation of resources (Clark 2007, p. 329.).

Long-term growth is influenced, besides the level of capital accumulation, by the structure of investments. Growth is facilitated if the greater productivity sectors and the infrastructure have an outstanding share in investments. As a thorough analysis of Hungary's capital accumulation is not possible here, we only highlight three major tendencies (van Leeuwen–Földvári 2011, pp. 143–164.). First, the average level of capital accumulation – basically, investments – represented 11.2% of the gross national product in the second part of the 1920s (Tomka 2009, p. 100.). This was equal, largely, to the Western European average. As domestic accumulation was low, all this was possible by increasing reliance on financial transfers from abroad–loans and capital investments. Besides, the proportion of sectors generating higher added value increased in capital accumulation, although with significant fluctuations, while that of agriculture diminished. Finally, we must emphasise the decisive weight of the infrastructure, especially of home building, within investments. This sector accounted for more than 40% of the capital accumulation in the 1920–1930s (Table 4.). Moreover, home building represents a form of investment that has a direct impact on the consumption level and directly improves living standards. Higher value homes have been built in larger cities and in Budapest, first; however, villages too witnessed dynamic home building trends, mainly because of the land reform resulting in 390,000 new small holdings and building plots (Eckstein 1955, p. 206.). Investment efficiency, considering the growth rate associated with the level of investment, could be considered sufficient, and it did not crowd out consumption either. Even more importantly, the high scope of infrastructural investments facilitated growth in the long run.

Table 4

Distribution of capital accumulation by sector in Hungary

(%)

	Agriculture	Mining	Industry	Commerce, transportation	Home building	Government
1924–1925	22.2	0.5	37.6	12.8	23.5	4.5
1929–1930	15.7	0.9	23.1	11.0	42.6	6.6
1931–1932	11.3	1.7	26.0	16.9	38.6	5.4

Note: NNP at current prices.
Source: Eckstein (1955, p. 205., 219.).

3. Technological development. Traditionally, technological change is interpreted as the main source, or at least carrier, of economic growth in economics, and in the economic history literature (Feinstein 1981, pp. 128–143.).[9] A multitude of innovations could serve as examples to prove how technical progress accelerated from the end of the 19th century, enabling productive labour. The development comprised different stages with different areas leading; however, in the early the 20th century, combustion engines and electricity became major sources of growth, especially in transportation and communication.

Passenger cars and telephones began to appear in larger numbers in Europe in the 1920s. It seems that the diffusion of combustion engine in Hungary is similar to the usual trends in East Central Europe, at least in terms of automobiles. In 1930, one automobile came per one thousand people in Hungary, and in Czechoslovakia and Poland. Simultaneously, Hungary was not only leading the region in the number of radios and telephones, but it also surpassed certain Western European countries. In 1930, there were 35 radios per 1000 inhabitants in Hungary, while this number was 33 in France, 30 in Norway, 26 in Switzerland, and 5 in Italy. Although France, Switzerland and Norway caught up and overtook Hungary very quickly in the 1930s, the early advantage of Hungary suggests the presence of capabilities to adopt new technologies. In case of the telephone, Hungary had 12 devices per 1000 inhabitants, which was considered the highest in the region in 1930, surpassing even Italy (Tomka 2013, pp. 232–233.).

Electricity consumption in interwar Hungary lagged significantly behind Austria or Czechoslovakia, but it increased faster than in these countries, meaning that the disadvantage was reduced (Mitchell 1992, pp. 500.). Internationally competitive companies operating in Hungary facilitated electrification. The Egyesült Izzó

[9] For the latter, see, Feinstein (1981, pp. 128–143).

Company was able to conduct significant export activity and its innovations (such as radio valves and tungsten lamps) and the implementation of research and development (R&D) in the modern sense, sustained competitiveness in the long run. The Ganz factory also sold world-class products; however, its exports did not expand to the same degree (Hidvégi 2014, pp. 45–64., Hidvégi 2016). Several large international companies active in the electrical industry operated branches in Hungary, including the Hungarian Philips Works, Standard Electric Co., Hungarian Siemens-Schuckert Works, and so on (Frisnyák–Klement 2017). Besides the competitive economic environment, the capital investment of these firms also played a significant role in technology import. Similar examples exist in other sectors of the economy too. However, based solely on these examples, it is undoubtedly difficult to gauge Hungary's success in technological innovation and adaptation in the 1920s.

4. Human capital. It is unnecessary to emphasise that the capability to adopt leading technologies and knowledge depends crucially on the level of human capital. According to the concept of human capital, knowledge is an equally important production factor as the capital incorporated in machines; furthermore, similarly, it can be accumulated, enhanced and even transmitted from one generation to another to a certain degree (Schultz 1961). Besides knowledge, human capital has other components, too, prominently, the population's state of health. We now examine these two factors.

Measuring the level of human capital is not simple; however, the access to education and changes in mortality may provide comprehensive information. Knowledge facilitates economic growth; schools act as agents of socialisation, passing values and norms necessary for effective social cooperation to the young (Szirmai 2005, pp. 213–224.). The average years of education, an indicator of the average educational attainment in a population, is a widely used indicator of human capital stock in research. The average length of education of the Hungarian population increased by 0.82 years between 1920 and 1930, which is one of the best results during the century, behind the 1990s and the 1940s, and surpassed the progress of any decade in the era of dualism (Table 5.) (van Leeuwen–Földvári 2008, pp. 1003). Improvement in mortality was even more spectacular during the 1920s; average life expectancy at birth increased by 7.7 years for men, and by 8.7 years for women. This is not only the fastest improvement in mortality during the recorded history of Hungary but the best result in this decade in a Western European context (Table 6.) (Tomka 2011, pp. 196–197., Schulze–Fernandes 2009, p. 284.). These achievements were the result of several factors, of which, we must emphasise the development of maternal- and child-care institutions (Stefania Alliance, Green Cross Movement), advancement in epidemics, extension of social insurance and progress in education.

Table 5

Average length of education in Hungary

	1890	1900	1910	1920	1930	1940	1950
Average years of education	4.03	4.63	4.94	4.45	5.27	5.72	6.71

Note: 1890–1910: post-Trianon territory.
Source: Schulze–Fernandes (2009, p. 284.); Leeuwen–Földvári (2008, p. 1003.).

Table 6

Average life expectancy at birth for men and women in Hungary and Western Europe

(years)

	1900	1910	1920	1930	1940	1950
Men – Hungary	36.6	39.1	41.0	48.7	55.0	59.9
Men – Western Europe (average)	45.6	49.8	53.1	57.7	61.9	65.2
Women – Hungary	38.2	40.5	43.1	51.8	58.2	64.2
Women – Western Europe (average)	48.2	52.3	56.5	60.8	64.1	69.3

Note: Hungary 1900–1910: post-Trianon territory; Western Europe: United Kingdom, France, the Netherlands, Belgium, Ireland, Germany, Austria, Switzerland, Sweden, Denmark, Norway, Finland, Italy.
Source: Tomka (2011, p. 271.).

It is necessary to highlight that education and the state of health of the population affects economic growth in the long run; therefore, the improvement of these indicators did not significantly determine the development of the 1920s; rather, they improved the growth potential of the country in the decades to come. In some periods in the 20th century, Hungary consumed sources of future economic development for the sake of short-term goals. The above signs indicate that these resources were rather enlarged in the 1920s.

5. International economic integration. Commercial and capital flows between national economies facilitate productivity growth, as they spread new technologies and offset the lack of natural resources. They also enable national economies to specialise in the goods and services they can produce most efficiently. One must also highlight the significance of free movement of ideas, knowledge and people in improving human capital. Generally, the smaller a national economy the more it has to rely on external trade (Frankel–Romer 1999, pp. 379–399., Dowrick–Golley 2004, pp. 38–56., Maddison 1995b, p. 37., Tomka 2011, p. 208.).

Of the examined growth factors, this promoted economic reconstruction in Hungary during the 1920s the least. Here, we do not need to go into the details of the increase in length of customs-frontiers within Europe after the World War, the rise in tariffs and the implementation of other trade barriers. Adaptation to the in-

ternational trends was following the *beggar-my-neighbour*-politics in interwar Europe, and the Hungarian government was no exception. Foreign trade essentially stagnated compared to the pre-war period throughout Europe, even during the boom in the second half of the 1920s (Ritschl–Straumann 2010, p. 175.). This undoubtedly moderated the growth of the world economy and also significantly reduced the effects of prevailing beneficial factors in Hungary.

Conclusions

To this day, scholarly literature treats the economic situation of post-Trianon Hungary in a rather one-sided manner, and this is true for the wider public discourse. The contemporary discourse in Hungary, in dealing with the economic consequences of the Trianon peace treaty, focused on the loss in natural resources, supposing – often implicitly – that raw material and other natural resources constitute the main factors of economic growth. This approach was outdated even between the two World Wars and is obsolete today. Moreover, these interpretations take as given that natural resources and economic capacities do not belong to the population of a territory and the labour of factories or other production units but to some impersonal entity, to Hungary, in this case. This is an unacceptable claim for the unbiased observer, and Hungarian analysts refute it in other contexts too. Finally, the traditional Trianon interpretations ignore that the modern, highest value-adding industries (e.g. machine industry) and other economic activities (e.g. financial services) remained in a larger proportion in Hungary than the share of the population warranted.

Owing to these shortcomings of the mainstream interpretations, it is necessary to introduce new approaches in the research on the economic impacts of the Trianon peace treaty. Therefore, we studied the post-World War I economic growth in an international comparison. The results of this analysis suggest that the reconstruction was successful in post-Trianon Hungary, and the economic growth approximately equalled the average rate in Western Europe. Consequently, the peace treaty did not generate such a negative economic outcome in the mid- and long run, as often assumed. One of the primary reasons is that natural resources were not – even between the two World Wars – major factors of economic growth. Structural changes in the economy, technological development and human capital were the driving forces of development, which were largely unaffected by the peace settlements. The final implication of this study is that when exploring the economic consequences of the Trianon peace treaty, we must undertake empirical research and tackle the relevant factors of economic growth.

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Changes in administration, spatial structure, and demography in the Partium region since the Treaty of Trianon*

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Following the Trianon decision, the name Partium re-emerged, this time as the name of a major region. When the border was defined, the infrastructure track overrode the ethnic, catchment, historic, administrative, and terrain dividing lines in the region. The previously balanced ethnic structure of the region's population has changed to a Romanian majority. In terms of spatial structure, the former market line has become a periphery, where only a few gateway cities managed to remain economically successful due to logistical reasons.

The new frontier suddenly eliminated the competitive situations of some city-pairs (for example Debrecen–Oradea, Szeged–Arad), creating new ones instead (Timişoara–Arad, Oradea–Cluj, Satu Mare–Baia Mare). The large cities that found themselves on the Romanian side of the border could not compete for major developments because their positions were strategically difficult to defend. Therefore, a peripherization of the border region took place. The ethnic change in the cities took place before the fall of Communism, while the population change in the suburban areas is taking place today.

Keywords:
border region,
spatial structure,
territorial-administrative system,
demographic change

Introduction

Partium is a geographic area located on the eastern edge of the Hungarian Great Plain, in the Romanian-Hungarian border region. The name originates in a times past political concept (1570–1860), referring to those 'parts' of Hungary outside Transylvania that formed together with Transylvania proper the Transylvanian Principality (later Grand Duchy). In the centuries before the Ottoman occupation, this area was one of the prosperous centres of the Kingdom of Hungary. The

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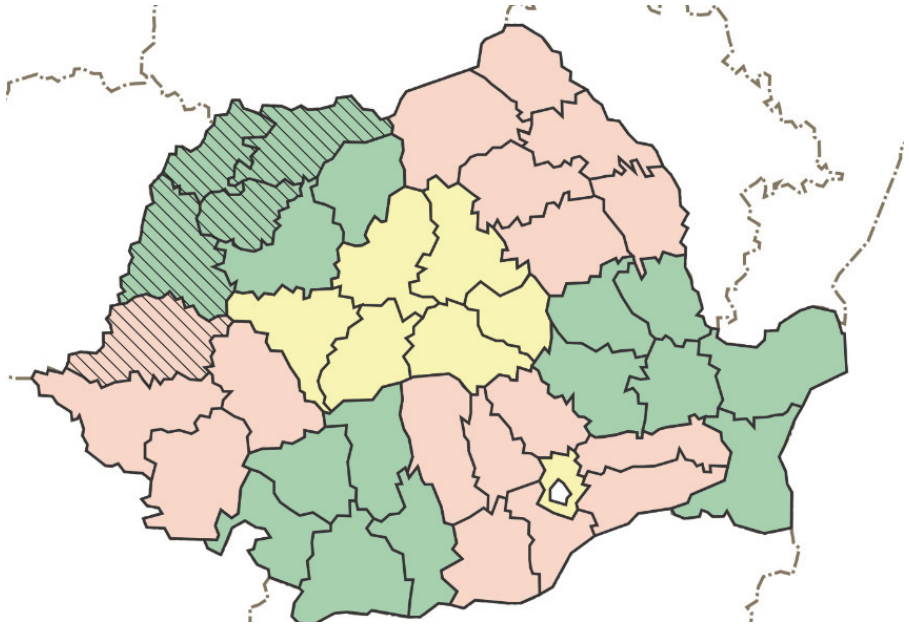
market line of Eastern Hungary was formed along the relief contact areas, and the flood-free plain had one of the densest settlement networks in the medieval kingdom (Süli-Zakar–Csüllög2000, 2003). While the periphery of the Great Plain was considered a socio-economic centre, the eastern highlands existed for a significant time as an inner periphery. At the same time, the river valleys Someş (*Hungarian: Szamos*), Crişul Repede (*Sebes-Körös*), and Mureş (*Maros*) that cross Hungary from east to west functioned as significant interregional transport corridors between the East Pannonian (Danube–Tisza) and Transylvanian basins (Kocsis 2018). These transport corridors still constitute the main spatial lines of the area. In the west, they run perpendicular to the north-south market line, while in the valley, gates forming the points of intersection shaped the economic and administrative centres of the region in an early historical period: Oradea (*Nagyvárad*) in the Crişul-Repede valley, Arad in the Mureş valley, and Satu Mare (*Szatmárnémeti*) on the two sides of the river Someş.

The modern concept of Partium is rooted in the Paris peace treaties that ended the First World War; as a result of the Trianon decision, the eastern parts of the Hungarian Kingdom were annexed to Romania. This decision not only allocated the historic Transylvania region and most of the Banat region to Romania, but also a rather large (almost 30,000 km^2) strip of land from eastern Tiszántúl (Szilágyi 2019b); today this area is called the Partium region. In Romanian, it is called Crişana, Crişana-Maramureş, Western Parts (Părţile Vestice – Pop 1997), while in a historical context, it is referred to as the 'Hungarian Parts' (Părţile Ungureşti[1]). With its current size, the Partium region accounts for nearly 10% of the Carpathian Basin and 13% of the present-day territory of Romania. According to the current interpretation, as a geographical macro-region in Romania, it includes the areas covered by Bihor (*Bihar*), Arad, Satu Mare, Sălaj (*Szilágy*), and Maramureş (*Máramaros*) counties (Szilágyi 2019b) (Figure 1).

[1] For example: Duica (2018) https://tudorduică-transsylvanica.ro/transilvania/cum-traiau-romanii-din-transilvania-partile-unguresti-si-banat-intre-anii-1867-1914/

Figure 1

The NUTS2 regions of Romania (coloured) and the studied counties (shaded)



Source: Szilágyi (2019a).

The geopolitical impact and spatial-structural effect of the Treaty of Trianon on Partium

As a result of the Trianon decision, the spatial structure of the region changed only slightly at first, but its geopolitical characteristics changed radically. In terms of spatial structure, the region preserved its dual nature. The presence of the doublerelief contact area (in a north-south direction) and the river valleys (interregional corridors) that perpendicularly intersect them (from east to west) are determining factors in this respect (Süli-Zakar–Szilágyi 2015a). The north-south spatial direction corresponds to the urbanization axis, while the east-west corridors map the main transport routes. The points of intersection represent the main attraction centres (Oradea, Arad, and Satu Mare) taking shape at the contact between the lowlands and highlands. These became multiple nodes due to the infrastructure developments carried out prior to the Trianon decision. For strategic reasons, during the peace negotiations, the railway linking the local junctions of the market line became the main border-generating factor from Halmeu (*Halmi*) through Satu Mare, Oradea, and Arad to Timişoara (*Temesvár*). Also, for strategic reasons, in the foreground of major cities, several settlement lanes were left as

buffers between the cities annexed to Romania and the new border; however, in many places, the border directly follows the railway line. When the border was defined, the infrastructure track overrode the ethnic, catchment, historic, administrative and terrain dividing lines in the region. This also resulted in a spatial structure paradox, according to which the eastern and southern (internal) borders of the Partium region are marked by Transylvania's historic border (or in the case of a softer administrative interpretation, the closest current county boundary); however, the western (external) borders were defined by infrastructures of strategic importance (Figure 2). Another consequence of this aspect is that the internal border runs along the peripheries in the traditional sense (so there is no state border, but a natural dividing line – Figure 3 Szilágyi 2019b). On the western and northern sides, the new state border cut off the former regional centre lane at the eastern edge of the Great Plain and gradually transformed it into periphery, without any actual physical barriers along the line. This peripheralization obviously had less impact on the points of intersection of those big cities that rose to gateway function in Romania, especially in the case of Arad and Oradea (Szilágyi 2013a).

Before the new frontier was defined, there was intense competition between the major cities in the Partium region and the centres in the East Great Plain with regard to regional roles. A typical example of this is the competition between Oradea and Debrecen. With its 64,000 inhabitants, Oradea was the ninth most populous city in Hungary in 1910, while Debrecen was the fourth most populous city with more than 90,000 inhabitants (HCSO 1912). At the same time, after Budapest, Oradea was one of the most important financial centres of the Kingdom of Hungary (Gál 1996)[2]. The regional functions were performed in such a way that they complemented each other. Arad was partly in a similar situation with Szeged and Timisoara, while Satu Mare competed with the rapidly growing Nyíregyháza. The new frontier suddenly eliminated these competitive situations, creating instead new ones. The large cities that found themselves on the Romanian side of the border could not compete for major developments because their positions were strategically difficult to defend. The main targets of the 20th century developments were Timisoara instead of Arad and Cluj-Napoca (*Kolozsvár*) instead of Oradea. Satu Mare got an artificially inflated competitor, Baia Mare (*Nagybánya*), a formerly small town. In these inner centres, the Hungarian proportion of the population was also lower (Szilágyi 2009). Following the Trianon decision, the name Partium re-emerged, this time as the name of a major region. The bulk of the Partium, a former Hungarian political entity with a changing extent (including a fragment of modern

[2] Variations in the population size can be partly explained by the difference in the city areas (Debrecen 957 km^2, Oradea only 48 km^2 [HCSO 1912]). In the case of Debrecen, they can also be explained by the high population of their outlying areas (Debrecen had a total population of 92,729 in 1910, of which 35,004 lived in 64 outlying settlements; in Oradea, 364 lived in two outlying settlements [HCSO 1913]).

Hungary) has been interpreted with modifications subsequent to the 1920 Trianon Treaty as a geographical region of Romania.

Figure 2

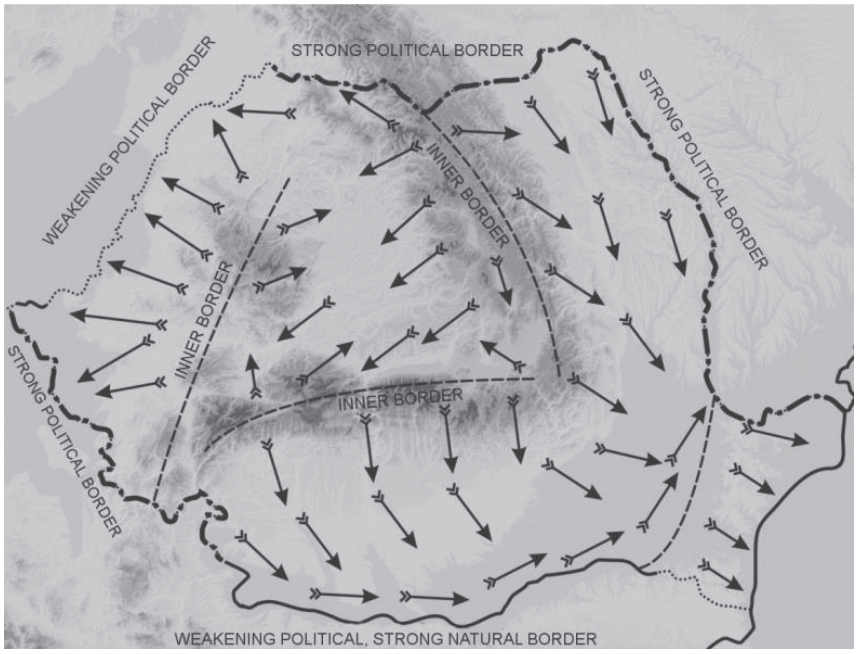
Administration after the Trianon decision

Note: The new border (red) follows the railway line (black).
Source: Szilágyi (2009).

After 1920, a new axis of development located further away from the border was selected and built in Romania for geopolitical reasons (Szilágyi 2009). Thus, instead of the former lowland border market line, the north-western part of Romania was developed along the Baia Mare – Zalău (*Zilah*) – Cluj-Napoca – Turda (*Torda*) – Câmpia-Turzii (*Aranyosgyéres*) – Alba-Iulia (*Gyulafehérvár*) – Deva (*Déva*) – Hunedoara (*Vajdahunyad*) axis (Figure 4), which clearly disadvantaged the Partium area and transformed it into a periphery. This means that the main contact zone was no longer on the edge of the Great Plain and the highlands, but on the foothills, and the main development axis was largely removed from the territory of Partium. This concept is still largely shared by the Romanian authorities, as illustrated by the fact that the regional system established in 1996 merged the historic Partium into the Northwest region and made Cluj the centre of the region (Szilágyi 2008).

Figure 3

Characteristic features of the Romanian borders and the main gravitational directions



Source: Szilágyi (2019b).

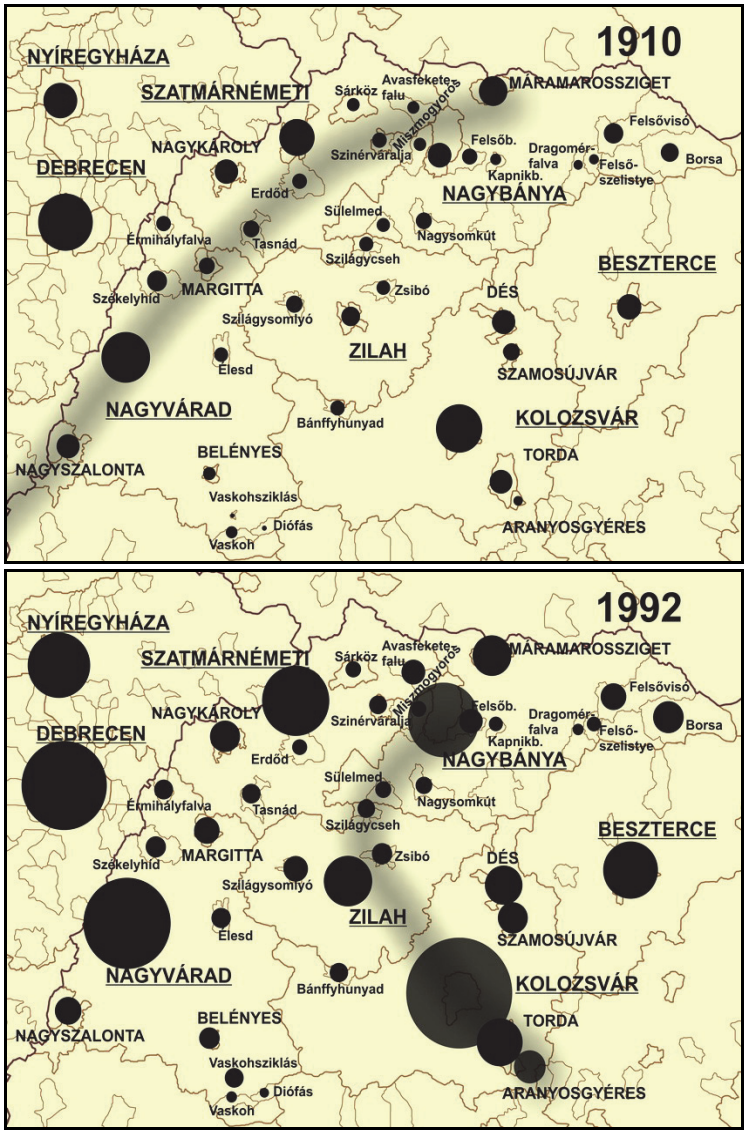
The peripherization of the border region took several steps. The first step was isolation, the establishment of a strong administrative border, followed by cutting the organic links to the west (for example, the removal of railway lines in Oradea, Satu Mare, and Arad[3]), and the closure of nearly 80 roads (Szilágyi 2013a). In parallel, the artificial integration (and change in the direction of diffusion) in the east and the transformation of flourishing commercial centres into simple gateway cities began. In the second step, heavy industry was brought onto the inner artificial spatial line, huge housing estates were built, and, in a few decades, certain small towns were transformed into new cities and medium-sized towns (like Baia Mare, Zalău, Turda – Câmpia-Turzii). At the time of the fall of Communism, the situation somewhat changed and the border gateway towns returned to a favourable position due to the slow changes in the nature of the border, while the socialist big cities located on the inner spatial line found themselves facing a structural crisis. After the

[3] The following railway lines were closed: Oradea – Debrecen, Oradea – Szeghalom, Satu Mare – Mátészalka, Satu Mare – Fehérgyarmat, Ciumeghiu (*Illye*) – Szeghalom, Gyula – SatuNou (*Simonyifalva*), Kétegyháza – Chişineu-Criş (*Kisjenő*), Arad-Mezőhegyes (MÁV 1915).

fall of Communism, such towns and cities suffered serious population losses (e.g. Baia Mare, Zalău).

Figure 4

Cities and the main urbanization axes in the Partium region in 1910 and 1992



Source: Szilágyi (2009).

Frontier towns and cities successfully benefited from a combination of poor infrastructure and low wage levels typical of the Romanian state, as many investors avoided the inland areas and companies were established near the western border. The labour-intensive sectors were attracted to the border towns, where Hungary's more developed infrastructure was easily accessible, while they could keep wage costs down. Consequently, low unemployment rates and low average wage levels became prevalent in the north-western counties after the turn of the millennium. Gateway cities also experienced serious declines in population, but they were less severe than those in heavy industry cities. Satu Mare could not fully transition to a gateway city and was proportionally more affected by the negative processes (Páthy 2017). At the same time, it can be stated for both groups that by the turn of the millennium, the former ethnic, denominational, and cultural image of these cities had irreversibly changed.

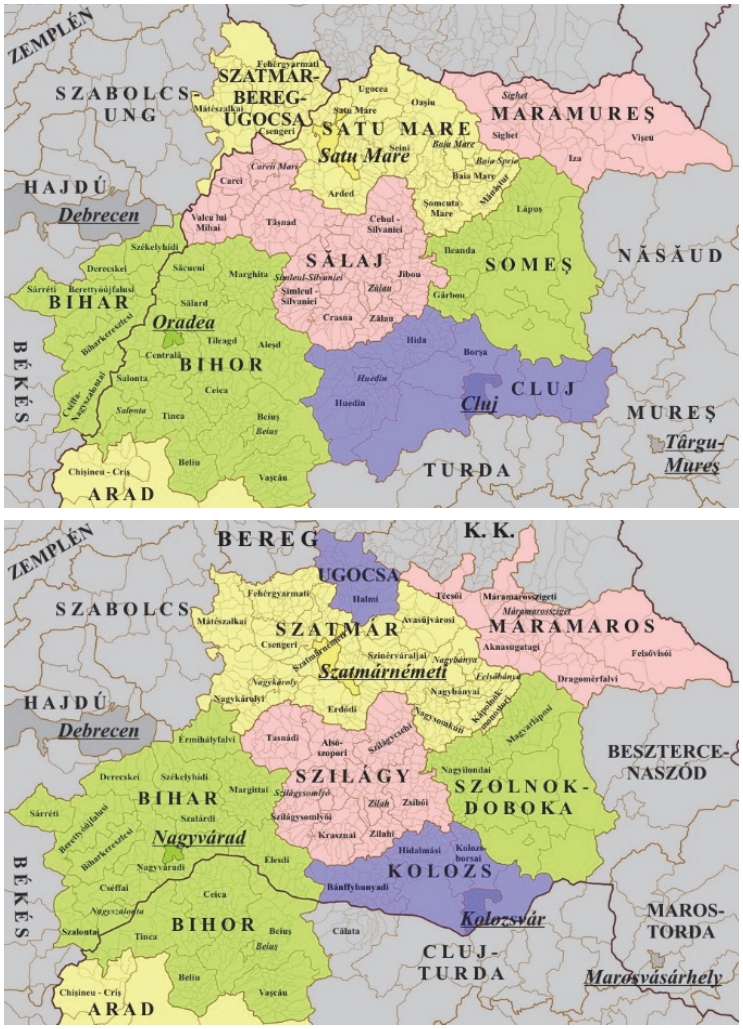
Changes in the centre-periphery relationships affected more than the cities. The settlements of the Great Plain, along which the border was artificially drawn, became isolated over the last century, experiencing population declines and a lack of investment. The transit traffic ceased to operate, and the dwindling middle class was in part replaced by Gypsy communities (Szilágyi 2016), which at that time had lower social standing (about the situation of the Hungarian side of the border see Pénzes et al. 2018). The border cities that slowly got under way and developed around the turn of the millennium are becoming successful islands in the connected peripheral belt.

The territorial-administrative consequences of the Trianon Treaty in the Partium region

Following the border demarcation, the Romanian government also submitted its territorial-administrative system to the national and state policy objectives (Szilágyi 2019b). The stabilization of the new border and the rapid establishment of the Romanian administration were the top priorities, so there were no changes in the administrative division in the first few years (Szilágyi 2013b, Elekes 2016). The only major change was that the communes of Ugocsa and Csanád counties that had been annexed to Romania were immediately merged into Satu Mare and Arad counties. The communes of Ugocsa established an independent district within Satu Mare county. Administrative names were rapidly translated into Romanian, and the names of many settlements without any Romanian inhabitants were phonetically transcribed into Romanian. The settlement name reform did not take place until the mid-twenties, when many settlements were given better sounding Romanian names, although these names had no historical tradition (Szilágyi 2009).

Figure 5

Territorial administration before and during World War II



Source: Szilágyi (2009).

By 1926 the territorial administrative reform was also accomplished. The aim was not to have any counties in the border region where the 1930 census, which was already being prepared, would show a Hungarian majority[4]. The task was solved by drastically expanding Sălaj county; having a stable Romanian majority, it was

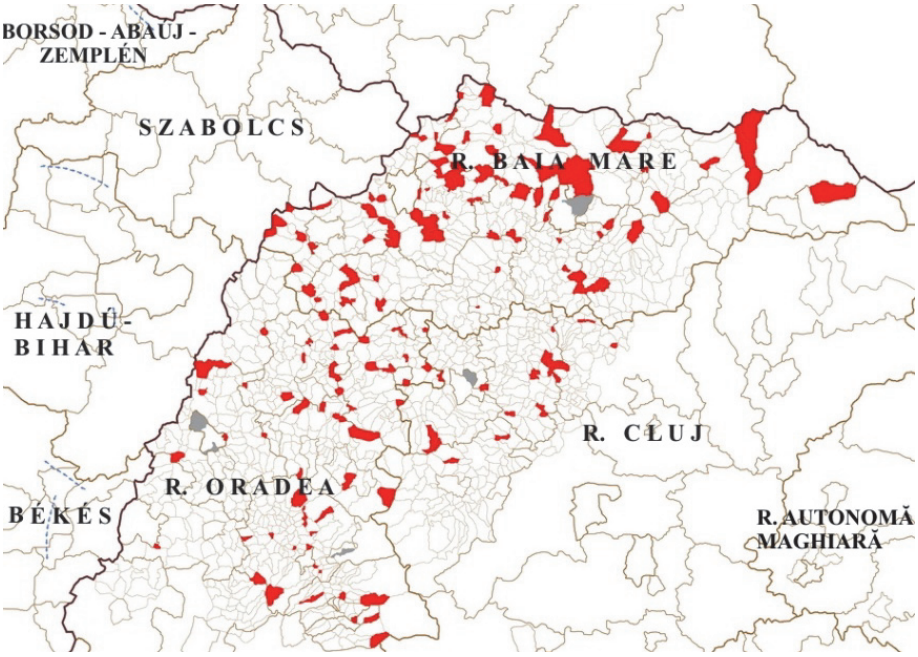
[4] According to the last Hungarian census data of 1910 (HCSO 1912), without modification, Satu Mare county would have had a Hungarian majority in 1930, and the Romanian and Hungarian communities represented almost the same proportion as in the Bihor county attached to Romania.

extended to the Hungarian-Romanian border by attaching the Hungarian-majority Valea lui Mihai (*Érmihályfalva*) district, formerly part of Bihor county, the Carei(*Nagykároly*) district, and the Hungarian-populated town of Carei, which formerly belonged to Satu Mare county. To maintain a stable Romanian majority in Sălaj county, it was supplemented in the east with villages having pure Romanian populations (Szilágyi 2009). Some compromises and catchment area anomalies also had to be accepted during the implementation:

– The town of Zalău, with just over 8,000 inhabitants, was more than one hundred kilometres away from the border towns, while these were only 40-60 kilometres away from the traditional and more populous centres (Oradea, Satu Mare).
– In 1930, the population in the Zalău county seat was half the size of the population of the town of Carei, which was annexed to Sălaj county and only 10 years earlier had been the seat of Satu Mare county.
– The shortest route from the Valea lui Mihai district to the county seat was via the Marghita (*Margitta*) district, which remained part of Bihor.

Figure 6

New settlements in the Partium region in the 20th century



Source: Szilágyi (2009).

Other steps were also taken:

– Removing the Carei district was not enough to secure a majority of Romanians in Satu Mare county. The Copalnic-Mănăştur (*Kápolnokmonostor*)

district, with a pure Romanian population, also had to be attached to it in the east.

– Also in the twenties, the settling of Romanian colonists in villages established for them began with the expropriation of large estates in the border region (Blomqvist 2014). These occurred only sporadically in Bihor, but appeared as almost continuous belts in certain border sections of Satu Mare county (Szilágyi2009)(Figure 6)[5].
– The remnants of the districts truncated by the new frontiers were merged, while some new districts were also created. Moreover, new district centres were designated to assist with the urbanization of some Romanian settlements.

During Hungarian rule, which was resumed in Northern Transylvania and the Partium in 1940, there was a return to the former territorial-administrative division (Szilágyi 2009, Elekes 2011). Satu Mare, Sălaj, and Maramureş counties were returned to Hungary; although Bihor remained a divided county, at that time the majority of it became Hungarian, while Arad county remained part of Romania.

The Romanian administration returned definitively by 1947, and the former Romanian administration was also temporarily restored. In 1950, the entire administrative system was reformed, and a Soviet-type province system was introduced. This new system was difficult to stabilize; provinces and districts were redrawn four times over the course of 18 years, with continually increasing unit sizes (Szilágyi 2009).

The main aim of the reform was to establish regional centres. In Western Romania, this primarily served the interests of Cluj-Napoca, Timisoara, and Oradea and supported the growth of Baia Mare, one of the period's favoured cities (in Hungary, a similar process took place, see: Kőszegfalvi 2020, Bartke 2020). By contrast, Arad and Satu Mare became neglected cities. Small towns, with the exception of a few new heavy industry centres, were rather stagnant (Szilágyi 2012).

Another reform took place in 1968, resulting in a return to the traditional county system. The word 'traditional' can also be used in the sense that the units' historical names were restored. In the Partium region, mid-level units were re-established bearing the names Arad, Bihor, Sălaj, Satu Mare, and Maramureş, although undoubtedly in a territorially transformed form (LAW 2/1968). The commune system that still exists today was also finalized at that time (JUDEŢELE 1969). Its peculiarity in Romania is that several settlements form one (production) unit, referred to as a commune (comună). Although this system existed previously, beginning in 1968 unit sizes increased, and several villages were merged to reach an average population of 3,000 inhabitants. Later, plans were made to introduce an even larger unit size. The main political programme of the Romanian Communist

[5] The second wave of new settlements appeared in the 1950s (Szilágyi 2013b).

Party included a plan to restructure the entire settlement network. The planned settlement system would have consisted almost exclusively of cities, and the rural settlements would have been wound up (village demolition or Systematisation-plan). Obviously, just as in the case of any previous urbanization programme, minorities would have been adversely affected. The authorities used every settlement development project to reduce the proportion of minorities. The village demolition plan would also have been a means of eliminating settlements with Hungarian majority populations; thus, it was a source of dissatisfaction and, indirectly, one of the causes of the 1989 uprising. The plan was not implemented due to the fall of Communism (1989).

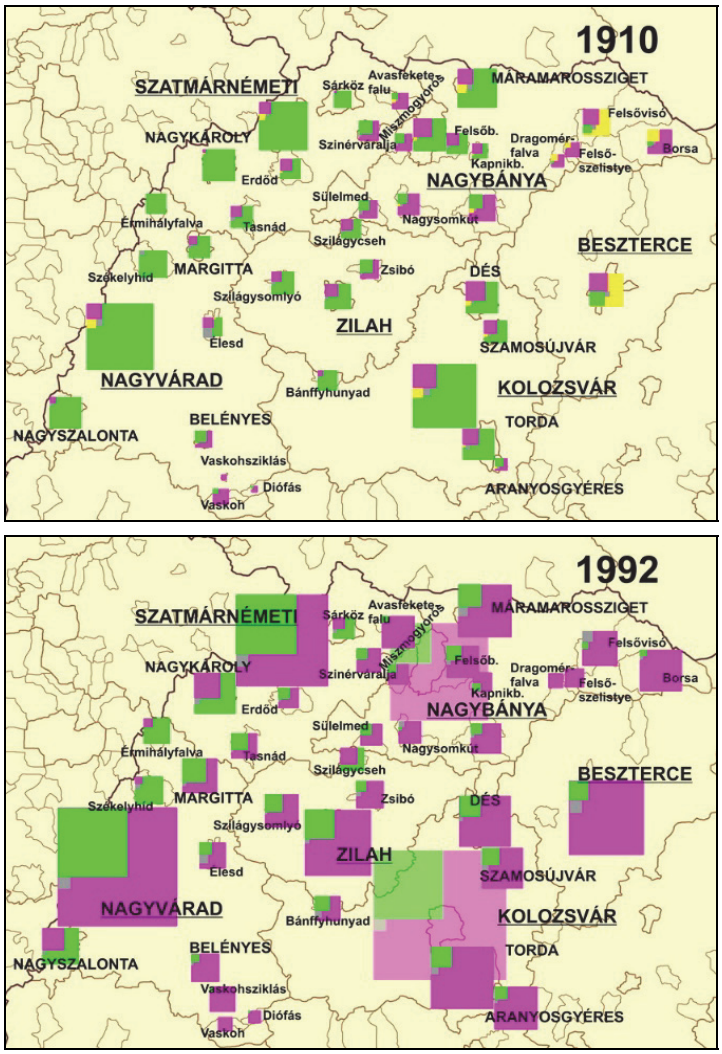
There have been no drastic changes in the territorial administration since 1990. County borders are the same as before the end of Communism, although there have been some changes at the local government level. The suburban municipality status was abolished after the fall of Communism. After the turn of the millennium, a settlement network development plan was adopted and a methodology for establishing new communes and granting municipal (town, city) charters was issued (LAW 350/2001). Previously, such changes had occurred only in exceptional cases; however, from the turn of the millennium until 2014, the classifications of many municipalities have changed. The NUTS system of regions (Brandmueller et al. 2017), created in 1996, has almost continuously been the subject of political discourse, but no practical improvements or modifications have been made at the regional level thus far (Benedek et al. 2018).

Demographic change

Prior to the Trianon decision, there was a balanced ethnic composition in the Partium region; Hungarian and Romanian communities were equally weighted, and complemented with some relatively large minority language communities (Swabian, Gypsy, Slovak, Serbian, etc.) (HCSO 1912). In the 20th century, homogenisation was already a characteristic process, and the ethnic balance was also broken. This process began immediately after the Trianon decision, when the regional centre of gravity shifted to the southeast; as Bihor, Satu Mare, and Arad became divided counties, villages with Hungarian populations were left in Hungary, while in the east, administrative reforms added villages with Romanian populations to the counties of this region. This overturned ethnic structure continued to shift in favour of the Romanians in later decades.

Figure 7

Mother tongue in the cities and towns of the Partium region in 1910 and 1992



Notes: green – Hungarian, violet – Romanian, yellow – German.
Source: Szilágyi (2009).

The 20th century censuses used almost always different criteria and were sometimes politically motivated. Prior to the Trianon decision, the Hungarian censuses only referred to the mother tongue and the denominational structure of the population and the Jewish community was only identified as a religion. In contrast, in addition to the mother tongue, the Romanian censuses in 1930

introduced the concept of ethnicity. At the same time, there were some restrictions on data collection, since in 1930 there were hardly any records of ethnic Hungarian Greek Catholic populations, and categorizing those of the Israelite religion as an ethnic group also automatically limited their – self declared and hitherto overwhelmingly Hungarian – classification (Varga 1988). The Hungarian-speaking population of Swabian and Ruthenian origin could also not be counted as Hungarians. The Romanian and Hungarian censuses of 1941 can be considered 'military' censuses, and ethnic data must be treated with caution on both sides.

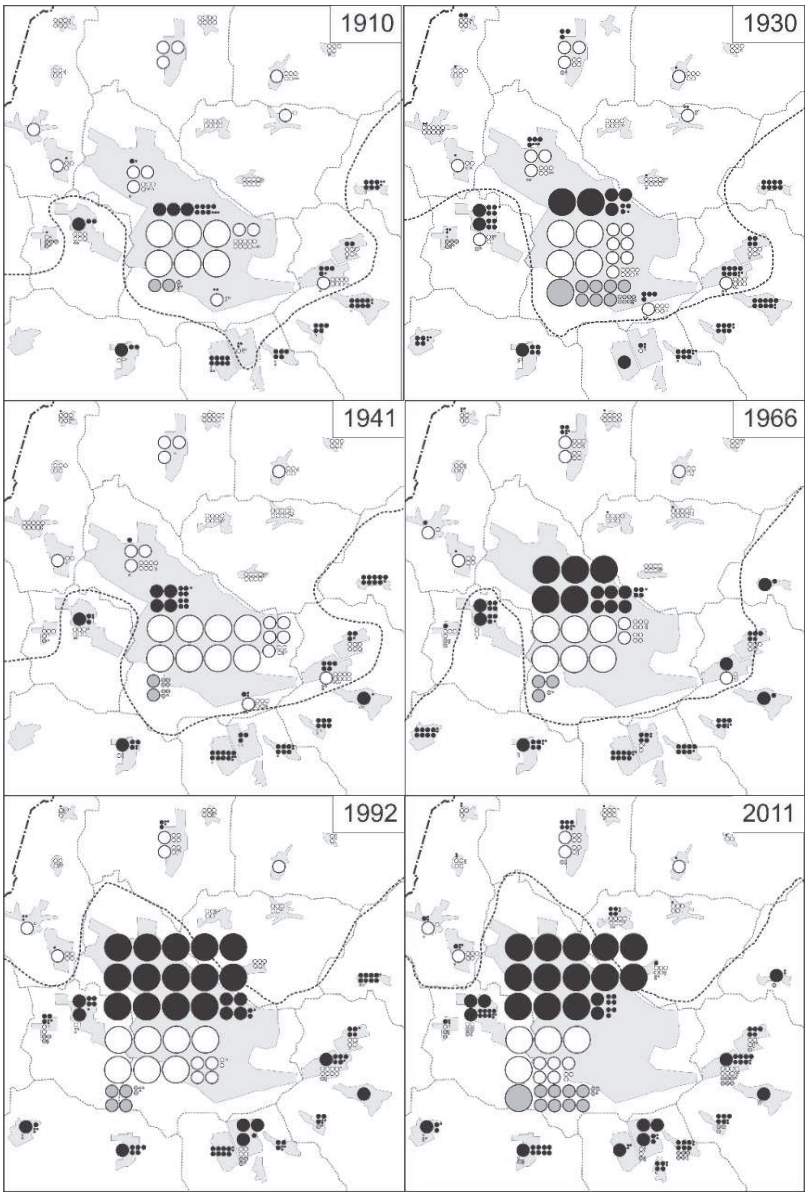
However, the Romanian censuses conducted during the decades of socialism also raise questions (e.g. Romanian majorities in cities where, after the fall of Communism, there is still a Hungarian majority or a suspiciously low number of Roma population). The number of Gypsies was underestimated by almost all censuses in the 20th century. Only after the change in the political system did their population begin to increase gradually at the statistical level, and some pulsating movements can also be observed (Szilágyi 2016).

As a result of these factors, there is a noticeable dramatic decrease in the Hungarian community proportion since 1930. Initially, along with the Romanians, the number of other nationalities increased, also at the expense of the Hungarians, a sign that the censuses were specifically aimed at eroding the Hungarian community. Later, however, the other communities gradually almost completely disappeared. The initial steps in this process were a decrease in population and the migration caused by World War II and the Holocaust. Then, during the communist period, the Jewish and German population was allowed to leave Romania, and a kind of a valve effect also came into being in the case of Hungarians. During the 20th century, Hungarians left the country in several waves. The World War II period is a separate chapter of this, when the young population of the Hungarian villages in southern Partium (which remained in Romania) fled northwards, and the Hungarian villages in southern Partium were never able to recover from this population loss (see Ginta (*Gyanta*), Tămaşda (*Tamáshida*), Ant, etc.). Population loss (Kulcsár–Brown 2017) through assimilation was also causing constant ethnic attrition, especially in mixed population areas. The Hungarian-speaking Greek-Catholic population, which predominantly lives in Satu Mare county, has been significantly affected by the assimilation process (Szilágyi 2003). The borders of the Hungarian majority areas have considerably shifted in Satu Mare county. Here, much of the county has become a zone of ethnic interference, and the Hungarian-majority belt is now discontinuously sticking to the state border. This dissolution transformed the Hungarian population of Sălaj county into an ethnic island, which is surprisingly still stable. Of the geographically divided Hungarian ethnic enclave of Sălaj county, only the forcibly industrialized towns of Sălaj county have become Romanian-dominated, while the Hungarian rural community has remained strong. In the case of the peripheral villages, there are a few instances of reverse ethnic change, with the majority of some mixed settlements (e.g. Coşeiu [*Kusalj*]) becoming Hungarian due to the departure of the Romanian population. Of course, the most

significant loss for Hungarians is the change in the ethnic structure of the large cities (Figure 7). This process was described in detail in 2015 in our joint research with István Süli-Zakar (See: Süli-Zakar–Szilágyi 2015b) (Figure 8).

Figure 8

Changes in the linguistic composition of Oradea between 1910 and 2011



Notes: white – Hungarian, black – Romanians, grey – others; size scale 10.000, 1.000, 100.

Between 1950 and 1989, there was a demographic explosion in Romania. This also affected the Hungarian community, and there was a period (1982–1989) when worldwide, the number of Hungarians probably grew significantly only in Transylvania and Transcarpathia. The Hungarian population decreased dramatically after the 1989 revolution. The Germans were even more affected by this period, when the Partium region lost its last major German-speaking communities. Paradoxically, the Partium region became the most important area for the Germans, as only the Hungarian-speaking Swabians around Carei remained in a greater number in Romania. The Romanian emigration became (also globally) significant after the turn of the millennium and stabilized the proportion of Hungarians in the Partium region (Recensamant 2011). Today, the most significant changes are caused by the process of suburbanization. Residents moving out of towns invade settlements in the metropolitan periphery (Süli-Zakar−Szilágyi 2015b). Thus, the ethnic change in the big cities took place before the fall of Communism, but the population change in the suburban areas is taking place today.

Conclusions

Following the Trianon decision, the name Partium re-emerged, this time as the name of a major region. The bulk of the Partium, a former Hungarian political entity with a changing area (including a fragment of modern Hungary) from the c. mid-C16 to the mid-C19 west to and associated with Transylvania, has been interpreted with modifications subsequent to the 1920 Trianon Treaty as a geographical region of Romania. In the 20th century, its territory shifted to the southeast, which also led to ethnic, linguistic, and denominational changes. The previously balanced ethnic structure of the region's population has changed to a Romanian majority. Besides the drastic decrease in the proportion of the Hungarian population in the 20th century, smaller ethnic communities have almost completely disappeared. However, this finding does not apply to the Gypsy population, which has increased in number in the villages of the border area and today have a share of almost 50% in some settlements.

In terms of spatial structure, the former market line has become a periphery (Egri−Tánczos 2018), where only a few gateway cities managed to remain economically successful. Hungarian settlements in the border area gradually fell behind in terms of their economy, and this process accelerated especially after 2010. According to a 2019 study, with four exceptions, the local school or municipality is the largest employer in the northern Hungarian majority communes of Bihor county (Szilágyi−Debrenti 2019).

The most important questions in contemporary research on the Partium region:

- How does the nature of the border change (weakening, Schengen accession, virtualization)?
- What happens to artificial dead-end villages?
- Will there be a continuous infrastructure and socio-economic network on the weakening border?
- What impact will this process have on the populous Gypsy communities in the dead-end villages?
- What are big cities in the border region going to do with their asymmetrical catchment areas?
- What will be the result of the competitions between competing city-pairs (e.g. Debrecen-Oradea; airport debate; will cooperation be decisive or competitive)?
- What is going to happen to the Hungarians in the Partium region? How does the motherland regard this community? What is the main objective (survival or demographic reserve)? What kind of institutional network are they assigned to?

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Administrative, spatial and demographic changes in Székelyland since the Treaty of Trianon to the present day*

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This study analysed the characteristics of the spatial organisation, spatial structure and population processes of Székelyland after the Treaty of Trianon. The purpose of the administrative reorganisation after World War I was unification. Between 1950 and 1968, transformation took place mirroring the political-ideological view of the time, often at the expense of the territorial units and centres created as a result of centuries of spatial development. The most significant change in the spatial structure during the early 20th century was the industrialisation that occurred between 1950 and 1989. In Székelyland, a contradictory socio-economic process in relation to other regions of Romania, began after 1990. The impact was smaller than that of the processes that had taken place under Communism. The population growth characteristic of the 20th century was replaced by a steady decline after 1990–1992.
The natural population decline of the last three decades and the vigorous transformation have resulted in population decline in the millions. The rate of population decline is the strongest among the young and physically active age groups.

Keywords:
Székelyland, administrative changes, spatial structure, population processes

Introduction

Under the Trianon Treaty, the Hungarian Kingdom, which became part of Romania, lost 103,093 km² of its total territory (325,411 km²) and one-fourth, that is 5,257,467, of its total citizens (20,886,487) as recorded in 1910 (53.8% Romanian, 31.6% Hungarian, 10.7% German, and 3.9% other nationalities) (1910 Census, Köpeczi 1993, Bereznay 2011).

* The study is an edited version of a presentation held on 16 October 2019 at the conference "Trianon 100 – Consequences of the Treaty in the context of statistical analyses".

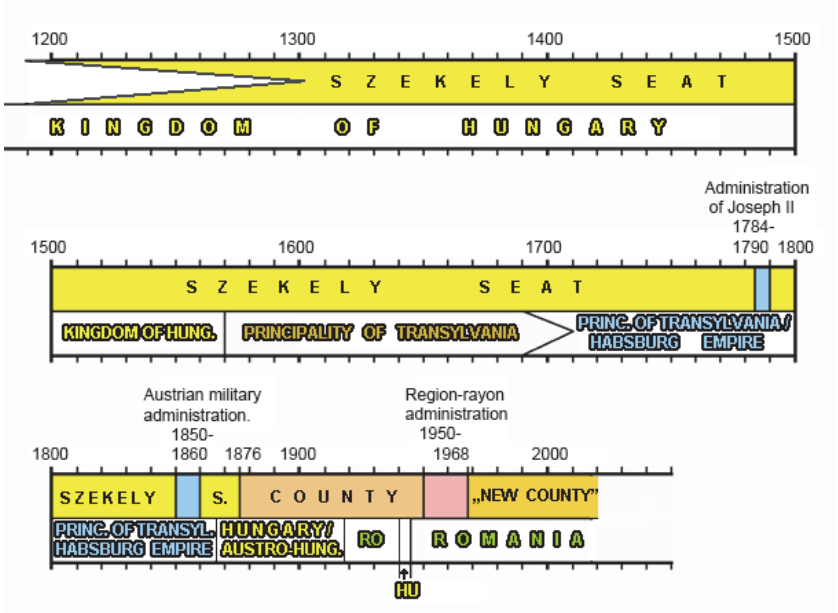
It was the first time in Székelyland's history that its 600 years of 'near-border, country-edge' position had ceased to exist; it became the geographical centre of Great Romania in 1920. Despite the political change, the economic 'semi-peripherical' position of the region continued to exist.

The characteristics of spatial organisation and public administration in the 20th century

The traditional administrative and military spatial organisational units of Székelyland, that is, the seats (székek), were generally adjusted to landscape borders (mountain ridges, hill watersheds) and water flows and were mainly organised depending upon natural endowments (Elekes 2011, 2016). Apart from Austria's two short-term attempts to reorganise these, the seats functioned as a 'spatial framework' for six-hundred years of social and economic processes until 1876. The spatial organising and identity-forming significance can be observed even nowadays (Elekes 2011, Egyed 2016) (Figure 1).

Figure 1

The administrative structures of Székelyland



In 1876, the civil administration eliminated the earlier system of counties (vármegye), seats (szék) and regions (vidék) (Hajdú 2001). New counties of the same names were established in the territory of the historical Udvarhely, Csíkszék and Háromszék. Accordingly, Marosszék became part of Maros-Torda, and

Aranyosszék part of Aranyos-Torda counties (Elekes 2011). The new Transylvanian counties were mainly adjusted to historical borders, that is, to the area units and centres that evolved over several centuries of social and economic development (Szilágyi 2013).

After World War I, the territories of five earlier administrative systems (Romanian, Hungarian, Austrian, Russian and Bulgarian) had to be unified in Romania.

After the Treaty of Trianon, Romanian became the language of administration in Székelyland (Martinovici–Istrati 1921). The territories of Udvarhely, Háromszék, Csík, Maros(-Torda) and Torda(-Aranyos) Counties established in 1876 were only changed for the first time in 1926 (Figure 2).

Figure 2

Székelyland and its regional composition in 1926

Between 1940 and 1944, territorial units adjusted to the new state borders operated in the divided Transylvania. The new administrative units were adjusted to the Hungarian counties established in 1876 in Székelyland reannexed to Hungary,

and to the Romanian counties established in 1926 in the Southern Transylvanian territory left in Romania.

After World War II, Northern Transylvania and Székelyland became parts of Romania again.

Between 1950 and 1968, the province-rajon spatial division followed the Soviet model in Romania. In the system, which had been reorganised three times, the Hungarian Autonomous Territoriality (functioning between 1952 and 1960) included the vast majority of the historical Székelyland. Considering the 10 regions of the 13,500 km² large Hungarian Autonomous Territoriality, 565,000 of its 731,000 thousand inhabitants (77%) were of Hungarian nationality (Szabó 2003, Bottoni 2008). Those counties that have been existed since 1968 were basically not elaborated on the basis of historicity; heterogeneous territorial units in Transylvania were delimited in most cases.

Since the early 2010s, numerous spatial transformation concepts have been suggested in the technical literature and political scene in Romania. In addition to the draft of 'artificial' regions comprising 3–4 counties recognised today there have been several proposals adjusting to historical areas, the needs of citizens and realising decentralisation more efficiently (e.g. Székelyland, or regions of counties in Székelyland, Bukovina, Dobrogea); however, no arrangement proposal has been realised for any region to date.

Socio-economic factors affecting the spatial structure and population processes

The settlement and transport network as well as the spatial structure built on it was established as a result of a process over several centuries (Gyenizse et al. 2011, Egri–Kőszegi 2018, Egri−Tánczos 2018). In Székelyland, the moderated industrialisation and rise of the middle class continued in the early 20th century and between the two World Wars (Egyed 2016).

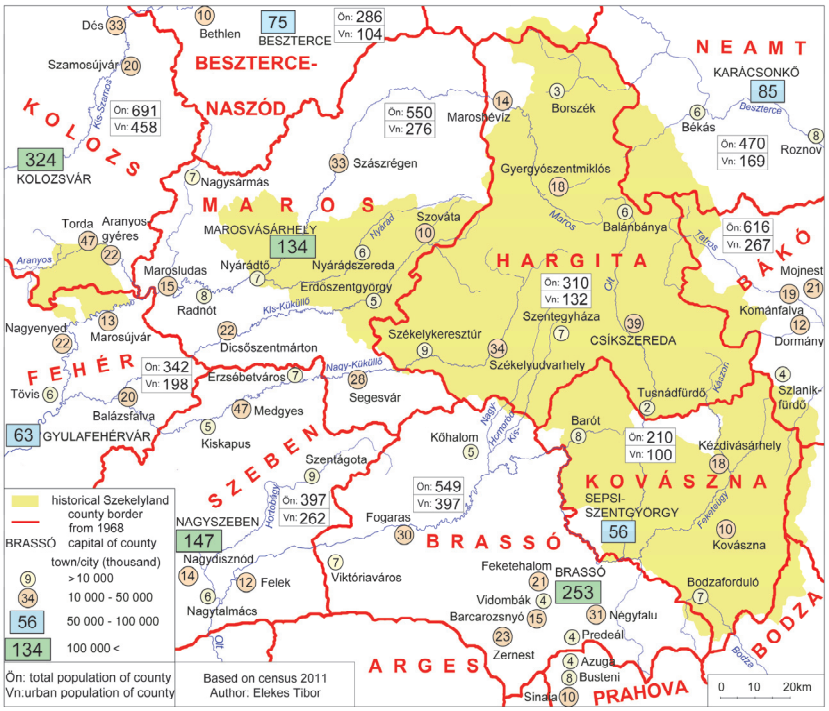
After World War II, a new and large-scale social and economic transformation began in Romania, similar to that in the Communist states of the region. The spatial structure developed within strict political limits; the intensity and texture of links within the country started to increase. The policy implementing the new ideological trend played an increasingly greater role, which affected the economy and society. This trend included the nationalisation of the production instruments, economic facilities and raw material deposits, as well as the establishment of the new social structure, the 'elimination of social classes inhibiting development and exploiting others', and so on. The planned economy, which was elaborated and controlled by the political government, primarily aimed at the overall and rapid improvement of the country and the reduction of inherited economic and regional inequalities (Benedek−Kurkó 2010, Benedek et al. 2018). The most efficient tool for

development was industrialisation, a factor giving rise to the greatest spatial structural, social and environmental transformation in the history of the region. New factories were constructed mainly on the basis of central decisions and not as a result of the local development in towns and cities after several centuries of development and in the industrial-urban regions established during the decades of Communism. The raw materials and the necessary labour force were often transported to and settled in the new facilities from outside the region. Controlled by the state, the intra-national as well as intra- and inter-regional migration between villages and cities provided the requisite labour force and settled into the newly built housing estates for the new economic facilities. Settlements located near republic-level large corporations received considerable funds and excellent opportunities for institutional development (Elekes 2008).

In Székelyland, the key target point of industrialisation was Targu Mures (Marosvásárhely). The two county seats, Sfantu Gheorghe (Sepsiszentgyörgy) and Miercurea Ciuc (Csíkszereda) as well as Odorheiu Secuiesc (Székelyudvarhely) were less industrialised; the necessary labour force was primarily ensured by their agglomerations (Páthy 2017). Communism implied slighter changes in towns with fewer than 20,000 inhabitants and in settlements that received town rank due to their industrial, mining or tourism functions.

Figure 3

The county and city system of South-eastern Transylvania in 2011



On the whole, Székelyland was industrialised and transformed to lesser extent than the Romanian average, which was also due to its geographical position within the country. The proportion of the inhabitants living in villages was still above the national mean value; one-third of the inhabitants residing in cities and towns lived in towns with fewer than 20,000 inhabitants (Figure 3)(see Atkinson 2019).

The 1980s were characterised by strengthening decentralisation, which primarily aimed at 'reaching social homogenisation' and 'becoming economically and energetically independent'. The national debt was repaid at the expense of the population, who were severely deprived. The state's prestige investments, the failed developments and the technical backwardness had resulted in an economy that was continuously becoming obsolete.

During that period, the power mechanism entirely served and protected the beneficiaries of the dictatorship. In terms of the country, the highest national security risk had become the Communist dictatorship, which was protected and served by the state by the late 1980s.

The country was progressing towards the realisation of a totally controlled Orwellian Society. The state attempted to place talented citizens in the service of its interest using incentives, intimidation and blackmailing. Each day, increasing numbers of those not agreeing with the prevailing ideology or rejecting the expectations of those in power were intimidated, isolated, expelled or 'neutralised'. During this period, society lost thousands or tens of thousands of 'innovative' people. The activity of persons and communities representing cultural or ideological alternatives was reduced to the minimum. Contrary to the more open former Communist countries (Czech Republic, Hungary, Poland), the increasing isolation resulted in tremendous information poverty in Romania. Market economy and Western societies were unknown to the population. After the fall of the dictatorship, it took nearly ten years to reduce the gaps and train specialists who were able to realise the transition to the market economy.

In 1989–1990, numerous events and processes hindered the social and economic development: the lack of accountability and explanation regarding the role of the former political and economic elite, the victims of the events taking place in Romania in December 1989 and the events occurring in Targu Mures (Marosvásárhely) in March 1990 regarding the Bucharest Mineriad. The economic collapse, the loss of markets and the delayed privatisation resulted in drastically growing unemployment and inflation as well as enhanced insecurity and hopelessness. The first half of the 1990s was accompanied by ideological and political disappointment, impoverishment and bread-and-butter worries for millions of people.

By the beginning of the millennium, Romania's economy, including that of Székelyland, had stabilised. Joining NATO (1 May 2004) and the EU (1 January 2007) resulted in consolidation and new opportunities for Romania. After the

economic and financial crisis that arose in the late 2000's. Romania achieved considerable economic growth. Today, the unemployment rate is approximately 3%; one of the key issues in the country is the increasing labour shortage.

Demographic processes

In today's territory of Romania, the population grew continuously over the 20th century until 1990, except for the periods of the two World Wars. For four decades, Romania's population increased by 46%; as a result of the migration realising industrialisation and controlled by the state, the urban population rose by 240% (Table 1).

Table 1

Changes in the total, urban and rural population of Romania between 1948 and 2011

Year	Total population of Romania	Urban population		Rural population	
			%		%
1948	15,872,624	3,713,139	23.4	12,159,485	76.6
1956	17,489,540	5,474,264	31.3	12,015,186	68.7
1966	19,103,163	7,305,714	38.2	11,797,449	61.8
1977	21,559,910	9,395,729	43.6	12,164,181	56.4
1983	22,553,074	11,054,179	49.0	11,498,895	51.0
1990	23,206,720	12,608,844	54.3	10,597,876	45.7
1992	22,810,035	12,391,819	54.3	10,418,216	45.7
2002	21,698,181	11,436,736	52.7	10,261,445	47.3
2011	20,121,641	10,054,000	52.8	8,989,000	47.2
	19,042,936[a)]				

[a)] Preliminary data of the 2011 Census.
Source: Compiled by the author based on the data of Insse.

In 1990, the former population policy acts supervised by the state were repealed. In 1992, the earlier natural population increase started to decrease at an accelerating pace, reaching an annual value of 50–75,000 at the national level in recent years (Insse.ro).

Since 1990, open borders have allowed employment in foreign countries. Due to the unemployment, bread-and-butter issues, ideological and political disappointment and poor living conditions, millions of young Romanians found work in the EU or in other countries throughout the world. The balance of emigration and immigration has witnessed a decrease of 40–75 thousand people per year at the national level. In 2018, the natural decrease of 67,000 and the migration loss of 58,000 resulted in a population loss of 125,000 people (Kincses–Bálint 2016). According to the data of the National Institute of Statistics in Romania, the

population of the country fell from 23.2 million to 19.4 million between 1990 and 2019. Nearly 20% of the active population works abroad. The ageing of the population is continuing; the dependency ratio was 51.1% in 2018 and 51.9% in 2019 (Insse.ro) (Kulcsár–Brown 2017).

Similar demographic processes can be observed in numerous countries in Eastern-Central and Eastern Europe (Siskáné Szilasi–Halász 2018, Bartke 2020, Kőszegfalvi 2020); however, one of the strongest processes takes place in Romania.

The demographic processes of the past 100 years were more remarkable in towns and cities. In Székelyland, the increase until 1990 and the decrease after 1990 was close to the national and the broader regional average but to a lesser extent (Table 2).

Table 2

Population changes in the cities with more than 20,000 people in Maros, Kovászna, Hargita, Brassó, Szeben and Fehér counties

(thousand)

Town	1910	1948	1964	1983	1990	1992	2002	2011
Marosvásárhely	26	47	76	155	172	164	150	134
Sepsiszentgyörgy	9	14	20	62	73	68	62	56
Csíkszereda	4	6	14	44	48	46	42	39
Székelyudvarhely	10	10	16	38	41	40	37	34
Segesvár	12	18	24	36	39	36	32	28
Szászrégen	7	10	22	35	39	39	36	33
Brassó	41	83	137	331	364	323	284	253
Szecseleváros			21	34	34	30	30	30
Fogaras	7	9	22	40	46	45	36	30
Nagyszeben	33	60	103	172	188	167	155	146
Medgyes	9	23	42	71	73	64	55	47
Gyulafehérvár	12	14	20	59	73	71	66	63
Nagyenyed	9	10	16	28	30	32	29	23
Szászsebes	9	10	13	30	31	30	28	27
Kudzsir			13	30	34	32	26	21

Source: Data of the Hungarian census in 1910 and the National Statistical Institute in Romania.

The estimated population of the historical Székelyland was 40–42,000 in the 1330s, and 120,000 in 1567 (Egyed 2016). In 1910, the population number of Székely counties, Udvarhely, Csík, Háromszék and Maros-Torda totalled 567,000, of which the Hungarian population of the historical Székelyland was nearly 420,000. Similar to other regions of Romania, the largest population of Székelyland was registered in 1990–1992. This figure was followed by a decline; in 2002 and 2011 the number of inhabitants was 812,000 and 762,000, respectively. Until 1990, the processes taking place in the historical Székelyland, primarily in large cities, resulted

in an increase in the proportion of people of Romanian nationality. At the 2002 census, the share of Hungarians in Székelyland was 78.2%. In 2011, this figure was 76.3%, or 78.3%, excluding the 3.5% of citizens not declaring their nationality. The official results of the last two censuses reveal a slight spreading of Roma population (3.6% in 2011) and the stabilisation of the proportion of the Hungarian-Romanian ethnic population in Székelyland.

The results of the last three censuses suggest considerable changes in the number and proportion of the nationalities living in Romania (Table 3, Figure 4). According to the data of the 1977 and 1992 censuses, the proportion of Romanians increased by 7.4% and reached 20.4 million, while that of Roma rose by 76.3%. At the same time, the proportion of Hungarians decreased by 5.2% and that of Germans by 66.7%. Between 1992 and 2002, the German, Hungarian and Romanian communities tended to decline, contrary to the increasing number and proportion of Roma. Between 2002 and 2011, the processes of the previous ten years continued. However, the proportionate decrease in the number of Romanians approximated that of Hungarians that time, which means that the rates of decrease of the two nationalities are also nearly the same at the national level. The number of Romanians fell by 3.6 million people over twenty years, to 16.8 million in 2011. The number of Hungarians decreased from 1.7 million (1977) to 1.2 million (2011). The German population totalled half a million between the two World Wars, 339,000 in 1977 and 36,000 in 2011. On the contrary, the number of the Roma tripled (Pénzes et al. 2018) to 621,000 between 1977 and 2011.

Table 3

Changes in the proportion of nationalities between 1977 and 2011

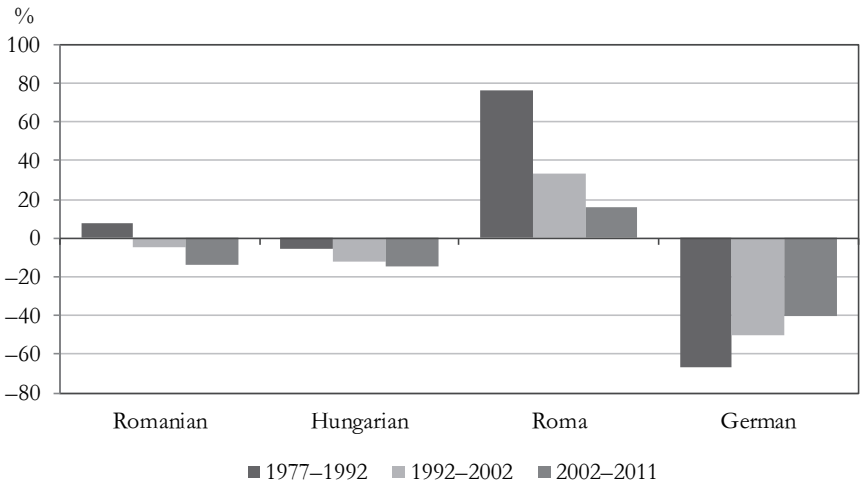
(%)

	Romanian	Hungarian	Roma	German
1977–1992	7.4	–5.2	76.3	–66.7
1992–2002	–4.9	–11.9	33.4	–50.0
2002–2011	–13.4	–14.3	16.1	–40.0

Source: erdélystat.ro.

Figure 4

Changes in the proportion of nationalities between 1977 and 2011



Source: Edited by the author based on data from erdélystat.ro.

Results

The administrative geographical synthesis shown in Figure 1 demonstrates that the Székely seats (szék) were adjusted to the landscape borders and established as a result of organic development used to ensure the spatial framework for the social and economic processes for six centuries.

None of the regionalisation concepts elaborated after 2010 have been realised until today.

The national demographic processes of the past one hundred years took place in Székelyland (Tables 1 and 2).

During the Communist dictatorship, the society lost tens of thousands of 'innovative' people due to their ideological perspectives. The information poverty and shortage of specialists that arose due to the isolation before 1990 could only be eliminated in the last decade of the millennium, through considerable economic and social sacrifices. All this resulted in a competitive disadvantage in the economy, considerable labour exodus and a significant population decrease. Nowadays, the rate of decrease is similar in terms of the Romanian and Hungarian nationalities (Table 3, Figure 4).

The significance of specialists and communities integrated into the society and performing economic activities is being increasingly appreciated.

Conclusions

Over the past century, Székelyland and its broader region have been the scene of remarkable political, administrative, social, economic, ideological and spatial structural changes. The system evoking the greatest social and economic changes was operated by the Communist dictatorship. Even after three decades, its influence can still be felt in the spatial organisational, demographic and economic processes. One of the key national issues of today and for the following decades is keeping the young and qualified labour force at home and luring back those citizens currently working abroad. It is essential that the highest wages possible be granted. Reducing corruption and bureaucracy as well as consolidating constitutionality all strengthen social efficiency and effectiveness. The declining number of the active population may result in a decrease of levies and state revenues despite the technological development and the economic and social opportunities in the 21st century. The decreasing sources may lead to the quantitative and qualitative deterioration of the fulfilment of state functions. The possibility of providing state pension and the amount that can be allocated to health care, education and culture may decrease. All these processes may become a group of insecurity factors that incite emigration. The sustainable operation of the society necessitates qualified and integrated (domestic or foreign) labour force.

Due to the known demographic and economic processes taking place in Romania, highly qualified specialists are becoming increasingly valuable.

In the following decades, the significance of communities integrated into the society and conducting economic activities is expected to be appreciated more in the case that the economy continues to develop.

Adjusting to the demands of the social, ethnic, denominational and regional communities and promoting their continuance and development, spatial, economic and social organisation (Kocsis 2013) strongly integrates the citizens by 'making them motivated' in the economic and social processes, facilitates staying at home and reduces the intra- and inter-regional divergences.

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How the Trianon Peace Treaty impeded social and spatial structure progress in the Bánság (1918–2010)*

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This study discusses different geographic relationships and highlights a few regional problems in the Bánság and the surrounding area. The Bánság, being a separate region, has its own development curve, structure, and related systems. The region has internal cohesion and a particular texture, reflected among people living there today and those who are familiar with this area. The Bánság, based on local and situational energies, is a separate region born from socioeconomic self-development, where the socioeconomic processes and changes in the state organisation reflect the combination of regionalisation and regionalism, and their interdependence. At the end of the 19th century it became the most developed region in the Carpathian Basin. The Trianon Peace Treaty caused many problems (e.g. economic, national, etc.), affecting its traditional spatial structure and social connection.

Keywords:
Trianon Treaty, Bánság, spatial structure

Introduction

The role of the state has undergone a transformation over the years, partly because of the development of technology, owing to which classic defence functions are no longer as important as they used to be, while the political role of the border, and its functions in maintaining law and order, have assumed importance (Kókai 2010). For Hungarians living in the Carpathian Basin, the gravest shock in the twentieth century was undoubtedly the Trianon Peace Treaty (Tóth 1997, Süli–Zakar 1997). It created sensitive issues that remain unresolved to this day, and the ethnic boundaries of the Hungarian people extend far beyond the state border. Furthermore, the peace treaty not only enforced a separation of territories and crowded out millions of Hungarians from their homeland, but also disrupted the process – centuries-old at that time − of the evolution of the nation and state (Hajdú 2020). It offered no possibility for unity lateron in history, and broke the Hungarian people's faith and trust in the future. Today, however, the Bánság region may reborn. There is a new form of organisation as the region tries to create a place for itself in the new global society (Cretan 1997, Kicošev 1997).

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Place and role of the Bánság in the historical Hungary

The Bánság (Banatus Temesiensis), or the Temesi Bánság, is a region in the Carpathian Basin with an area of almost 30,000 km^2 (28,522 km^2); this region stood out among all the other regions of historical Hungary owing to its characteristic socioeconomic development. The unique importance of this region is underscored by the fact that the area was placed under military administration after the Treaty at Pozsarevác (1718) up until 1778, and was governed directly from Vienna as a border guard region. The indirect and direct interactions with the Royal Chamber of Vienna changed after the restoration of the patrician counties (Torontál, Temes, and Krassó) in 1779; however, traces of its former distinction, covering all elements of the socioeconomic–urban space, and bearing the characteristics of enlightened mercantile absolutism, are detectable even today in this region. The effects of the regional reorganisation initiated when the Habsburgs were in power are clearly traceable in the development of the Temes Bánság in the 18th and 19th centuries; besides the separation of Croatia and Transylvania, the Bánság is the only extensive region in historical Hungary where regionality played a role in administration, regional development and settlement policy between 1718 and 1920, countering and sometimes disagreeing with traditional Hungarian constitutional law.

Development in the 18th to 19th centuries mobilised local and positional energies, helping ethnic groups (e.g. Germans, Serbians, Romanians, Bulgarians, etc.) and Hungarians dwelling here to establish a regional identity, making the Bánság the most developed culture in historical Hungary (Kókai 2010, Demeter 2020). The special socioeconomic characteristics of the Bánság (e.g. the lack or subordinate role of farms, the dense railway network, the formation of the modern factory industry, and the establishment of the basis of modern trading – 70% of the agricultural produce of the Bánság was transported by traders from Temesvár, and its spice trade was the most significant and its cattle markets the largest, etc.) may be further detailed. However, it is a specific region of the Carpathian Basin that is markedly separate from both the Great Hungarian Plain and the other regions of the southlands and Transylvania, in which the new borders drawn under the Trianon Peace Treaty brought about "space schizophrenia" and economic recession, creating underprivileged border-side peripheries, a problem that remains unsolved even today.

Changes in the population of the Bánság between 1910 and 2001/02

With the processing of the data from the 1910 census of the 801 settlements of the Bánság, it became possible to derive the ethnic spatial structure of the Bánság. No single ethnic group became dominant in the Bánság: Hungarians numbered 242,152 (15.4%); Germans, 387,545 (24.5%); Romanians, 592,045 (37.4%); and Serbians,

284,329 (18.0%). Therefore, on a linguistic–ethnic basis, none of the nationalities could have claimed exclusively the area.

The population growth and the formation of the ethnic and settlement space structure were disturbed only temporarily by World War II. The region's economic development, which grew and differentiated rapidly after 1945, was evident. According to the data of the national census of 1949/53/56, 1,622,564 people lived in the 849 settlements in the region (Tables 1–2), which is 3.25% higher (51,169 people) than the figure of 1910 (804 settlements = 157,1395 people). This small increase in the population indicates an unfavourable trend, because the region witnessed a huge (17.62%, 235,406 people) increase in the population between 1870 and 1910 (Kókai 2010).

Table 1

Ethnic distribution of the population in the Bánság (1910–2001/02)

Nationality	Hungarian Banat				
	1910	1930	1949	1990	2001
Hungarian	11,683	16,967	19,024	18,601	20,139
	69.7	91.9	98.4	100.0	100.0
German	1,248	1,045	–	–	–
	7.5	5.6	–	–	–
Serbian	3,588	471	–	–	–
	21.4	2.5	–	–	–
Romanian	85	–	–	–	–
	0.5	–	–	–	–
Others	154	–	310	–	–
	0.9	–	1.6	–	–
Total	16,758	18,483	19,334	18,601	20,139
	100.0	100.0	100.0	100.0	100.0
	Romanian Banat				
	1910	1931	1956	1992	2002
Hungarian	120,959	97,854	86,592	67,497	59,691
	12.3	10.2	8.9	5.9	5.5
German	252,802	246,354	147,275	30,843	21,083
	25.7	25.6	15.1	2.7	1.9
Serbian	48,733	36,491	31,156	15,622	20,937
	4.9	3.8	3.2	1.4	1.9
Romanian	515,485	532,589	648,925	954,846	916,492
	52.3	55.3	66.7	83.5	85.1
Others	46,870	48,520	58,542	73,902	59,987
	4.8	5.1	6.1	6.5	5.6
Total	984,849	961,808	972,490	1,142,710	1,078,190
	100.0	100.0	100.0	100.0	100.0

(Table continues next page.)

(Continued.)

	Serbian Banat				
	1910	1931	1953	1992	2002
Hungarian	109,510	90,670	110,030	72,508	62,891
	18.8	15.4	17.4	10.5	10.5
German	133,495	116,900	6,277	–	854
	23.0	20.0	1.0	–	0.1
Serbian	232,009	271,900	388,268	460,929	435,685
	40.0	46.3	61.5	66.7	72.6
Romanian	76,398	61,743	55,439	33,795	26,521
	13.1	10.5	8.8	4.9	4.4
Others	29,175	45,693	69,911	124,072	74,059
	5.1	7.8	11.3	17.9	12.4
Total	580,957	586,906	631,485	690,314	600,010
	100.0	100.0	100.0	100.0	100.0
	Banat				
	1910	1930/31	1949/56	1991/92	2001/02
Hungarian	242,152	205,416	215,646	158,606	142,721
	15.3	13.1	13.3	8.5	8.4
German	387,545	364,299	153,552	30,843	21,937
	24.5	23.2	9.5	1.7	1.3
Serbian	284,330	308,862	419,424	476,551	456,622
	18.0	19.7	25.8	25.7	26.9
Romanian	591,968	594,332	704,364	988,641	943,013
	37.4	37.9	43.4	53.4	55.5
Others	76,199	94,213	128,763	197,974	134,046
	4.8	6.1	8.0	10.7	7.9
Total	1,582,194	1,567,122	1,621,749	1,852,615	1,698,339
	100.0	100.0	100.0	100.0	100.0

Source: personal editing based on HCSO data.

Table 2

Large- and middle-sized cities' population and ethnic composition in the Bánság (1910–2001/02)

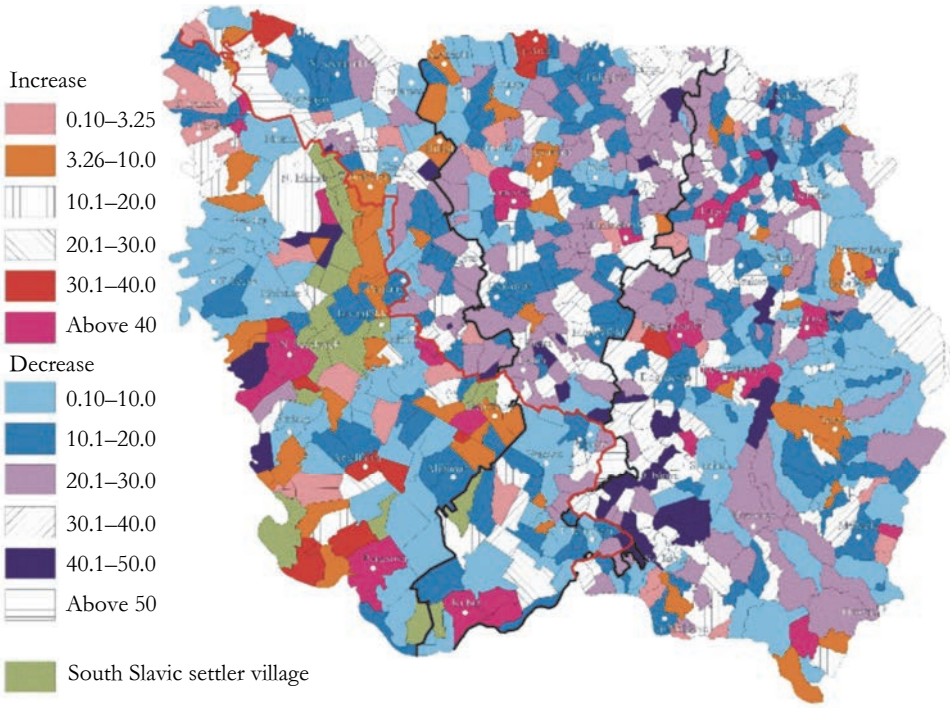
Cities	1910						2001/02					
	Population	1.	2.	3.	4.	5.	Population	1.	2.	3.	4.	5.
Temesvár	72,555	39.4	43.6	4.8	10.4	1.8	317,651	7.9	2.2	2.0	85.2	2.7
Lugos	19,818	34.7	31.0	1.1	31.4	1.8	44,571	9.6	2.9	0.1	82.9	4.5
Resicabánya	17,368	15.6	54.3	0.9	21.9	7.3	79,869	3.7	3.2	0.0	88.9	4.2
Versec	27,370	14.2	49.5	31.4	3.2	1.7	36,623	4.9	0.2	77.5	4.7	12.7
Nagykikinda	26,795	22.3	21.9	52.8	1.6	1.4	41,935	12.6	0.1	74.7	0.2	12.4
Nagybecskerek	26,006	35.2	26.2	34.4	1.3	2.9	79,773	14.5	0.2	70.9	0.8	13.6
Pancsova	20,201	16.7	37.0	43.1	3.8	0.1	77,087	4.3	0.2	79.1	1.0	15.4
Total	210,113	28.8	38.5	21.1	9.5	2.1	677,509	8.0	1.7	27.1	56.3	6.9

Notes: 1. Hungarians, 2. Germans, 3. Serbs, 4. Romanians, 5. Others.
Source: personal editing based on HCSO data.

According to the data, between 1910 and 1949/1953/1956, the population of Torontál increased by 6.53% (38,770 people), despite the population of Temes and Krassó-Szörény counties were decreasing. Until 1930/1931, the numbers of the Serbs had increased by 30,000 people, despite the Hungarian population decreasing more than 15,000 people in Torontál County alone. Within 30–50 km of the border, the number of settlements in which the Serbs were in the majority outnumbered the Hungarians (for example, Deliblat, Kubin, Pancsova, etc.). In this region, they settled in new villages (for instance, Aleksandrovo, Vojvoda Stepa, Banatsko Karadjordevo, Mileticevo, etc.). In the area of the Serbian Bánság, the number of Romanians decreased by 8–10,000 people in the 1920s because they moved to Romania (Figure 1). According to László Gulyás's (2007) data, 19,226 families settled in the Kingdom of Serbs, Croats, and Slovenes (Bácska, Bánság, Szerémség) between 1919 and 1941. Assuming five members per family, this was a population of approximately 93,440 people. In the Serbian Bánság, 10,933 families settled (approximately 54,665 people), and they established 42 new settlements between 1919 and 1941 (Gulyás 2007).

Figure 1

Population growth and decrease (in %) between 1910 and 1949/1953/1956



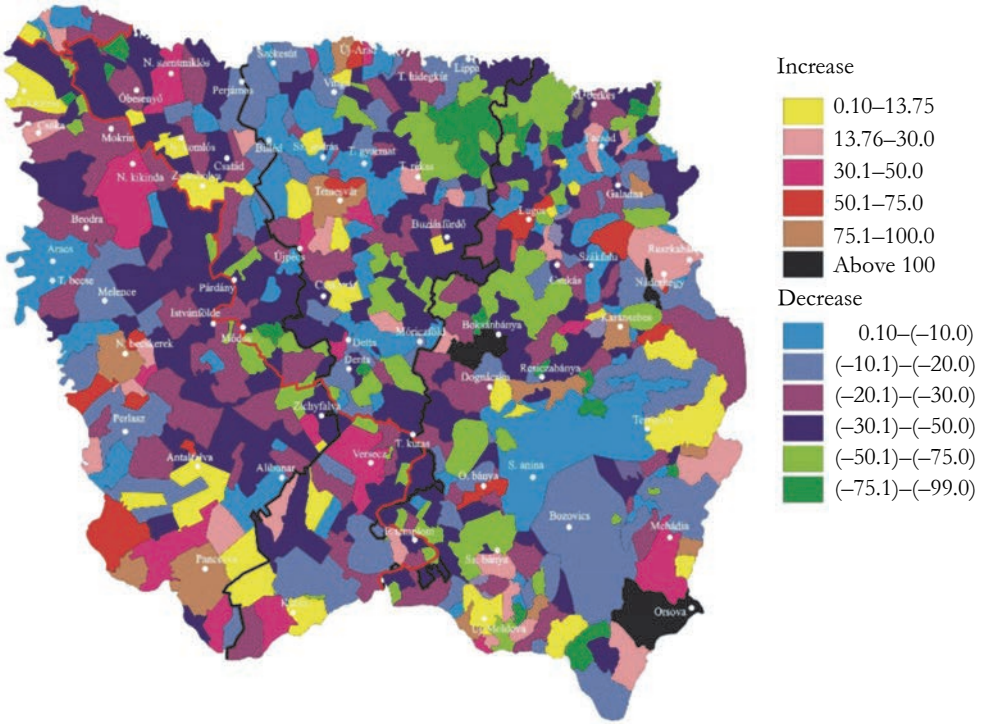
The spontaneous migration–assimilation processes were determined in the Romanian Bánság (Kókai 2010), and were not the result of Romanian villages having

been established. In 1910, 592,049 Romanian people lived in the area of the Bánság, while this number was 594,005 in 1930/1931. The Romanians in the Bánság had a low birth rate, and could not compensate for the influx of Romanians from the Romanian Old Kingdom (i.e. the Regat). Because of Trianon and the second Vienna Decision, many Hungarians moved out of the Romanian Bánság. The Hungarian population decreased by more than 23,000 people by 1930/1931. Romanians were most prevalent in the big cities (for example, Resicabánya and Temesvár).

The study of the population number of the Bánság settlements showed significant differences at the local level as well as in micro and macro respects. The region witnessed a 13.74% increase in population between 1949/1953/1956 and 1990/1991. This alone is a favourable tendency. Only 116 settlements had a natural increase (mainly in the agglomeration of Belgrade and Temesvár, as well as in the areas around Nagybecskerek, Orsova, Moldova, and Resicabánya). More than 700 settlements, however, have been in a state of constant population decrease (Figure 2).

Figure 2

Population growth and decrease (in %) between 1949/1953/1956 and 1990/1991



The natural decrease occurred differently; it was dramatic along the borders of the counties and also the Trianon borders, and these regions became extremely backward.

Along the Serbian–Romanian border this decrease was remarkably different in connection with both the regions and the territories. As a result of these unfavourable economic and social circumstances and possibilities, the 238 settlements of the abovementioned border-zone involved in the survey (a zone with about 20 kilometres on each side of the border) had a population decrease of 14.7% between 1949/1953/1956 and 1990/1991. Only 17 settlements increased their population during this period. The result is that among the 826 settlements of the Banat region, only 128 remained by 1990/1991 where the Romanians or the Serbs have an absolute majority. Of these, only eight settlements can be found in Hungary (with a homogeneous Hungarian population), while 60 settlements are in the Romanian Bánság territory. Another 60 settlements are in the Serbian Bánság territory, with Romanian and Serbian minorities (Figures 3–4).

Figure 3

Ethnic structure in the Bánság (1990)

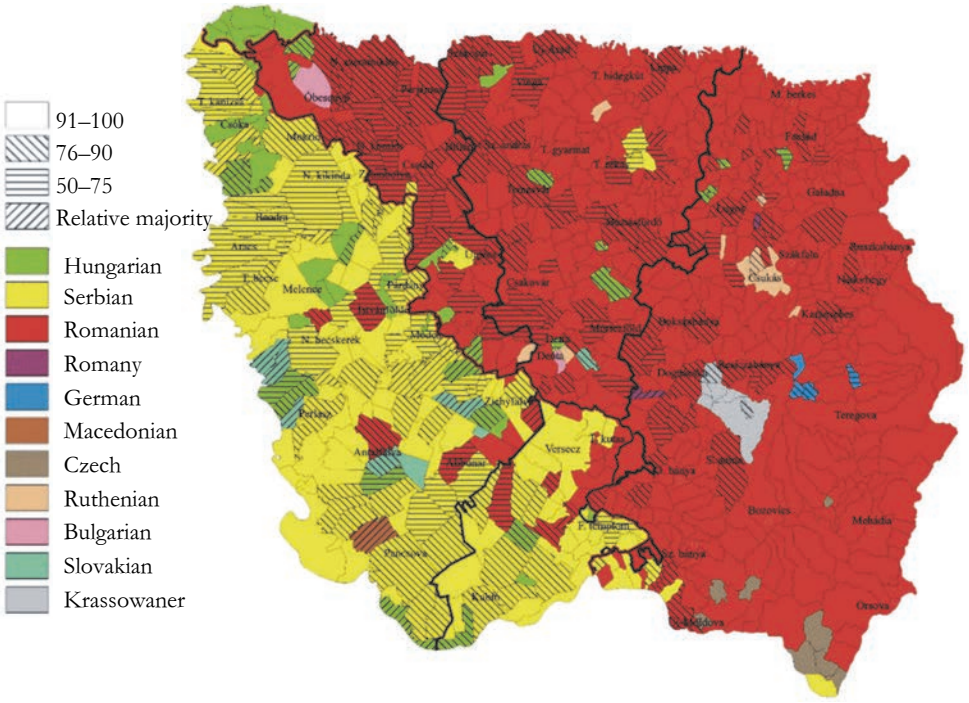
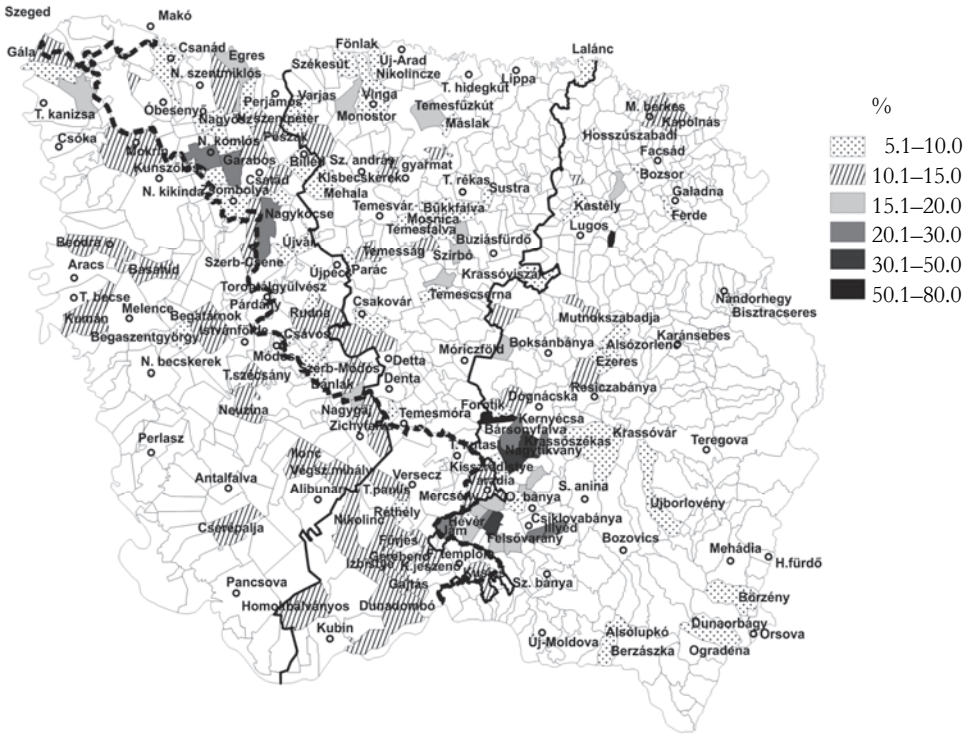


Figure 4

Bánság settlements with a Romanian population above 5% (2002)



The following data show that these two nations became stronger: the number of Romanians swelled to almost one million (988,641 people = 53.56%), while the number of Serbians became nearly half a million (474,831 people = 25.73%). These figures will be even larger if we take into consideration the other 32,527 Yugoslavian people (Kókai–Bottlik 2002). It is regrettable that the number of Hungarians decreased (152,609 people = 8.26%), as did the number of other small nationalities (except the Roma [gypsy] population, 13,108 people = 0.71%); the increasing number of Roma resulted in their absolute majority in Maguri village.

In the border zone, three micro-regions developed, which can be characterised by a dramatic natural decrease (Figure 2).

One of these is the region of the Hungarian–Romanian and Serbian triple border (Marosszög), where the rate of decrease might reach 50% in certain villages (e.g. Egyházaskér, 59.8%; Porgány, 77.7%; Bolgártelep, 80.7%, etc.). As a region of Banat, the 1,500 km^2 area of Marosszög is situated at the southeastern part of the Great Hungarian Plain, which extends from where the Tisza and Maros rivers join the line of Aranka river, and it can be interpreted as a borderland region of three neighbouring countries. From 1850 up to the end of World War I the tendencies in

the demographic changes were characterised by the domination of the spontaneous migration and assimilation processes, and the territory represented the contact region between people of Hungarian, Serbian, Romanian, and Schwab (Germans of Banat) nationality, with Hungarians and Serbians dominating. By 1910, these processes resulted in the population of Marosszög being composed of 35% Hungarian, 26.4% Serbian, 16.7% German, 14.9% Romanian, and 5% Bulgarian. Although the region was defined by the domination of the Hungarians in 1910, the Trianon borders did not respect ethnic structure or natural economic–commercial relations, and gave disproportionately large areas to Serbia and Romania. In the 20th century, inner migration and assimilation played a decisive role in population and ethnic configuration changes. In this way, by the millennium, these changes related to intense demographical erosion, with the focal points of the ethnic configuration moving away from the more progressive homogenising processes. In the Hungarian relative majority region (38.4%), among the other ethnic groups, Romanians reached 26.1%, Serbians 22.1%, and Germans essentially disappeared. Today the former 40% Hungarian population of the region live as a minority (14,899 persons) in neighbouring countries, with 10% Serbians (1,948 persons) and 0.1% Romanians (68 persons).

The second micro-region is between Nagykikinda and Versec along the Serbian border, and between Zsombolya and Detta along the Romanian border. The village of Zichyfalva was the only settlement in the area that had a natural increase; otherwise, the rate of natural decline here is above 30%. This region was the hinterland of the population increase of Temesvár and Nagybecskerek.

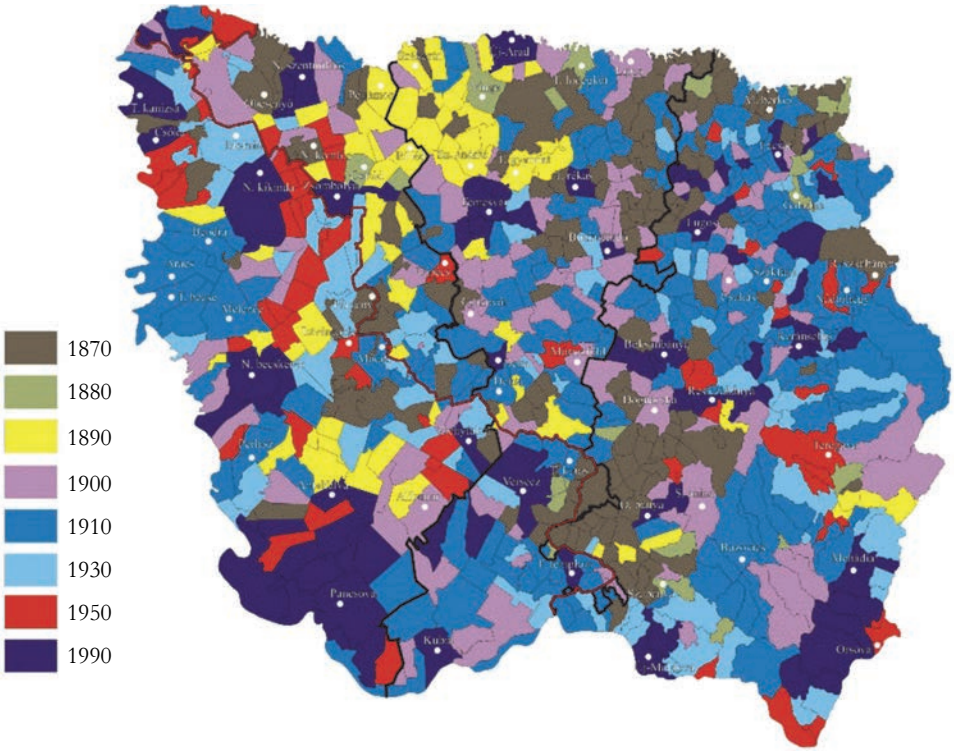
The third micro-region with a natural decrease was south of the Detta-Versecz-Fehértemplom line, a settlement of small villages, where the unfavourable transportation options resulted in a 20% decrease. The natural decrease in this region is remarkable because it is related to the ethnic composition of the Bánság.

The region witnessed an 8.3% (153,241 people) decrease in population between 1990/1991 and 2001 (Kókai 2010). Only 16 settlements had a natural increase (mainly in the agglomeration of Belgrád, Temesvár, and Szeged, as well as in the area of Nagybecskerek, Orsova, Moldova, and Resicabánya). The natural decrease took different forms; it was dramatic along country borders and along the Trianon borders, and these became distinctly backward regions (Figure 5). Along the Serbian–Romanian border, this decrease was remarkably different in both the regions and the territories. As a result of these unfavourable economic and social circumstances, the 238 settlements of the aforementioned zone along the border involved in the survey experienced a population decrease of 9% between 1990/91 and 2001/02. One of these is the region of the Hungarian–Romanian and Serbian triple border, where the rate of decrease might reach 15% in certain villages. The second micro-region is between Nagykikinda-Versecz, along the Serbian border, and between Zsombolya and Detta along the Romanian border. (this section refers to the time-span from 1990-to 2001 the previous one refers to the one from 1949 to

1990.This region formed the hinterland of the population increase in Temesvár, Nagybecskerek, and Pancsova. The third micro-region with natural decrease was south of the Detta-Versecz-Fehértemplom line, a settlement of small villages, where the unfavourable transportation options resulted in a 10% decrease. These ethnic and contact zones have changed irreversibly up until the present day.

Figure 5

Maximum population in the settlements of the Bánság



Spatial structure changes in the Bánság (1910–2010)

The indirect and direct interactions with the Royal Chamber of Vienna stopped, but the traces of the effects covering all the elements of the socioeconomic–settlement space are detectable even today in this region (Table 3).

Market towns with wide borders and their associated systems are not characteristic in the Bánság due to known historical reasons. Mid-sized villages with smaller borders and populations (two to five thousand people) were established instead of constructing even a small market–town network (Figure 6). Considering the categories of size of the settlements, it can be stated that most of the tiny and small villages are found in Krassó-Szörény County (66.3%). Torontál County is characterised by the dominance of mid- and large-sized villages (75.6%) and 15

extremely large villages. There were two villages (Nagyszentmiklós and Zsombolya) whose population exceeds 10,000 people. In this respect, Temes County is the most balanced, with a slight dominance of mid-sized villages.

Table 3

Settlements of the Bánság by population (1910)

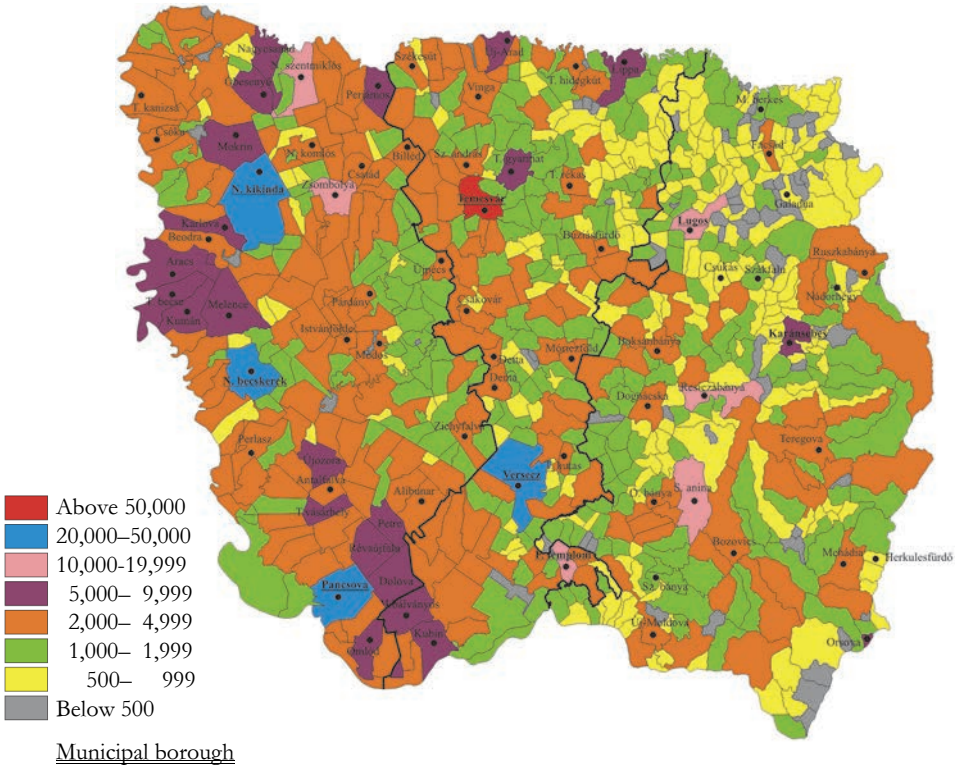
County	Sett-lement	Under 500 people	Bet-ween 500–1,000 people	Bet-ween 1,000–2,000 people	Bet-ween 2,000–5,000 people	Between 5–10 thousand people	Between 10–20 thousand people	More than 20 thousand people
Krassó-Szörény	363	56	145	113	44	Karánsebes 7,638 people Orsova 5,538 people	Lugos 19,126 people Resicabánya 17,368 people Stájerlakanina 12,323 people	– – –
%	100.0	15.4	40.0	31.2	12.1	0.5	0.8	–
Temes	225	14	56	81	66	Lippa 7,854 people Kevevára 7,022 people Homok-bálványos 6,836 people Temesgyarmat 5,259 people Újarad 5,982 people	Fehértemplom 10,181 people	Temesvár 68,471 people Versec 26,941 people
%	100.0	6.2	24.9	36.0	29.3	2.0	0.4	1.2
Torontál	213	9	23	67	94	15[a)]	Nagyszent-miklós 10,611 people Zsombolya 10,882 people	Nagykikinda 26,356 people Nagybecskerek 25,470 people Pancsova 20,201 people
%	100.0	4.2	10.8	31.5	44.15	9.1	0.1	0.15
Bánság	801	79	224	261	204	22	6	5
%	100.0	9.7	28.0	32.6	25.5	2.75	0.75	0.7

[a)] *Torontál county settlements between 5,000–10,000 people:* Aracs 9,162 people, Melencze 8,935 people, Mokrin 8,830 people, Törökbecse 7,640 people, Dolova 6,905 people, Révaújfalu 6,597 people, Kumán 6,136 people, Óbesenyő 5,989 people, Petre 5,833 people, Nagycsanád 5,645 people, Újozora 5,581 people, Karlova 5,503 people, Omlód 5,344 people, Perjámos 5,336 people, Torontálvásárhely 5,173 people.

Source: personal editing based on HCSO data.

Figure 6

Settlements of the Bánság by population (1910)



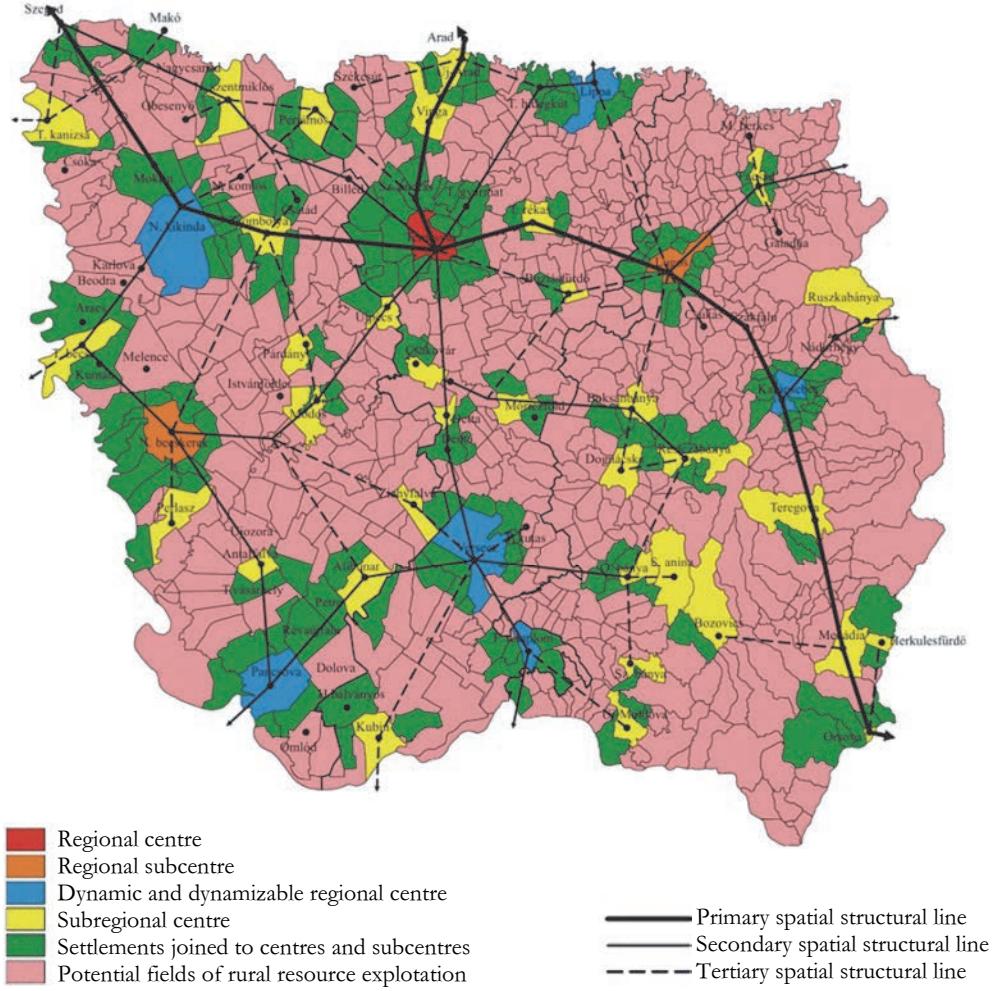
The Bánság town network started reshaping many settlements, which had only a few town functions, a small number of citizens, and an undeveloped town population; it inherited the town institution system, and some settlements thus owned town functions (e.g. Csanád, Gattaja, and Nagymargitta). According to our investigations, the number of the settlements having real centre functions in the Bánság was reduced by half (30 pcs.) by 1910 (Figure 7). This was intensified by the demographic boom, the speed of urbanisation, the establishment of a professional administration, the establishment of the modern banking and financial system, and the extension of its educational – cultural role − and these increased the gap within and between the given hierarchy levels.

– The inhabitants of the Bánság were offered three *primary centres* (Temesvár, Szeged, and Arad), which had a somewhat similar development but differed a great deal in their character, society, and economic specialties (based on examining 23 centre functions). However, a real choice was offered only to the inhabitants of a few settlements.

– Regarding *secondary centres* from studying 13 factors (e.g. population above 20,000, a central court of law, a medical centre or hospital, etc.), three full centres (Nagybecskerek, Pancsova, Versec) and two partial ones (Nagykikinda, Lugos) were defined.
– In the case of the *third and fourth centres,* 10 centre functions were involved in the investigations (e.g. district centre, tax inspectorate, a minimum of two banks, a population above 10,000 people, etc.), which produced ten third centres (e.g. Fehértemplom, Karánsebes, Lippa, Nagyszentmiklós, Oravica, Zsombolya, etc.) and 14 fourth centres (e.g. Perjámos, Vinga, Facset, Törökkanizsa, Buziásfürdő, Bogsánbánya, Resicabánya, Stájerlakanina, Új-Moldova, etc.).

Figure 7

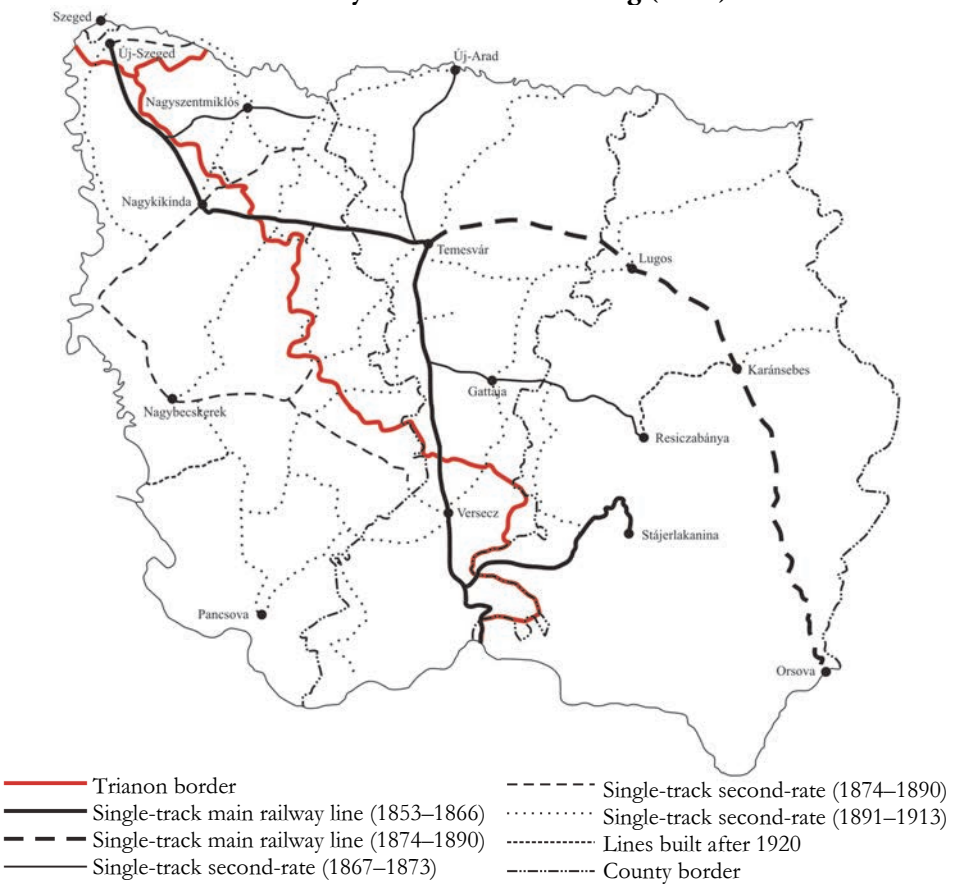
Outline of the spatial structure of the Bánság (1910)



After World War I, the Bánság belonged to the relatively developed regions of the Kingdom of Serbs, Croats, and Slovenes, as well as Romania, although it continuously lost its benefits for many decades. The traffic conditions of the Serbian Bánság (9,296 km^2) changed disadvantageously after the Trianon Peace Treaty. The railway network has been cut in 17 places by the border lines (Figure 8). Until 1922 there was no direct railway connection between the historical Bács-Bodrog and Torontál Counties. In this era, the railway bridge between Zenta and Csóka was built. The main railway line (Szeged to Temesvár) was divided into three pieces by the borders (for instance, the settlement of Valkány was transferred to Romania, but the Kingdom of Serbs, Croats, and Slovenes got its railway station). Today the Serbian Bánság has connection with the Romanian Bánság on three railway lines (Versec-Temesvár, Módos-Temesvár, and Nagykikinda-Temesvár). The area of the Serbian Bánság has four international main roads, which join the area of the Romanian Bánság. The previously regionally significant roads are either used for local transportation only or they are out of order.

Figure 8

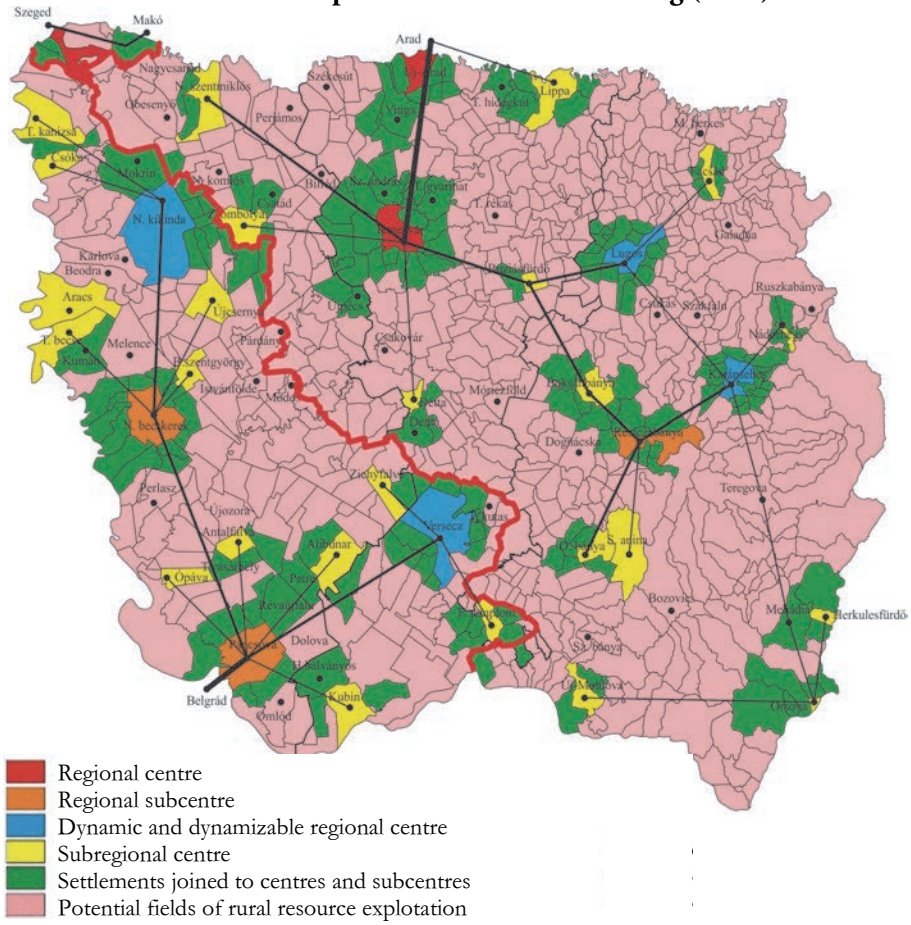
The railway network of the Bánság (1918)



The conditions of the traffic infrastructure financially limit communication between the two sides of the border (Serbian–Romanian), because there are only two public roads and two railway crossings. By contrast, at the Serbian–Hungarian border, there are potentially 20 crossing opportunities, thanks to the settlement network. The geographical situation of the Romanian Bánság is less beneficial compared to Transylvania, though the Vest region is mentioned as "the gate of the West" by Romanian scientists. There are several transportation connections in the region: toward Transylvania is the valley of Maros; toward Olténia is Turnu Severin; and toward Hungary there are public road crossings (Csanád-Kiszombor) and railway crossings (Lökösháza-Kürtös). The inhabitants of the Bánság were offered two primary centres, having a somewhat similar development (Temesvár, Belgrád). However, a real choice was offered only to the inhabitants of a few settlements (Figure 9).

Figure 9

Outline of the spatial structure of the Bánság (2010)



I determined that among secondary dynamic centres, there are two full (Nagybecskerek, Resicabánya) and four partial (including Karánsebes, Lugos, and Pancsova) centres. I also determined the third and fourth centres. According to the results, there are two third centres (Versec, Nagykikinda) and 27 fourth centres (e.g. Csóka, Facset, Törökkanizsa, Stájerlakanina, etc.). These centres are positioned in the shape of a semicircle around Temesvár and Belgrád (Figure 8). Small market towns could fulfil the tasks given to them in the Bánság structure, so the dynamic of "speeding time"–"slowing time" prevailed to revive the "stopped time" atmosphere of the small towns (Tables 4–5).

Table 4

Large and middle-sized cities' population in the Bánság and their position in the Carpathian Basin (1910–2011)

Cities	1910	1930/31	1953/56	1970/77	1991/92	2011	Changes (%)
Temesvár	72,555 (7)	102,390 (7)	142,257 (5)	269,353 (4)	334,115 (4)	319,279 (5)	440.1
Lugos	19,818 (61)	24,330 (58)	31,634 (50)	44,537 (49)	49,742 (64)	40,361 (67)	203.7
Resicabánya	17,368 (66)	25,307 (56)	47,305 (26)	84,786 (25)	96,918 (28)	73,282 (34)	421.5
Versec	27,370 (39)	29,411 (46)	23,038 (73)	34,256 (68)	35,585 (92)	36,040 (82)	131.7
Nagykikinda	26,795 (41)	28,400 (49)	28,665 (58)	37,576 (65)	42,707 (74)	38,065 (72)	142.1
Nagybecskerek	26,006 (43)	32,831 (36)	34,091 (42)	59,630 (35)	80,170 (37)	76,511 (31)	294.2
Pancsova	20,201 (59)	22,089 (66)	26,423 (64)	54,444 (39)	71,668 (43)	76,203 (32)	377.2
Total	210,113	264,758	333,413	584,582	710,905	659,741	314.0

Source: personal editing based on HCSO data.

Table 5

The 33 most populated settlements of Banat (1910, 2001/02)

1910		2001/02	
Settlements	Population	Settlements	Population
1. Temesvár	68,471	1. Temesvár	317,660
2. Versec	26,941	2.Resicabánya	79,869
3. Nagykikinda	26,356	3. Nagybecskerek	79,773
4. Nagybecskerek	25,470	4. Pancsova	77,087
5. Pancsova	20,201	5. Lugos	43,555
6. Lugos	19,126	6. Nagykikinda	41,935
7. Resicabánya	17,368	7. Versec	36,623
8. Nagyszentmiklós	12,350	8. Karánsebes	27,723
9. Stájerlakanina	12,323	9. Boksánbánya	16,911
10. Zsombolya	10,882	10.Törökbecse	14,452
11. Fehértemplom	10,181	11. Kubin	14,250
12. Aracs	9,162	12. Orsova	12,965
13. Melence	8,935	13. Nagyszentmiklós	12,914
14. Mokrin	8,830	14. Zsombolya	11,136
15. Lippa	7,854	15. Fehértemplom	10,675
16. Törökbecse	7,640	16. Nádorhegy	10,554
17. Karánsebes	7,638	17. Oravicabánya	10,222
18. A. és F. Ittebe	7,059	18. Stájerlakanina	9,167
19. Kubin	7,022	19. Lippa	7,920
20. Homokbálványos	6,836	20. Francfeld	7,624
21. Révaújfalu	6,597	21. Sztarcsova	7,615
22. Óbesenyő	5,989	22. Törökkanizsa	7,581
23. Új-Arad	5,982	23. Révaújfalu	7,345
24. Csanád	5,645	24. Dolova	6,835
25. Orsova	5,538	25. Antalfalva	6,764
26. Perjámos	5,336	26. Beodra+Karlova	6,763
27. Temesgyarmat	5,259	27. Melence	6,737
28. Antalfalva	4,963	28. Omolica	6,518
29. Perlasz	4,943	29. Torontálalmás	6,312
30. Törökkanizsa	4,938	30. Homokbálványos	6,106
31. Módos	4,746	31. Mokrin	5,918
32. Vinga	4,702	32. Nagykárolyfalva	5,820
33. Beodra	4,674	33. Detta	5,786
Total	389,957	Total	929,115

Source: personal editing based on HCSO data.

Conclusions

The Bánság, as one of the historical Hungary's most developed cultural regions, has not disappeared without a trace. On both sides of the Trianon border, these characteristics can be observed: an ageing population (Kulcsár–Brown 2017),

declining population, low economic performance, high unemployment rate, malformed economic structure, and a generally depressed situation. Our study found that the Bánság became one of the most advanced regions in the Carpathian Basin by the beginning of the 20th century. The new borders drawn by the Trianon Treaty not only caused economic impossibilities and schizoid space divisions, in addition to still-unresolved cumulative disadvantages, but also disrupted traditional socioeconomic divisions of labour. In 1990, the region appeared to have been resurrected in a new form, the Danube-Kris-Mures-Tisa (DKMT) Euroregion. However, the process of forging a new identity for itself does not stop at territorial borders as societies and local and regional communities try to find their place in the global society. They realise that in neighbouring countries, like-minded people live, act, and are ready to cooperate. This cooperation can only be successful if we explore the region's past and its relationships in order to understand the historical–geographical unity. The frontier guard area is now an outer periphery. Cross-border cooperation means identifying ways to reduce differences between countries' social, economic, and community levels and outside forces, based on the existence of ethno-linguistic and cultural minorities.

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Trianon: self-defeating self-determination

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At the end of 1918, multinational Hungary was among the losers of the First World War. It did not follow from this that the victors needed to impose on her a century ago in the Trianon treaty the extremely harsh measures they did, especially in a territorial sense. Nor did it follow from the events of the period between the end of the war and the concluding of the treaty. The plans, including secret treaties (Szarka 2008a) were ready beforehand.

Hungary had been part of Western civilization by then for over nine centuries, sharing its values, including the most defining one, the principle of self-determination. The latter's content had widened through the ages, and by about this time was widely acknowledged to also apply to ethnic groups. For Hungarians the least tolerable aspect of the treaty to absorb was the contradiction of its measures to this western value.

The inconsistency of those dictating the terms is conspicuous not just in the Trianon treaty itself, but its comparison with treaties concluded with other states on the losing side. This was manifested not just in the frequent superseding of the principle of self-determination when it came to masses of the Hungarian population despite quoting it when rationalizing the detaching from the country her minority inhabited areas, but also in the selective application of plebiscite as in the context ideal means for exercising democratic will.

It was an odd application of the principle of self-determination that considered necessary to dismember Hungary that – disregarding autonomous Croatia-Slavonia which was choosing to secede – had a Hungarian majority of 54.5% (Kogutowicz 1927) so as to transfer to Czechoslovakia a territory where the proportion of the Slovaks was 47.7% and another to Romania where the proportion of Romanians was 53.8% (Kogutowicz 1927). This, while the state forming position of the Slovaks in the new Czechoslovakia – the very justification for transferring land they inhabited to Czechoslovakia – was at least not without ambiguity; and as to Romanians, amounting in total to 16.1% (Bárdi 2008) of the population of hitherto Hungary securing self-determination for – not even all of – them involved the transfer to Romania a larger territory than allowed by the treaty to be retained by Hungarians who were forming 54.5% of the inhabitants of the partitioned country.

Regional Statistics, Vol. 10. No. 1. 2020: 151–156; DOI: 10.15196/RS100106

Simultaneously the state named then Kingdom of the Serbs, Croats and Slovenes (later Yugoslavia) came to possess two such areas of Hungary where even the combined total of all Southern Slavonic population (Serbian, Croat, Slovene, Šokac and Bunievac) was merely 30.9% (Kogutowicz 1927) according to the 1910 census. The state forming position of the non-Serbians in this area (just as in joining to this new state Croatia-Slavonia) remained in various ways mere fiction (Figure 1).

Delegating over 3.3 million people, i.e. one third of all Hungarians into a minority position contradicted unequivocally the principle of self-determination. Their number was substantially higher than that of either the seceding Romanians or of the Slovaks, not to mention that of the Southern Slavs which was amounting to a mere one-seventh of this figure. Besides, the concept of self-determination was not served by the fact that there was as a result of the redrawing of the frontiers an about two and a half million strong population transferred from a minority position in Hungary to the same position in the successor states. Being moved to another state meant no improvement for them from the standpoint of self-determination. It meant instead a major upheaval affecting them only detrimentally, given the series of ways in disrupting their way of life hitherto. Thus even if assuming that the Slovaks, Romanians, Southern Slavs and the western Transdanubian (Burgenland) Germans all desired to secede – and there were tangible signs to the contrary – the treaty brought improvement even then to the position of only about 5.2 million people, at most. It achieved that at the price of worsening simultaneously the position of about 5.5 million other people. Viewing this from a general Western standpoint, it was hardly worthwhile to bring about such 'gain' by destroying a traditional unit that was functioning for 900 years as one of the pillars of the state system of the West. The collapsing of this pillar contributed to destabilizing that system, thus affecting the West as a whole detrimentally.

The principle of self-determination having been in the case of the Trianon treaty a mere catchphrase is unmistakably clear from the victors not wishing even to hear about plebiscites to be held – although suggested by the Hungarian delegation (Szarka 2008b) – in the territories assigned to be detached concerning their fate. They were pointing instead to decisions of national assemblies of dubious legitimacy, convened together in haste, uncertain if reflecting democratically the collective will of the various minorities. What more, they have done so without taking in account the decisions of those such assemblies that decided for remaining in Hungary.

This was inconsistent further by comparison with the other post-war treaties. Whilst it is customary to the level of amounting to a cliché to refer disapprovingly to the extreme harshness of the Versailles treaty to Germany – and not without reason – its conditions, especially concerning territory were almost incomparably milder and certainly much fairer than those of the Trianon treaty to Hungary. Minor linguistic islands and Alsace-Lorraine (the German-speaking inhabitants of which were traditionally of a pro-French sentiment) apart, that treaty not only did not detach German speaking areas from Germany but allowed in the main the minority populations of various areas to decide by plebiscite if they wished to secede. The Polish speaking Masurian (and some other) parts of Germany decided for remaining in Germany. It was thus apparent that it did not necessarily follow from the linguistic conditions of the population where they wanted to live; economic considerations and conservatism could prove to be more decisive than the attraction of their 'mother nation'. This could well have been the case in at least some minority inhabited areas of Hungary if people were not denied the chance to decide.

Austria, it is true, was deprived of significant German-speaking territories, but at least in her mainly Slovenian inhabited southern Carinthia a plebiscite was held – the result deciding for Austria. Also, Austria was compensated to some extent for her losses – by receiving Hungarian land. Bulgaria lost in the main – and only partially – territory she had gained a mere six years earlier. Compared to the losses of Hungary, both the size and proportion of this was negligible. The Ottoman Empire, whilst having to give up its Arabian possessions (also Germany's colonies were taken), there was little intention to detach Turkish-speaking area from her even in the Sèvres treaty, which was annulled due to the Turkish resistance to it. That treaty even foresaw a plebiscite for a sizeable Kurdish-inhabited land.

There was much traumatized, thus unhelpful soul searching among Hungarians for an explanation as to what had led to the wholesale disregarding of a core Western principle by leading Western powers that, adversaries or not, had been highly respected. There was much misguided effort to internalize the explanation. It is nonetheless unwarranted to seek it in the Hungarian treatment of minorities. Despite a prevailing 'bad press' to the opposite – advanced by the victors and a desire to rationalize a deeply unjust deed – it was, if compared under proper scrutiny against contemporaneous European standards, in fact exemplary, or at the very least in no way worse than that of any other state of the period. Indeed, the very victors were never referring to any retaliatory intent in the treaty terms. There is no reason to seek an explanation in other than a benevolent indifference of the Entente powers towards the excessively covetous craving of Hungary's neighbours – their erstwhile allies – for unrestrained expansion, combined with an as short-sighted as it was unprincipled expectation for the latter's services to come in the future.

It does shed an unfavourable light on the victorious powers that the sole plebiscite in Hungary that was allowed to be held – not before concluding the Trianon treaty – about the fate of Sopron, took place not out of a respect to the

right of self-determination, but in view (Baumgartner 2008): of armed resistance in western Transdanubia.

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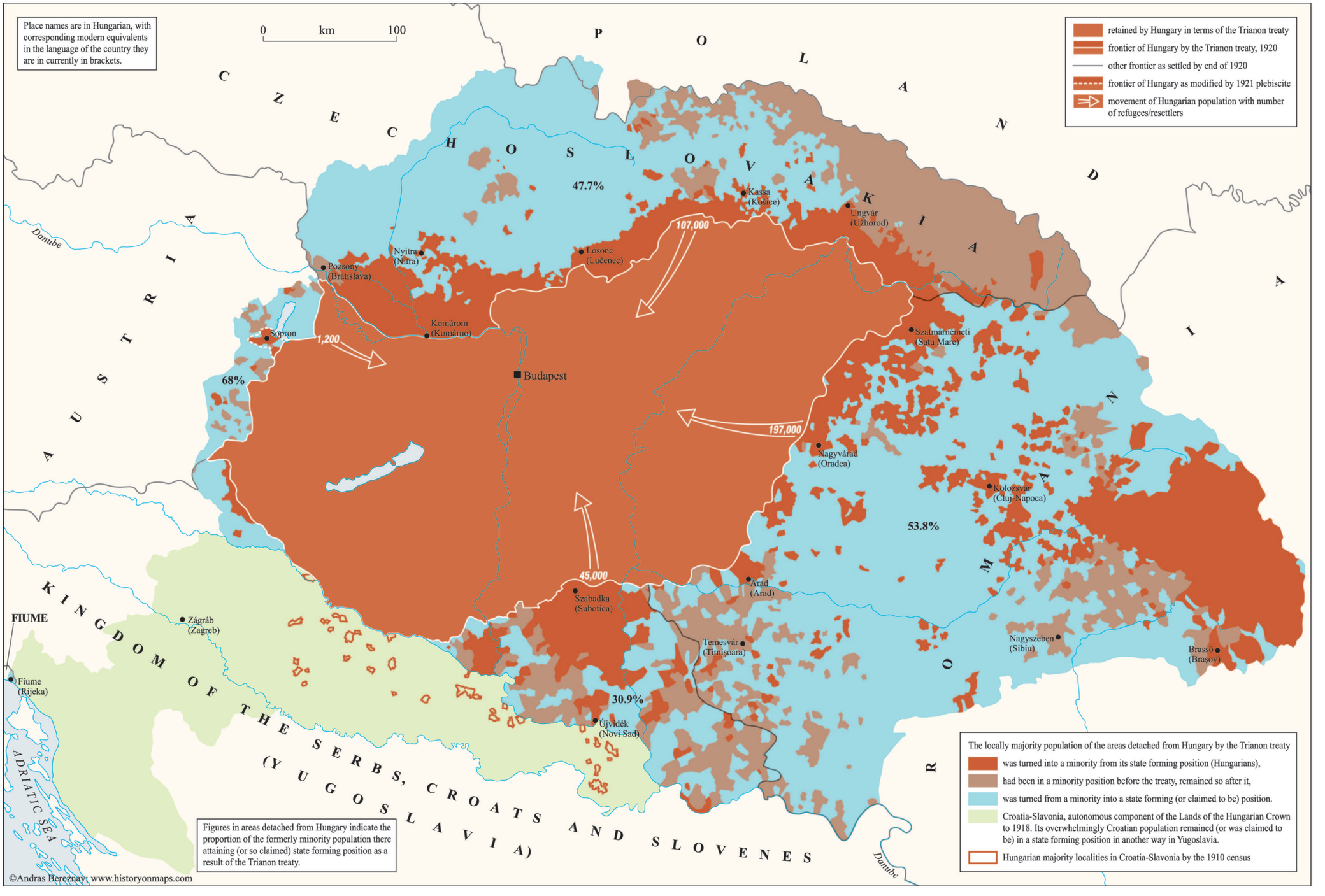
Figure 1



Regional Statistics, Vol. 10. No. 1. 2020: 151–156; DOI: 10.15196/RS100106