



Universitat de Lleida

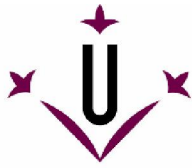
Political instability and regional transformations in the Balkans. Railways, population and socio-economic indicators of uneven regional development: 1880 – 2000

Kaloyan Stanev Stanev

ADVERTIMENT. La consulta d'aquesta tesi queda condicionada a l'acceptació de les següents condicions d'ús: La difusió d'aquesta tesi per mitjà del servei TDX (www.tesisenxarxa.net) ha estat autoritzada pels titulars dels drets de propietat intel·lectual únicament per a usos privats emmarcats en activitats d'investigació i docència. No s'autoritza la seva reproducció amb finalitats de lucre ni la seva difusió i posada a disposició des d'un lloc aliè al servei TDX. No s'autoritza la presentació del seu contingut en una finestra o marc aliè a TDX (framing). Aquesta reserva de drets afecta tant al resum de presentació de la tesi com als seus continguts. En la utilització o cita de parts de la tesi és obligat indicar el nom de la persona autora.

ADVERTENCIA. La consulta de esta tesis queda condicionada a la aceptación de las siguientes condiciones de uso: La difusión de esta tesis por medio del servicio TDR (www.tesisenred.net) ha sido autorizada por los titulares de los derechos de propiedad intelectual únicamente para usos privados enmarcados en actividades de investigación y docencia. No se autoriza su reproducción con finalidades de lucro ni su difusión y puesta a disposición desde un sitio ajeno al servicio TDR. No se autoriza la presentación de su contenido en una ventana o marco ajeno a TDR (framing). Esta reserva de derechos afecta tanto al resumen de presentación de la tesis como a sus contenidos. En la utilización o cita de partes de la tesis es obligado indicar el nombre de la persona autora.

WARNING. On having consulted this thesis you're accepting the following use conditions: Spreading this thesis by the TDX (www.tesisenxarxa.net) service has been authorized by the titular of the intellectual property rights only for private uses placed in investigation and teaching activities. Reproduction with lucrative aims is not authorized neither its spreading and availability from a site foreign to the TDX service. Introducing its content in a window or frame foreign to the TDX service is not authorized (framing). This rights affect to the presentation summary of the thesis as well as to its contents. In the using or citation of parts of the thesis it's obliged to indicate the name of the author.



Universitat de Lleida

TESI DOCTORAL

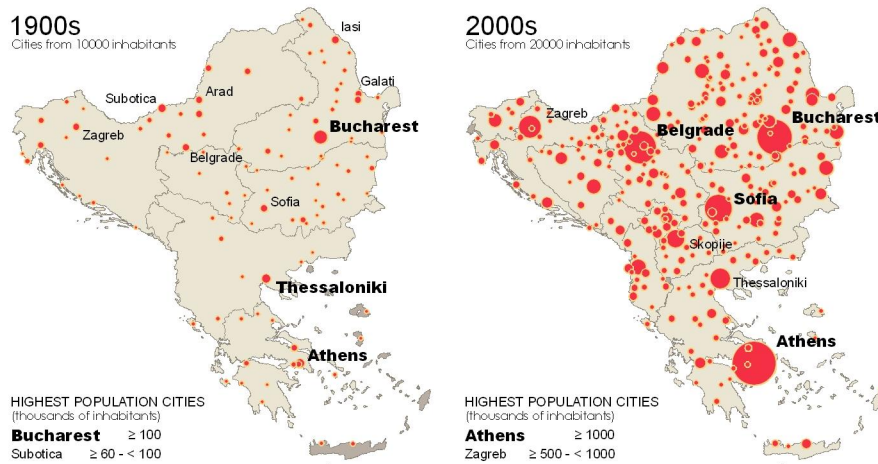
DOCTORAT EN TERRITORI, PATRIMONI I CULTURA

DEPARTAMENT DE GEOGRAFIA I SOCIOLOGIA / FACULTAT DE LLETRES

UNIVERSITAT DE LLEIDA

**Political instability and regional transformations in the Balkans. Railways,
population and socio-economic indicators of uneven regional development:**

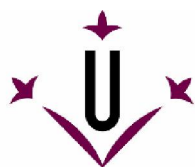
1880 – 2000



Kaloyan Stanev Stanev

Director: Jordi Martí Henneberg

2011



Universitat de Lleida

Political instability and regional transformations in the Balkans.
Railways, population and socio-economic indicators of uneven
regional development: 1880 - 2000.

Kaloyan Stanev Stanev

DEPARTAMENT DE GEOGRAFIA I SOCIOLOGIA / FACULTAT DE LLETRES
UNIVERSITAT DE LLEIDA

Director: Jordi Martí Henneberg

2011

Acknowledgments

Writing a thesis is a lengthy and demanding task. The next few lines are dedicated to the ones who supported me during this journey.

The current project has been developed during the last five years, in the University of Lleida under the supervision of Jordi Martí Henneberg. I am grateful for the opportunity to be part of the research group and for the encouragement and support he has always given me. I owe him great debt of gratitude for his inspiration, patience and friendship. Without him this project would have not been completed.

My work also benefited from the collaboration and the guidance of Martin Ivanov who supervised every stage of the work and made sure it stays in the right direction.

I am also indebted to my colleagues from the research group HGISE within the University of Lleida who provided me with the technical and intellectual assistance whenever it was needed. I would like to acknowledge the support of Mateu Morillas, Meritxell Gallart, Laia Mojica, Josep Puig and the others that throughout these years formed part of the group.

The data collection was a vital part of this research and I was fortunate to use the resources of the Eurodata library of MZES (Mannheim Centre for European Social Research) in the University of Mannheim, Germany. During my visits to MZES, it was privilege to work with the director of the Eurodata library Franz Kraus who provided me with an unrestricted access to the best possible technical facilities and the rich resources of the library. I am especially grateful for the special attention that I received from him and his family.

Over the years a number of institutions financed my studies and research in Catalonia. During the early stages I benefited from the PhD grant of University of Lleida and later from the grant FI provided by the Regional Governments of Catalonia (AGAUR). As a member of the project “Water, Road & Rail: The Development of European Waterways, Road and Rail Infrastructures: A Geographical Information System for the History of European Integration (1825-2005)”, my research was also partially funded by the Spanish Ministry of Education.

I am also indebted to the teaching and administrative staff of the Universities of Lleida and Barcelona and especially Alfonso Herranz who facilitated my integration within the Catalan university life which for a foreigner is a major concern.

I would like to acknowledge the role of Professor Daniel Tirado who directed my “tesina” project presented in the University of Barcelona in September 2009. This smaller initial project influenced significantly the entire thesis.

On personal level I received the support of the other Bulgarian PhD students in the University of Lleida and my colleagues and friends from Doctoral program in Economic History. I should mention Petya Vulcheva from University of Lleida, Edgar Cruz, Claudio Lionel, Claudia Tello and Ana Paula Solis who over the years aided me during different stages of my work.

And of course, thanks also to my girlfriend, my family and friends in Bulgaria, Spain and Catalunya who have always been extremely supportive of my studies.

Thank you all

Contents

1	Abstracts	1
<hr/>		
2	Introduction	5
<hr/>		
2.1	Territorial extent of the research	6
2.2	Data collection and methodology.....	8
2.3	Literature.....	11
2.4	Structure of the thesis	12
3	Chapter II. Regional Transformations of a State under Construction: Bulgaria, 1878-2002	15
<hr/>		
3.1	Data collection and methodology	18
3.2	Results, maps, and tables	20
3.2.1	<i>Population Density.....</i>	<i>20</i>
3.2.2	<i>Urbanization Rates</i>	<i>22</i>
3.2.3	<i>Railway Construction.....</i>	<i>27</i>
3.2.4	<i>Modifications to the regional economy.....</i>	<i>30</i>
3.2.5	<i>The rise of Sofia.....</i>	<i>31</i>
3.2.6	<i>The ports on the black sea.....</i>	<i>32</i>
3.2.7	<i>North versus south and the decline of the peripheral regions.....</i>	<i>34</i>
4	Chapter III. Regional changes and political discontinuities in Romania: 1859–2002. Demographic, urban and transport infrastructure indicators	37
<hr/>		
4.1	Introduction.....	37

4.2	Data collection and methodology	39
4.3	Historical Background	42
4.4	Population and urban development at the national and regional levels.....	44
4.4.1	<i>Years of population growth: 1859-1913</i>	<i>44</i>
4.4.2	<i>The interwar period: 1920-1939</i>	<i>45</i>
4.4.3	<i>Decades of transformation: 1945-1989</i>	<i>46</i>
4.4.4	<i>Transforming again: 1989-2002.....</i>	<i>49</i>
4.5	The development of the Romanian railway network	49
4.5.1	<i>Railways before WW-I</i>	<i>49</i>
4.5.2	<i>The Railways after WW-I</i>	<i>52</i>
4.5.3	<i>The Railways after WW-II.....</i>	<i>52</i>
4.6	Spatial and urban modifications in the Romanian economic hierarchy	53
4.6.1	<i>The development of the capital Bucharest</i>	<i>54</i>
4.6.2	<i>Comparisons between the Danube and Black Sea regions and settlements</i>	<i>56</i>
4.6.3	<i>Transylvania and Bukovina.....</i>	<i>58</i>
4.6.4	<i>The hierarchy of Romanian towns and cities</i>	<i>58</i>
4.7	Conclusion	59
5	Chapter IV. Before, during and after Yugoslavia: Demographic, urban and transport infrastructure indicators from Yugoslavia and its successor states.....	61

5.1	Introduction	61
5.2	Territorial changes and Data collection.....	63
5.3	Railway construction in the territories of former Yugoslavia 1840-2000.....	71
5.4	Density rates	76
5.4.1	<i>Serbia</i>	<i>78</i>
5.4.2	<i>Croatia</i>	<i>80</i>

5.4.3	<i>Macedonia, Bosnia and Herzegovina, Slovenia and Montenegro</i>	82
5.5	The rise of urbanization levels	86
5.5.1	<i>Serbia and Montenegro</i>	89
5.5.2	<i>Croatia</i>	91
5.5.3	<i>Macedonia</i>	92
5.5.4	<i>Bosnia and Herzegovina</i>	93
5.5.5	<i>Slovenia</i>	94
5.6	Cities: Evolution, Primacy and Hierarchy	95
5.6.1	<i>Serbia</i>	98
5.6.2	<i>Croatia</i>	100
5.6.3	<i>Macedonia</i>	102
5.6.4	<i>Bosnia and Herzegovina</i>	103
5.6.5	<i>Montenegro</i>	103
5.6.6	<i>Slovenia</i>	103
5.7	Conclusion	105

6 Chapter V. Railways, regions and the urban network in the Balkans during a century of political transformations 1900-2000107

6.1	Territorial extent, data collection and methodology	108
6.2	Railways and uneven urban growth	110
6.3	Population increase	115
6.4	Urbanization rates	121
6.4.1	<i>The beginning of the century</i>	122
6.4.2	<i>The interwar period</i>	124
6.4.3	<i>Decades of transformation: 1945-1989</i>	125
6.4.4	<i>Years of transition: 1989-2002</i>	127
6.5	The urban network of the Balkans during the 20th century	127
6.5.1	<i>Factors behind the uneven growth of the cities</i>	128

6.5.2	<i>The largest cities in the Balkans and modification in their hierarchy.....</i>	130
6.5.3	<i>The evolution of urban disparities</i>	133
6.5.4	<i>The experience of the Balkans compared.....</i>	134
6.6	Conclusion	135

7 Chapter VI. Structural Change and Economic Growth in Southeast Europe: Bulgaria, 1888–2001..... 137

7.1	Introduction.....	137
7.2	Economic Growth and Structural Change	139
7.2.1	<i>Census Data Reliability.....</i>	140
7.2.2	<i>GDP Growth and Structural Change</i>	141
7.2.3	<i>Southeast Europe</i>	143
7.3	Growth Pattern of Bulgarian Economy.....	144
7.3.1	<i>Population, Labour Force and Activity Rate</i>	144
7.3.2	<i>Work Intensity.....</i>	147
7.3.3	<i>Gender Variations</i>	149
7.3.4	<i>Sectoral Shifts.....</i>	152
7.4	Regional Disparities.....	153
7.5	Conclusion	157

8 Conclusion..... 159

9 Sources and Bibliography171

9.1	Sources.....	171
9.1.1	<i>Bulgaria.....</i>	171
9.1.2	<i>Greece</i>	174

9.1.3	<i>Romania</i>	175
9.1.4	<i>Yugoslav states</i>	175
9.2	Bibliography	178

10 Annex.....191

10.1	Railways	194
10.2	Density rates	197
10.3	Urbanization	199

List of figures

Figure 1. The Balkan Peninsula	7
Figure 2 The States included in the study	8
Figure 3 Census Year and Number of Regions Covered by the Publication	18
Figure 4 Evolution of Population Density and Urbanization Rates in Bulgaria, 1888-2002.....	21
Figure 5 Population Densities in Regions of Bulgaria Compared to the National Average	22
Figure 6 Urbanization Rates in Bulgaria, 1888-2002.....	24
Figure 7 Population of the Largest Cities in Bulgaria, 1881-2001.....	25
Figure 8 Largest Bulgarian Settlements in 1880 and 2002*	26
Figure 9 Evolution of the Railway Network in Bulgaria, 1880-2000.....	28
Figure 10 the Percentage of the National Population in Varna and Ruse, 1881-2001	34
Figure 11 Territorial enlargement of Romania after WW-I	38
<i>Figure 12 Census year and number of regions covered by the publication</i>	<i>40</i>
Figure 13 Romania's regions: 2002	42
Figure 14 Levels of urbanization and population densities in Romania: 1859-2002	44
Figure 15 Romania: population growth at regional level 1859-2001.....	47
Figure 16 Romania: urbanization levels increase at regional level 1859-2001.....	48
Figure 17 the Romanian railway network in the context of the Balkans: 1880-1910	51
Figure 18 Romania's railway network: 1950-2000	53
Figure 19 Evolution of the primacy of the capital Bucharest within Romania.....	55
Figure 20. Yugoslavian successor states in 2011	62
Figure 21. Census publications used in the study	63
Figure 22. The states in the Western Balkans in 1910 and 1930.....	64
Figure 23. Differences in the territory of Modern Serbia and the kingdom of Serbia in 1911..	65
Figure 24. Territorial differences between interwar and socialist Yugoslavia	66
Figure 25. Modern Serbian regions.....	67
Figure 26. Croatian zupanja (regions)	68
Figure 27 Railways in Yugoslavia in 1920.....	71
Figure 28. Railroads in the region before the creation of Yugoslavia	72
Figure 29. Yugoslavia railway between the World Wars	74
Figure 30. Evolution of the railroad network in Yugoslavia after WW-II.....	75

Figure 31 Regional density rates in Yugoslavia 1921-2001.....	77
Figure 32 Density rates of the Yugoslavian republics.....	78
Figure 33. Density rates in Serbia and Montenegro 1890-2002.....	79
Figure 34 Population growth between censuses in Croatia	81
Figure 35. Evolution of the regional population density in Croatia 1857-2001.....	82
Figure 36. Urbanization levels and density rates of Macedonia 1900-2001.....	83
Figure 37. Regional density rates of Macedonia	83
Figure 38. Density evolution in Bosnia and Herzegovina	84
Figure 39 Regional population density of Slovenia in 2001	85
Figure 40. Population and urbanization data from Montenegro	85
Figure 41. Evolution of the Urbanization levels in the Yugoslav states (1890-2005)	87
Figure 42 Urbanization levels Yugoslavia 1948-2001	88
Figure 43. Regional urbanization rates in Post WW-II Serbia and Montenegro.....	90
Figure 44. Regional urbanization rates in Croatia 1857-2001.....	92
Figure 45. Macedonia: Regional urbanization levels 2001	93
Figure 46 Urbanization levels in Slovenia.....	94
Figure 47. Largest cities in the territories of Yugoslavia in 1910 and 1920	95
Figure 48. Historical growth of the largest cities of Yugoslavia	97
Figure 49. Primacy levels Serbia (Belgrade/top 5-30).....	99
Figure 50 Primacy of Zagreb in Croatia. The population of Zagreb compared historically to the population of the next five cities, total urban population, and total population of Croatia from 1857 to 2001	101
Figure 51. The evolution of the primacy of Skopje: The population of Skopje compared with the population of the next five largest cities combined	102
Figure 52 the states included in the study	109
Figure 53 Expansion of the railway network in the Balkans (1870-2000).....	112
Figure 54 the cities with at least 100,000 inhabitants in 2000 and the railway network in 1910	115
Figure 55 Evolution of the national density rates in the Balkan states 1880-2000.....	116
Figure 56 Evolution of the population density in the Balkans at regional level 1900-2000	120
Figure 57 Evolution of the urbanization levels of the Balkan states: 1900-2000.....	123
Figure 58 Regional urbanization levels in the Balkans.....	126

Figure 59 Evolution of the urban network in the Balkans. The growth of the cities: 1910-2000	129
Figure 60 the evolution of the combined population of the largest cities in the Balkans (1900-2000)	130
Figure 61. The growth of the combined population of the ten largest cities compared with the combined population of the next 90 cities	131
Figure 62 Evolution of the population disparities between the largest cities of the Balkans (coefficient of variation)	134
Figure 63. Bulgarian Real GDP and GDP Per Capita, 1870–2001 in 1990 international dollars	141
Figure 64. GDP Growth and Structural Change	143
Figure 65. Total and Active Population of Bulgaria	146
Figure 66. Age Structure of Labour Force, 1900–2000	147
Figure 67. Female Component of Total and Active Population	151
Figure 68. Share of Active Population per Sector, (in percent)	153
Figure 69 Sectors of Occupations at regional level (1934-1992)	155
Figure 70 The decrease of the primary sector at regional level (1934-1992)	156
Figure 71 Main Balkan cities	191
Figure 72 The Balkan states during 20th century	192
Figure 73. The Names of Bulgarian regions	193
Figure 74 Evolution of the railway network of the Balkans	194
Figure 75 Regional density rates Bulgaria 1881- 2001	197
Figure 76 Greece: Regional density rates	198
Figure 77 Regional urbanization levels Bulgaria 1881- 2001	199
Figure 78 International comparison of the Urbanization rates 800-1800	200
Figure 79 Bulgaria CV-20 largest cities 1881-2001	201
Figure 80 CV-40 largest cities on the territory of Former Yugoslavia 1910-2001	201
Figure 81 CV-30 largest cities of Romania 1900-2001	201

Abstracts

This thesis explores the uneven regional growth, the development of the urban network and the evolution of the railroads in the Balkans- one of the most diverse and turbulent regions of Europe. The states included in the study are Albania, Bosnia and Herzegovina, Bulgaria, Croatia, Greece, Macedonia, Montenegro, Romania, Serbia, Slovenia and Kosovo. During the 19th and 20th centuries, these states underwent several radical political transformations that altered profoundly their socioeconomic development. The hypothesis of the current study is that these changes also affected the economic geography and the spatial distribution of the population in the region, and therefore the modern history of the Balkans provides a valuable opportunity to study the main determinants for the uneven regional growth. The correlations between political events and spatial development are illustrated and analyzed with the use of the created for the purposes of the study database. It includes historical geographical and transport information: like the changes to the national and regional borders, and the development of the railway network, and socioeconomic data: such as the evolution of urbanization and density rates at regional level, and the growth of the cities. The final result is a database with internationally comparable historical and geographical information covering the entire Balkan Peninsula, which therefore permits, for the first time, the establishment of an integrated, long run vision over the spatial development of the states in the peninsula.

The thesis is organized into five chapters written in the form of articles. The first three chapters present national studies of the regional and urban development of Bulgaria, Romania and former Yugoslavia during the last 100-130 years. The results revealed remarkable similarities in the spatial formation of the new national economies after the dissolutions of Austro-Hungary and the Ottoman Empire. The fourth chapter explores the spatial trends of the entire peninsula during the 20th century. The last chapter focuses on the structural transformation of the Bulgarian economy.

Overall, the experience of the Balkans illustrates how, in newly established pre-industrial states or in those in the process of formation, political institutions can play a major role in determining the trends of the spatial inequality. By and large, in the underdeveloped and predominantly centralized Balkans, private initiative has played lesser role and political borders and the institutional framework have been the main determinants for the uneven regional growth. The governments were able to influence significantly the regional development; by making relatively small investments in transport infrastructure which had significant effects in long run due to the self-enforcing nature of increasing returns. The small initial advantages during the preindustrial period, in the form of political and administrative importance or railway access, had a lasting effect over the economic geography. Later economic and political transformations were followed by a visible increase of the regional and spatial disparities; however they had lesser effect on the economic geography of the Balkan nations, as the principal beneficiaries of the economic growth were the already developed cities and regions.

Esta tesis explora el crecimiento desigual regional, el desarrollo de la red urbana y la evolución de los ferrocarriles en los Balcanes, una de las regiones más diversas y turbulentas de Europa. Los países incluidos en el estudio son Albania, Bosnia y Herzegovina, Bulgaria, Croacia, Grecia, Macedonia, Montenegro, Rumania, Serbia, Eslovenia y Kosovo. Durante los siglos XIX y XX, estos estados se sometieron a varias transformaciones políticas radicales que alteraron profundamente su desarrollo socioeconómico. La hipótesis del estudio es que estos cambios también afectaron a la geografía económica y la distribución espacial de la población en la región. Por ello, historia moderna de los Estados de los Balcanes es una oportunidad valiosa para estudiar los principales determinantes de los desequilibrios en el crecimiento regional. Las correlaciones entre los acontecimientos políticos y de desarrollo territorial se ilustran y analizan a través de lo creado especialmente para este estudio base de datos. La base incluye información histórica y geográfica de transporte: como la modificación de las fronteras nacionales y regionales, y el desarrollo de la red ferroviaria, y datos socio-económicos tales como: la evolución de las tasas de urbanización y la densidad a nivel regional y el crecimiento de las ciudades. La creación de la base de datos permite el establecimiento de una visión integrada, a largo plazo sobre el desarrollo espacial de la región y facilita el análisis de los cambios regionales y ajustes espaciales a finales del siglo XIX y XX. El análisis ofrece observaciones importantes sobre el mecanismo de formación de la geografía económica de los estados en construcción o en transición.

La tesis se estructura en cinco capítulos escritos en forma de artículos. Los tres primeros capítulos ofrecen estudios nacionales sobre el desarrollo regional y urbano de Bulgaria, Rumania y la ex Yugoslavia. Se puso de manifiesto las notables similitudes en la formación espacial de las nuevas economías nacionales después de la disolución del Imperio Austro-Hungría y el Imperio Otomano. El cuarto capítulo analiza la evolución espacial de toda la península durante el siglo XX. Y el último capítulo se centra en la transformación estructural de la economía de Bulgaria.

La experiencia de los Balcanes ilustra cómo, en los estados de reciente creación o en proceso de formación con una economía preindustrial, las instituciones políticas juegan un papel importante en la determinación del desarrollo y las tendencias de la desigualdad regional. En general, en los estados balcánicos subdesarrollados y mayoritariamente centralizados, la iniciativa privada ha jugado un papel secundario. Las fronteras políticas y el marco institucional han sido los principales determinantes sobre las desigualdades en el crecimiento regional. Esta conclusión se ve confirmada por los datos sobre los sectores de ocupación de Bulgaria. Los gobiernos fueron capaces de influir de manera significativa en el desarrollo regional, mediante inversiones relativamente pequeñas en la infraestructura del transporte que tuvieron importantes efectos a largo plazo debido al efecto de los rendimientos crecientes. Las pequeñas ventajas iniciales durante el período pre-industrial, en la forma de importancia política y administrativa o acceso ferroviario, tuvieron efectos duraderos sobre la geografía económica. Más tarde, las transformaciones económicas y políticas tuvieron menor efecto sobre la geografía económica de las naciones balcánicas porque los beneficiarios del crecimiento económico fueron principalmente las ciudades y las regiones ya desarrolladas.

Aquesta tesi explora el creixement regional desigual, el desenvolupament de la xarxa urbana i l'evolució dels ferrocarrils Als Balcans, una de les regions més diverses i turbulentes d'Europa. Els Estats inclosos en l'estudi són Albània, Bòsnia i Hercegovina, Bulgària, Croàcia, Grècia, Macedònia, Montenegro, Romania, Sèrbia, Eslovènia i Kosovo. Durant els segles XIX i XX, els Estats dels Balcans es van sotmetre a diverses transformacions polítiques radicals que van alterar profundament el seu desenvolupament socioeconòmic. La hipòtesi de l'estudi és que aquests canvis també van afectar a la geografia econòmica i la distribució espacial de la població a la regió. Per això, endinsar-se en la història moderna dels Estats dels Balcans és una oportunitat valuosa per estudiar els principals determinants dels desequilibris en el creixement regional.

Les correlacions entre els esdeveniments polítics i el desenvolupament territorial il·lustren i s'analitzen a través de la base de dades especialment creada per a aquest estudi. La base inclou informació històrica i geogràfica de transport: com la modificació de les fronteres nacionals i regionals, i el desenvolupament de la xarxa ferroviària, i dades socioeconòmiques com ara: l'evolució de les taxes d'urbanització i la densitat a nivell regional i el creixement de les ciutats. La creació de la base de dades permet l'establiment d'una visió integrada, a llarg termini sobre el desenvolupament espacial de la regió i facilita l'anàlisi dels canvis regionals i ajustaments espacials a finals del segle XIX i XX. L'anàlisi ofereix observacions importants sobre el mecanisme de formació de la geografia econòmica dels estats en construcció o en transició.

La tesi s'estructura en cinc capítols escrits en forma d'articles. Els tres primers capítols ofereixen estudis nacionals sobre el desenvolupament regional i urbà de Bulgària, Romania i l'ex-Iugoslàvia i els seus estats successors en els últims 100-130 anys. Es van posar de manifest les notables similituds en la formació espacial de les noves economies nacionals després de la dissolució de l'Imperi Austro-hongarès i l'Imperi Otomà. El quart capítol analitza l'evolució espacial de tota la península durant el segle XX. I l'últim capítol es centra en la transformació estructural de l'economia de Bulgària.

En general, l'experiència dels Balcans il·lustra com, en els Estats de recent creació o en procés de formació amb una economia preindustrial, les institucions polítiques juguen un paper important en la determinació del desenvolupament i les tendències de la desigualtat regional. En general, en els estats balcànics subdesenvolupats i majoritàriament centralitzats, la iniciativa privada ha jugat un paper secundari. Les fronteres polítiques i el marc institucional han estat els principals determinants sobre les desigualtats en el creixement regional. Aquesta conclusió es veu confirmada per les dades sobre els sectors d'ocupació de Bulgària. Els governs van ser capaços d'influir de manera significativa en el desenvolupament regional, mitjançant inversions relativament petites en la infraestructura del transport que van tenir importants efectes a llarg termini a causa de l'efecte dels rendiments creixents. Els petits avantatges durant el període pre-industrial, en forma d'importància política i administrativa o accés ferroviari, van tenir efectes duradors sobre la geografia econòmica. Més tard, les transformacions econòmiques i polítiques van tenir menor efecte sobre la geografia econòmica de les nacions balcàniques perquè els beneficiaris del creixement econòmic van ser principalment les ciutats i les regions ja desenvolupades.

Introduction

The uneven spatial distribution of population and economic activities are among the basic characteristics of modern states. Spatial disparities are usually attributed to the differences in location, endowments, institutions, technology or policy. However, in spite of numerous studies and discussions, there is no clear consensus as to which is the leading factor determining regional and spatial development. In this debate, the modern history of the southeastern part of Europe, commonly known as the Balkans, can offer a valuable perspective.

During the 19th and 20th centuries the Balkans underwent through several political and socioeconomic transformations that had a substantial impact on its economic geography. These included: a gradual political fragmentation, a number of wars, economic experiments, the construction of a modern infrastructure, demographic transition, a considerable increase in its population, rapid industrialization and urbanization. During the same period, the states of the peninsula underwent through similar phases of political and economic development - each apparently triggered by a significant geopolitical change.

The first of such changes was the disintegration of the multiethnic Austro-Hungarian and Ottoman Empires and the emergence of numerous independent nation states towards the end of the 19th and the beginning of the 20th centuries. Political fragmentation caused considerable adjustments in the regional structure of the new economies, as they had to adapt to new territorial and political realities. The second geopolitical, pattern breaking event was the Cold War and the implementation of the Soviet economic and political model throughout the Balkans after WW-II.¹ The consequence was a total reorganization of the social, economic and political structure of the Balkan states, rapid urbanization, industrialization and reorientation of political and economic relations. Nevertheless, this economic and political model lasted less than five decades and the end of the Cold War and the transition from a centrally planned to a market oriented economy, prompted yet another profound structural transformation in the Balkans.

The central hypothesis of the current work is that these political and territorial changes, along with the development of the railway network, influenced the economic geography, led to several important shifts in the regional distribution of the population and affected the urban network of the

¹ After a devastating civil war Greece remained on the “capitalist” side of the Iron Curtain.

Balkans. The objective is to trace, illustrate and analyze these shifts at regional level through several basic socioeconomic indicators such as population density, urbanization and occupations of the active population. The analysis of the particular experience of the Balkan states could contribute to the evaluation of the factors determining the spatial distribution of the population and economic activities.

The lack of homogenous data and the volatility of the national and administrative borders constrain the studies about the Balkans at regional level and impede adequate historical comparisons with the rest of Europe. Hence, the historical regional studies of Europe usually exclude the peninsula. There is a genuine need for a standardized homogeneous data base that could include the indicators that are available at regional level. The current work is an effort in that direction. The main tool of the study is a database created by the author that consists of internationally comparable historical, geographic and transport related information at national, regional and urban (town) level going back to the mid 19th century. Its creation facilitates historical analysis and permits comparisons between Balkan states. Moreover, the information will be added to similar existing historical databases for the rest of the continent, which will allow future comparative studies on the geo-historical development of the Balkans and Europe. The Historical geographical information system (HGIS) database could also be used by other researchers interested in the subject or the territory. The empiric data and the maps will be available online at www.europa.udl.cat and will be shared with academics who express interest.

2.1 Territorial extent of the research

The focus of the study is the Balkans or South Eastern Europe.² The mountainous landscape of the region permitted the survival of various diverse ethnicities and facilitated the establishment of numerous states. However, the definition of exactly which states belong to the Balkans depends on the criteria that are applied. In spite of the common perception, the broadly used term “The Balkans” and the Balkan Peninsula are not coterminous. The Balkan Peninsula is the geographic region defined by the Adriatic Sea on the west, the Mediterranean Sea to the south, the Black Sea to the east and the Danube, Sava and Kupa Rivers to the North (see Figure 1).³ Geographically, it

² Because of the somewhat negative connotations of the term “The Balkans”, often scholars or politicians from the region prefer the use the more neutral term Southeastern Europe

³ Jelavich, Barbara (1983). *History of the Balkans: Eighteenth and nineteenth centuries*. Cambridge University Press. p. 1.

fully includes Albania, Bulgaria, Greece, Kosovo, Macedonia and Montenegro, significant parts of Serbia and Croatia and only small parts of Romania, Turkey, Italy and Slovenia.

Whereas, the term "The Balkans" or Southeastern Europe, stands for a geopolitical and cultural region of Europe that refers not only to those countries that are located within the geographical boundaries of the "Balkan Peninsula", it may also include states that are historically and culturally related to the peninsula like Slovenia or Romania. The objectives of the current study require the use of the broader, geopolitical meaning. Therefore, it includes data from 11 states from an area of more than 750,000 sq. km. These states include Albania, Bosnia and Herzegovina, Bulgaria, Croatia, Greece, Macedonia, Montenegro, Romania, Serbia, Slovenia and Kosovo.

Figure 1. The Balkan Peninsula⁴



⁴ Source: http://en.wikipedia.org/wiki/File:Balkan_topo_en.jpg, retrieved 25/01/2011

Figure 2 The States included in the study



Source: own elaboration

2.2 Data collection and methodology

The construction of a homogenous database over an area with such a heterogeneous political history is a challenging task. The objectives of the current study required the use of documents and publications from 12 different states, published over a span of 170 years in the context of frequently changing national and regional borders. The basic sources are the official census publications of Bulgaria, Romania, Austro-Hungary, Greece, Albania, Yugoslavia and its successors. The first were found in the Bulgarian National library in Sofia, while the rest were taken from the library of MZES (Mannheim Centre for European Social Research) – in the University of Mannheim, Germany.⁵ The data from more than 60 national enumerations and statistical publications had to be collected, selected, digitized, organized and incorporated in the HGIS by the author. This includes information from Greece, Slovenia, Romania, Croatia and Serbia since the 1850s, Bulgaria and Bosnia and Herzegovina since the 1880s and Albania,

⁵ Often census data from the 2000's, and occasionally from the 1990's, is available online on the webpage of the national statistics institute of each respective state.

Montenegro, Macedonia and Kosovo from the beginning of the 20th century. Nevertheless, even when data is available it is difficult to evaluate the accuracy of the figures produced in the 19th century. There are serious reasons to doubt the statistical capacity of the agencies that were responsible for the process of data-collection. This problem could be expected to decrease with time and the reliability of the data to improve. In reality, however, the situation actually deteriorated in the post-WW-II period. In the communist regimes, the insufficient statistical capacity was replaced by an ideologically motivated incentive for misreporting. Within the context of the Cold War, statistical data became a politically sensitive commodity that was often “corrected” before publishing. Even so, the actual obstacles in the current study are not related to the availability or reliability of data, but mainly to its comparability. Each state uses its own and often diverse classifications for most of the indicators presented in the censuses – cities, literacy, occupational statistics, fertility rates, etc., and the classifications often differ within censuses from the same state. Hence, the challenge was to create an internationally comparable data series derived from censuses with varying quality, conducted by diverse methodologies within a frequently changing administrative structure. To avoid the various approximations and adjustments that could considerably distort the original data, the statistical indicators had to be as simple as possible. Hence, the first variable used in the study is the population density at national and regional level. It is calculated from the *de facto* population and the area of the respective region. Population data is extracted from the census publications, while the data regarding the borders and the area of the regions occasionally required the use of additional sources.

Another important indicator employed in the current study and representing the consequences of modernization are urbanization levels. However, again the definition of “urban” may vary considerably between countries. In some states, towns must meet certain minimum population requirements, while in others they have to comply with certain socioeconomic or cultural conditions (relating to the infrastructure, specific buildings and institutions that they house). Therefore, a flexible methodology had to be applied when working with urbanization statistics at international level. The urbanization rates in the current study represent the share of the population living in towns with at least 10,000 inhabitants -a methodology applied by De Vries (1984) and

Maarten Bosker, Eltjo Buringh and Jan Luiten van Zanden (2008) in their works.⁶ Although the chosen classification is just one of several that are possible, it is useful for the objectives of the study as it permits feasible international and historical comparisons.

So far, in the situation of frequent border and administrative changes, the cities stand as a stable entity. Therefore, the analysis of the development of the urban network offers an additional perspective on the historical trends in the spatial growth. The growth of cities, movements in the urban hierarchy and fluctuations in the level of urban disparities all reveal spatial trends in the economic development.

The fourth variable included in the database is the occupation of the active population. The data was organized according to the PST (primary, secondary, tertiary) system of classifying occupations developed by Tony Wrigley, where the numerous professions are organized into a three clearly defined groups.⁷ The system permits international comparisons of the structural shifts of the economy. The basic assumption is that the increase in employment in the secondary and tertiary sectors effectively represents economic growth and modernization. However, the collection and classification of data is an extremely laborious procedure. Even the earliest censuses provide information about hundreds of classes, groups and subgroups of professions. Moreover, not all Balkan states enjoy adequate historical occupational statistics at regional level. Hence, the current research analyses only include data from Bulgaria. This data was extracted from 11 enumerations (1888-2001) at national level and three (1934, 1965, 1992) at regional level. Notably, the results reveal that, in Bulgaria, the increase in urbanization and the decrease in the population employed in the primary sector followed analogous paths, both at national and regional level. This strengthens the credibility of the assumption that the levels of urbanization could represent economic modernization and development.

The information produced on the occupation of the active occupation, density rates, urbanization levels, transport infrastructure and the population of cities is presented mostly in the form of maps. All maps are created by the author, unless otherwise noted. The empirical data represented on the maps is extracted and organized by the author from the collected original census publications. The information concerning the historical regional and national boundaries

⁶ De Vries, J., *European Urbanization, 1500-1800*, 79; Bosker, Maarten and Jan Luiten van Zanden, "From Baghdad to London: The Dynamics of Urban Growth in Europe and the Arab World, 800–1800," CEPR Discussion Paper, 2008, 6833.

⁷ <http://www.geog.cam.ac.uk/research/projects/occupations/britain19c/papers/paper1.pdf> retrieved 16/01/2011

is taken from the forthcoming book edited by Peter Flora (2012).⁸ The data for the railways is extracted from various sources that include documents from the national railway companies, numerous editions of the Thomas Cook rail map of Europe, maps published by “Bartholomew and son”, Jane’s World railways publications, and single maps found in libraries. And finally the data concerning the geographical position of the settlements is collected and organized by the author of the thesis.

As a result, the thesis presents an integrated vision over the development of the Balkan states by the means of historical geography. The maps permit us to identify the trends and to distinguish any pattern breaking effects related to political and economic transformations.

2.3 Literature

The history of the Balkans has been the subject of numerous works; among them the classic piece of work by Barbara Jelavich, “History of the Balkans” (1983) or the more recent “The Balkans: Nationalism, War and the Great Powers, 1804-1999” (1999) by Misha Gleny. Well known studies on the economic development of the region include works by Lampe and Jackson (1982), Turnock (1988) and Palairret (1997). There are also national studies by Lampe (1986) and Crampton (1997) on Bulgaria, Turnock’s studies on Romania and numerous studies on Yugoslavia and Greece. However, as previously noted, the lack of territorial stability and the shortage of reliable information at the provincial level often limit the possibility for historical regional studies. Thus, international projects aiming to produce historical GDP data at regional level for the entire European continent exclude the Balkans due to the lack of solid empirical data. The majority of studies on regional development focus on the period after WW-II, or use approximation models for the earlier periods (N, Wolf, David F. Good, and M. Pammer). Moreover, the second group of studies often officially aim to examine regional development in Eastern Europe (Good, Good and Ma, Pammer), while actually focusing on data mainly relating to Germany and Austro-Hungary. The aim of the current thesis is to explore the regional development of the Balkans with original census data from the Balkans - although it may not be as detailed as one would like.

⁸ Peter Flora et al. (eds.), *European Regions: The Territorial Structure of Europe, 1870-2000* (New York, 2012).

The expansion of the railways in the Balkans is documented in every book dedicated to the economic history of the Balkans and has also been the subject of various specialized studies such as those by Nikova (2007) or Hertner (2006). National studies on railway development include Turnock (2001) on Romania, Stanishev (1948) for Bulgaria, Samardzic Momir (forthcoming) for Serbia, Papayiannakis (1982), Paravantis and Panos (2001) on Greece. The majority of these works usually focus on the chronology of the railway constructions and their political and financial issues. Few attempt to analyze the effects of the railways on regional or urban development, as the data is usually unavailable.

The results reveal that the most important spatial modifications in the region occurred before WW-II; therefore we assume that the railways, together with territorial changes, stand as the principal factor behind the current spatial composition of the region. This is in line with the so called “new economic geography” models (Krugman (1991) Krugman and Venables (1995), Venables (1996), Puga (1999), which were based on imperfect competition and increasing returns. The governments were able to contribute significantly to regional development; by making relatively small investments in transport infrastructure and communications, which may have significant effects in long run due to the self-enforcing nature of increasing returns. The development of the Balkans seems to confirm this model.

2.4 Structure of the thesis

The thesis consists of five chapters written in the form of articles. They stand as independent texts, which explain the occasional similarities or repetition of topics concerning the hypothesis, the methodology or the history of the region, found usually in the introduction of the chapters. Two of the articles have already been accepted for publication, while a third has been submitted.

The first chapters offer three national case studies on the regional and urban development of Eastern Europe and the Balkans during the last 100-130 years, which, as previously noted, went through similar stages of economic and political development. The first one is called “**Regional Transformations of a State under Construction: Bulgaria, 1878-2002**”. It has been accepted for publication by the *Journal of Interdisciplinary History*.⁹ The focus is on the socioeconomic and spatial transformations of Bulgaria triggered by the series of geopolitical changes. The text

⁹ Stanev, K., J. Marti and Martin Ivanov (2011), *Regional Transformations of a State under Construction: Bulgaria, 1878–2002*, *Journal of Interdisciplinary History*, XLII:1 (Summer, 2011), 111–134.

consists of a section dedicated to data collection and methodology, followed by a section with results regarding the growth of the population and the increase in urbanization rates, there is a section dedicated to the development of the railways and concludes with analyses of regional modifications in the economy. The article was written in collaboration with Jordi Marti and Martin Ivanov. While the first author of the paper Kaloyan Stanev led the research, the co-authors: influenced the concept of the study, supervised the analysis and provided critical revision of the article

The next chapter is dedicated to Romania. It is called “**Regional changes and political discontinuities in Romania: 1859–2002. Demographic, urban and transport infrastructure indicators**” and explores the same problems as chapter I and has by and large similar structure. The third chapter is called “**Before, during and after Yugoslavia: Demographic, urban and transport infrastructure indicators from the Yugoslavia and its successor states**”. The text analyzes the complex regional development of the states that formed Yugoslavia between 1918 and 1991. Along with the problems presented in chapters I and II, chapter III embarks with more detail on the issues of political and economic integration and disintegration. The complicated political and territorial history of the region also required a more complex structure and as a result each section of the chapters begins with the experience of Yugoslavia as a whole and continues with the specific case of each of the successor states. It might be also appropriate to study the other large Balkan state Greece. However Greece did not experience the same radical political and economic transformations. Although the development of Greece before WW-II shared similarities with Serbia, Bulgaria or Romania, the Hellenic state was not subjected, like the others, to the totalitarian reorganization of society, communist rule, and the transition to a market oriented economy, as it is the only state included in the study that was not part of the Soviet sphere of influence. Even so, the data from Greece is included in the next chapter which explores the spatial transformations of the entire Balkan Peninsula. It is called “**Railways, regions and the urban network in the Balkans during a century of political transformations 1900-2000**”. The analysis extends spatially to include all Balkan states and focuses on the 20th century. The chapter offers a broader international perspective on the problems presented in the first three chapters; the relations between transport development, institutional changes and regional and urban growth and disparities. The inclusion of all Balkan states permits us to trace and evaluate the differences in the development of the territories that belonged to the Austro-Hungary and the Ottoman Empire. At

the same time, the addition of data on Greece allows us to compare the development of states that stood on the opposite sides of the Iron Curtain. The chapter has been accepted for publication by the periodical journal of the Bulgarian Academy of Sciences- *Etudes balkaniques*.¹⁰

The last chapter of the thesis is called “**Structural Change and Economic Growth in Southeast Europe: Bulgaria, 1888–2001**”. This focuses on the structural transformation of the Bulgarian economy after the state was established in 1878. It has been written in cooperation with Martin Ivanov from the Bulgarian Academy of Sciences. The chapter will be part of a special publication on occupational transition published by Cambridge university press and edited by Leigh Shaw Taylor and Osamu Saito. This study builds on the results of the previous articles and adds a new perspective on the regional studies of the Balkans. It offers an analysis of the shifts in the national occupational structure of Bulgaria from 1888 until 2002 and changes at the regional level for the years 1934, 1965 and 1992. The information has been incorporated into the HGIS database and used to analyze the modernization of Bulgaria at national and regional level. It presents the opportunity for future studies on regional GDP. While, Martin Ivanov led the research, my contribution consisted of organizing the data and producing the maps used in the study. I was also responsible for the analysis of the regional shifts in the occupational structure.

The final part of the thesis is the appendix with maps and graphics illustrating different aspects of the socioeconomic development of the Balkans during the 19th and 20th centuries.

¹⁰ Stanev K., (2011) Railways, regions and the urban network in the Balkans during a century of political transformations 1900-2000, *Etudes balkaniques* 2011, III(forthcoming)

Kaloyan Stanev, Jordi Martí-Henneberg, and Martin Ivanov

Chapter II. Regional Transformations of a State under Construction: Bulgaria, 1878-2002

Forthcoming in *Journal of Interdisciplinary History* 42:1, Summer 2011

This article explores the extent to which frequent political transformations and the development infrastructure have influenced the economic geography and socioeconomic development of Bulgaria during a 125 year period (1878 to 2002). The modern history of this Southern European state is comparable to that of other Eastern European countries that have undergone analogous radical modifications of a political and economic nature throughout the same period- foundation of the state, war, totalitarian communist rule, forced industrialization, and transition from a centrally planned to a market-oriented economy. From these perspectives, an analysis of the Bulgarian experience could serve as a reference point for understanding the development of other Eastern European states.¹¹

This study is the first stage of a project exploring patterns of regional development in Eastern Europe, and particularly the Balkans, by collecting and processing new socioeconomic and transport data at the regional level. The choice of Bulgaria was justified by the reliability and accessibility of the data and the relatively early creation of the Bulgarian state in 1878.

In Eastern Europe and the Balkans, researchers often confront obstacles that are not found in Western and Central Europe. The lack of territorial stability and the shortage of reliable information at the regional level tend to discourage and restrict regional studies. Wolf, Good, and Pammer used approximation models to study regional development in this part of the continent. Yet, even though several such works officially sought to examine regional development in Eastern Europe, they tended to use only data from Germany and Austro-Hungary. Though the two Central

¹¹ Several states have undergone through stages of development similar to Bulgaria's—the states of former Yugoslavia Serbia, Croatia, Macedonia, Montenegro, Slovenia, Bosnia and Herzegovina,, Romania, Poland Albania,Hungary, the Czech Republic, and Slovakia.

European empires constituted the most highly developed part of the region, their cases, interesting as they are, are not representative.¹²

The best-known studies of economic development in the Balkans present broad and profound analyses with a considerable amount of socioeconomic data, but they do not always focus on regional development. Furthermore, studies of Eastern European economies usually explore structural changes rather than spatial ones, focusing on either the period after World War II, when the Soviet system had been incorporated, or the transition to a market-oriented economy, after the fall of the Berlin Wall. Nonetheless, there is a strong relationship between structural and spatial transformations, the most obvious being that industrialization and the development of infrastructure lead to urbanization, population concentration, and regional inequality. Since political changes lead to economic transformations, it is reasonable to expect that they also have spatial repercussions.¹³

¹² Other states--such as Rumania, Greece, and Serbia--were created earlier than Bulgaria, though they had boundaries that were much different from those of today. Bulgaria's present boundaries are similar to those of 1885. For approximation models, see Nikolaus Wolf, "Path Dependent Border Effects: The Case of Poland's Reunification (1918-1939)," *Explorations in Economic History*, XLII (2005), 414-438; David Good, "The Economic Lag of Central and Eastern Europe: Income Estimates for the Habsburg Successor States," *Journal of Economic History*, LIV (1994), 869-891; Michael Pammer, "Proxy Data and Income Estimates: The Economic Lag of Central and Eastern Europe," *ibid.*, LVI, (1997), 448-455. Good, "Economic Lag," Pammer, "Proxy Data," and Good and Tongushu Ma, "The Economic Growth of Central and Eastern Europe, 1870-1989," *European Review of Economic History*, III (1999), 103-138, restricted their studies to Germany and Austro-Hungary.

¹³ The best-known studies of economic development in the Balkans are Michael Palairot, *The Balkan Economies c. 1800-1914: Evolution without Development* (New York, 1997); John R. Lampe and Marvin Jackson, *Balkan Economic History, 1550-1950: From Imperial Borderlands to Developing Nations* (Bloomington, 1982). Structural studies of Eastern European economies include David Turnock, *The East European Economy in Context, Communism and Transition* (New York, 1997); Jon Elster, Claus Offe, and Ulrich Klaus Preuss, *Institutional Design in Post-Communist Societies: Rebuilding the Ship at Sea* (New York, 1998). For the strong relationship between structural and spatial transformations, see Sukkoo Kim, "Spatial Inequality and Economic Development: Theories, Facts, and Policies" (2008), at <http://www.growthcommission.org/storage/cgdev/documents/gcwp016web.pdf>; Kim and Robert A. Margo, "Historical Perspectives on U.S. Economic Geography, NBER Working Paper No. W9594 (March 2003).

This article explores the complex correlation between three distinct, yet highly related, processes--political (institutional) changes, socioeconomic developments such as urbanization and industrialization, and spatial adjustments within the national economy. The leading question concerns the effect that political considerations exerted on Bulgaria's regional economic composition. Another aim of this article is to assess the extent to which constant political changes and the development of infrastructure led to transformations in the regional hierarchy of the country.

Three important and radical political events supposedly had a pattern-breaking effect on the regional composition and socioeconomic development of the country. The first, and most obvious, was the formation of the Principality of Bulgaria in 1878. Next came the creation and development of national institutions, the establishment of a new economic center in Sofia (the capital), and the slow re-orientation of Bulgaria's commercial relations. Along with the construction of a national railway grid, these changes altered the economic context of the territories within the new state.

Wolf and Schulze studied the effects of border changes in several Eastern European states, including Poland and Austro-Hungary. In the case of post-World War I Poland, they concluded that pre-war borders were visible for at least fifteen years after unification, a case similar to that of Bulgaria after 1878. However, they also found that the post-World War I borders of the Austro-Hungarian states were already detectable before the war. The experience of Bulgaria does not seem to conform to this model. The Bulgarian borders of 1878 were the result of accidental political decisions and were not based on economic logic. Once the political lines had been drawn, the socioeconomic borders had to adapt to this new reality.¹⁴

The second transformation was Bulgaria's incorporation within the Soviet sphere of influence after World War II, which resulted in significant changes in the socioeconomic and political order, including the nationalization of land and industry, growth in industrial activity, rapid urbanization, and another radical shift in international trading partners. The third important political change was the fall of the totalitarian regime in 1989. The transition to a market-oriented economy brought economic hardship, mass emigration, and yet another shift in trade relations.

¹⁴ Wolf and Max-Stephan Schulze, "On the Origins of Border Effects: Insights from the Habsburg Empire," *Journal of Economic Geography*, IX (2009), 117-136.

These three events initiated significant socioeconomic and institutional transformations. This article assesses the regional repercussions of these changes by observing the rate of urbanization and density of population in different parts of Bulgaria and the evolution of the population of the largest towns and cities.

3.1 Data collection and methodology

The fundamental sources used in this study were the national census publications of Bulgaria. The first census took place in 1881 and the most recent was conducted in 2002. During this period, censuses were conducted on a regular basis, and census data are available for every decade (see Figure 3). Although the reliability of some of the results presented in part of the censuses are open to reasonable doubt, particularly those from the first censuses and those from the totalitarian regime, the quality of the population data used in the present article should not be a major concern.

Figure 3 Census Year and Number of Regions Covered by the Publication

CENSUS	REGIONS	CENSUS	REGIONS
1881	21	1926	16
1884	6	1934	7
1881+1884	27	1946	9
1888	23	1956	13
1893	23	1965	28
1900	12	1975	28
1905	12	1985	28
1910	12	1992	9
1920	15	2001	28

Source: Our own estimations based on census publications.

The fundamental variable, which is relatively easy to construct, is population density--calculated from the *de facto* population and the area of the region concerned. Population data can be directly extracted from the census records, although acquiring data relating to administrative

units occasionally required the use of additional secondary sources, such as other contemporary administrative publications or documents.

The second variable is urbanization--one of the symbols and consequences of modernization and economic development. When reliable economic data are insufficient, urbanization rates can be used to help trace "the evolution of a society during its structural transformation from an agrarian to an industrial-service economy." Notwithstanding an ongoing debate, the mainstream literature generally accepts that urbanization is a result and consequence of industrialization. Since industrialization is the driving force behind economic development, urbanization rates can be considered representative of economic growth.¹⁵

The process of "urbanization" involves an increase in the share of the total population living in urban areas. It is usually the consequence of three separate actions--natural population increase, immigration to urban areas from rural zones or other countries, and/or the re-classification of rural locations as urban areas. The first two phenomena are natural and unsurprising; re-classification, however, can artificially modify statistics and suggest misleading trends. The definition of *urban* varies considerably, both from state to state and from one period to another. In some states, towns must meet certain minimum population requirements, whereas in others, they have to comply with certain socioeconomic or cultural conditions (relating to the infrastructure, specific buildings, and institutions that they contain). These variations imply that the methodology dealing with statistics about urbanization at the international level must be flexible. The urbanization rates in this article represent the share of population living in towns with more than 10,000 inhabitants. Although the chosen methodology is only one of numerous possibilities, it permits adequate international and temporal comparisons.¹⁶

¹⁵ Andrei Rogers and Jeffrey Williamson, "Migration, Urbanization, and Third World Development: An Overview," *Economic Development and Cultural Change*, XXX (1982), 463-482 ("Third World Migration and Urbanization: A Symposium"); Kim and Margo, "Historical Perspectives," 22; Joseph Berliner, "Internal Migration: A Comparative Disciplinary View," in Alan Brown and Egon Neuberger (eds.), *Internal Migration: A Comparative Perspective* (New York, 1977), 443-461; Joseph Spengler and George Myers, "Migration and Socioeconomic Development: Today and Yesterday," *ibid.*, 11-35.

¹⁶ After World War II, the annexation of villages to cities, or the redefinition of existing villages as towns, was a major source of growth for Bulgaria's urban population. Until the 1970s, several hundred villages, with a total population exceeding 800,000, were "urbanized" in this way, accounting for a large part of Bulgaria's urban growth. In 1985, only one-eighth of Bulgaria's urban population was in "towns" with fewer than 10,000 residents.

Unfortunately, the regular modifications that the territorial structure of Bulgaria has undergone seriously constrain long-term comparisons of development between Bulgarian regions. Nevertheless, in several cases, a number of regions and their respective areas are comparable. For example, the censuses of 1888, 1965, 1975, 1985, and 2002 were based on twenty-three to twenty-eight regions with fairly stable borders.

The data series created to show the evolution of population in the largest Bulgarian settlements partially overcome the problem of border instability. These series also include the growth rates and the share of Bulgaria's total population that resided in these settlements. Since the development of the regions is strongly correlated with the growth of their respective settlements, change was examined at both the regional and urban levels. This two-tier approach permits a more accurate analysis of changes in the spatial composition of the Bulgarian state.

A Geographical Information System (GIS) database based on maps of the territorial-administrative units of Bulgaria during the period under study was created to visualize the statistical information revealed by the census data. These maps are available in Peter Flora et al. (eds.), *European Regions*, which deals with administrative changes in Europe during the last 130 years. The sources for these maps were diverse and wide-ranging: censuses, historical and government publications, official documents, et al.¹⁷

The utilization of GIS helped to combine and display diverse data (transport, statistical historical, geographical) to achieve a vision that can help detect and analyze the spatial transformations in the Bulgarian economy with greater accuracy. Even so, the shortage of data and the frequent administrative changes constrained the use of the full potential that historical GIS present.

3.2 Results, maps, and tables

3.2.1 Population Density

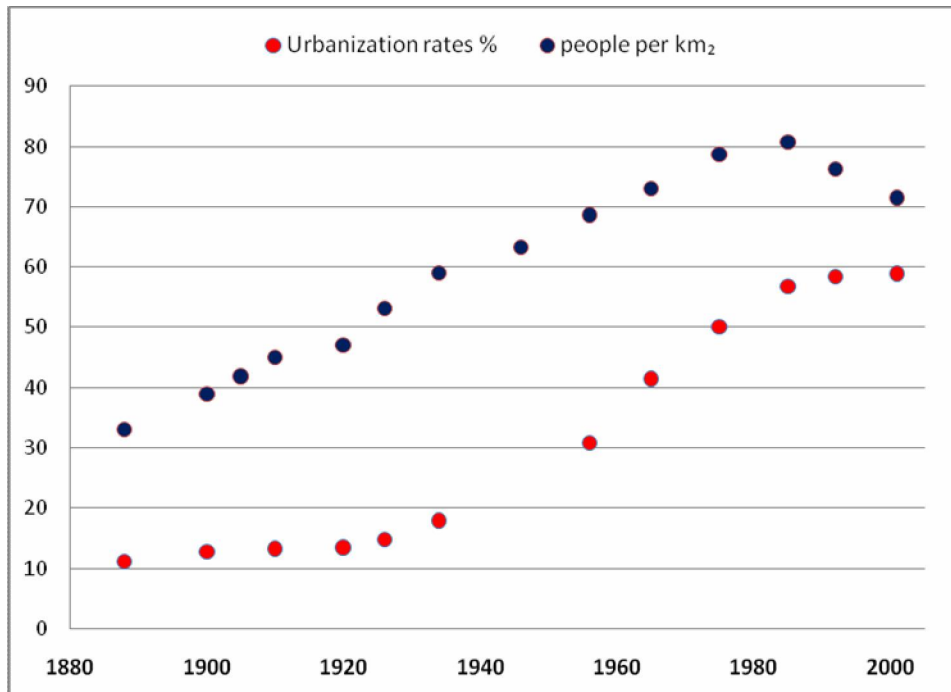
The population of Bulgaria increased steadily until the end of World War I. The post-war period then saw a rapid growth in national densities that continued until the 1960s. The population

See Robert Taaffe, "Population Structure," in Klaus-Detlev Grothusen (ed.), *Handbook on of?? South Eastern Europe* (Göttingen, 1990), VI, 433–457.

¹⁷ Peter Flora et al. (eds.), *European Regions: The Territorial Structure of Europe, 1870-2000* (New York, 2010).

continued to increase until the 1980s, though at a more modest rate, until the beginning of the 1990s when the trend reversed. After the socialist period, densities declined sharply, returning to World War II levels as a result of emigration, an aging population, and a fall in life expectancy.

Figure 4 Evolution of Population Density and Urbanization Rates in Bulgaria, 1888-2002



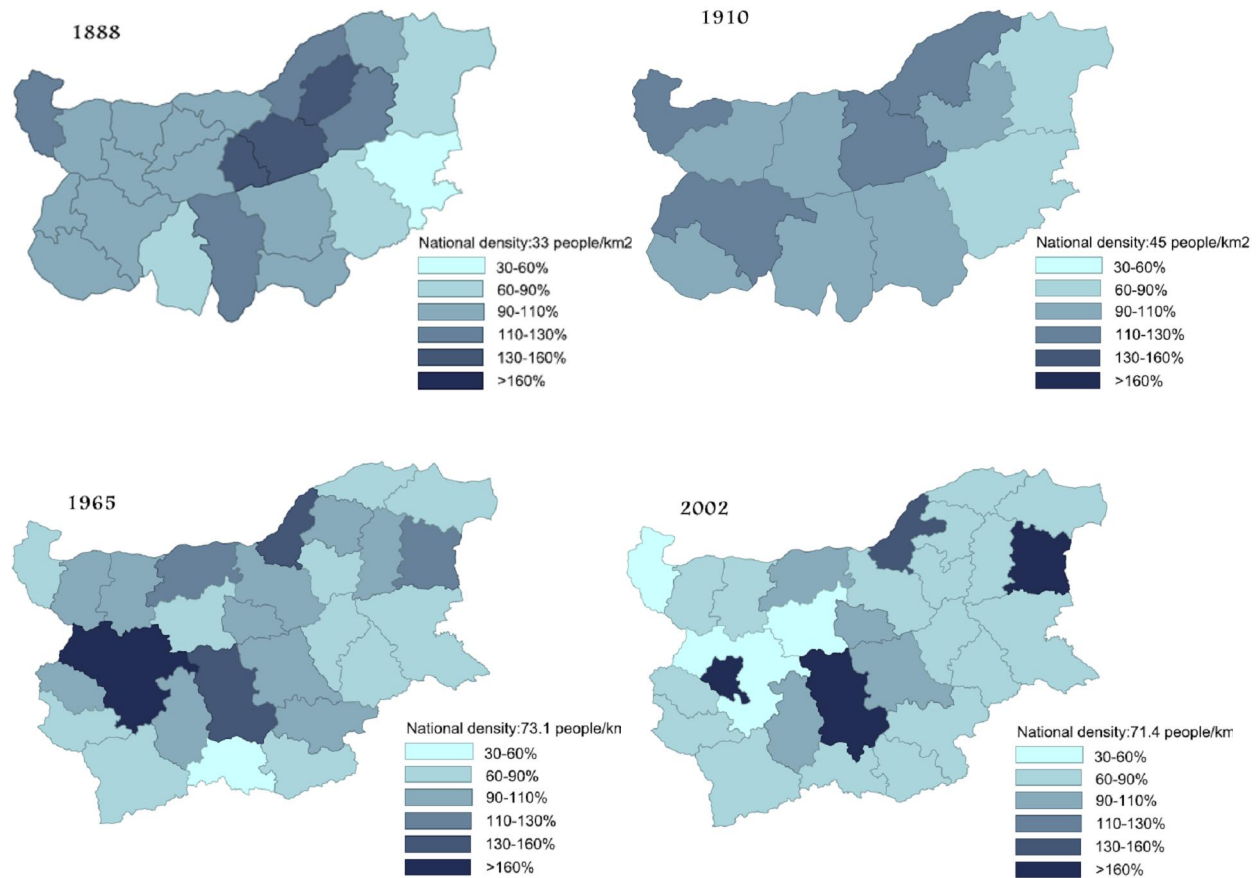
Source: Our own estimations based on census publications.

The story at the regional level is more complex and diverse. A comparison of population density at the regional level to that of the national average (Figure 5) reveals a change in the distribution of population concentrations in Bulgaria. In 1888, the regions north of the mountain Stara Planina were more densely populated than those that had formed part of Eastern Rumelia (in the south). However during the twentieth century, the northern regions gradually lost momentum, while the south, particularly the region around Sofia, grew at a faster rate. The maps also illustrate a clear tendency for the regions of Sofia, Plovdiv, and Varna (and, to a certain extent, Ruse) to absorb population during the last three decades.

In general, the peripheral regions grew at a slower rate than the interior regions. By the beginning of the twenty-first century, there was a visible imbalance between the population densities of regions located near international borders and those of the interior. This trend is

particularly evident in the northern and south-eastern parts of the country; it is less apparent, though still present, in the southwest. The Pernik (west of Sofia) and Ruse (in the north) regions, with population densities that exceed the national average, are exceptions to this general rule, and are easily explained as such. Development in Pernik was clearly affected by proximity to Sofia, whereas in the Ruse region, it was largely been due to the available transportation network.

Figure 5 Population Densities in Regions of Bulgaria Compared to the National Average



Source: Our own estimations based on census publications.

3.2.2 Urbanization Rates

During the first years after the creation of the Bulgarian state, only around 11 percent of the Bulgarian population lived in towns with more than 10,000 residents. Twelve decades later, the official statistics place almost 60 percent of the population in urban areas. This fivefold increase in the urban population reveals a profound upheaval in Bulgaria's society and economy. Other states

with late urbanization, including Spain, experienced a considerably smaller increase (by a factor of about 2.26) during the twentieth century. This difference between the two countries is explained by the particularly low starting point of Bulgaria, though it does reveal the magnitude of the transformation of Bulgarian society.¹⁸

When the state of Bulgaria first appeared on the map of Europe, its society was still predominantly rural in nature. Although the Bulgarian economy made progress during the nineteenth century, its development, which was largely based on agriculture, was meager by contemporary Western European standards. At that time, the differences between Bulgarian regions were probably insignificant, since rural societies tend to exhibit only small levels of regional inequality. In 1881, the populations of the largest towns in Bulgaria did not exceed 35,000 inhabitants. During this initial period, several regions did not have a single town with a population of over 10,000.¹⁹

The scarcity of the natural resources required for industrial development, by both nineteenth-century and present-day standards, also hindered industrial activity, thus helping to account for major regional disparities. Once industrial development took off and the domestic railway infrastructure improved, the population of Bulgaria's towns began to increase, as did its levels of regional and urban inequality (see Figure 6).²⁰

Sofia, the new seat of Bulgaria's political power and transportation system, eventually replaced Plovdiv as the most developed and important city in the country, making the Sofia region the most urbanized region in the country. During the first decades of the twentieth century, population noticeably concentrated in the territories around Sofia, Plovdiv, Stara Zagora, Sliven, and Burgas--south of the Stara Planina Mountains. Only two regions in the northern part of the country were able to keep pace—those near the important Danube port of Ruse and the Black Sea port of Varna. Meanwhile, the north-western territories of Bulgaria--the regions of Vratza, Pleven,

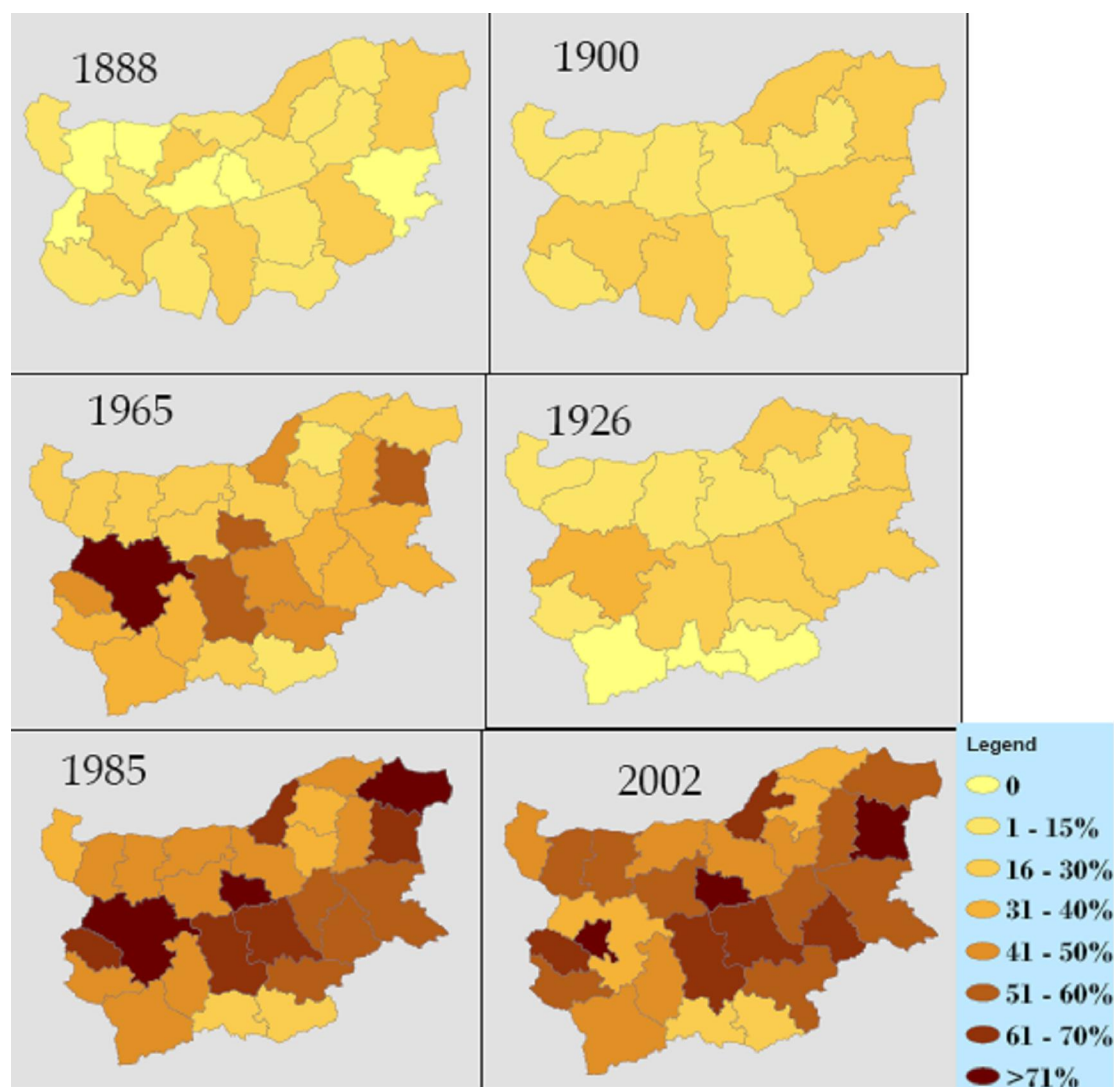
¹⁸ Luis Lanaspá, Fernando Pueyo, and Fernando Sanz, "Evolution of the Spanish Urban Structure during the Twentieth Century," *Urban Studies*, XL (2003), 567-580.

¹⁹ John Vernon Henderson, "Urbanization in Developing Countries," *World Bank Research Observer*, XVII (2002), 89-112.

²⁰ John Lampe, *The Bulgarian Economy in the Twentieth Century* (New York, 1986).

and Montana--fell behind despite being densely populated. These areas, which remained enclosed between the Danube, the Serbian border, and Stara Planina, grew at a slower pace than the rest of Bulgaria. The Vidin region, which had been relatively important in Ottoman times, began to decline when divided from its natural neighbors of Nish and Pirot by the new national borders (Nish and Pirot were ceded to Serbia in 1878). By the end of the period, Vidin had urbanization rates below the national average, similar to those found in the nearby regions of Vratsa, Montana, and Pleven.

Figure 6 Urbanization Rates in Bulgaria, 1888-2002



Source: Our own estimations based on census publications.

The first years of communist rule were characterized by a significant increase in urbanization levels. The regions around Sofia, Varna, Plovdiv, and Ruse maintained their leading positions, but the gap between them and the less developed regions decreased.

Yet, after 1989, a clear pattern of population concentration emerged in several leading regions, while the peripheral regions fell into relative economic and demographic decline.

The urbanization process in Bulgaria has not been homogeneous (Figure 7); notable variation is evident in the growth rates of Bulgarian settlements. Until the 1950s, the largest cities (Sofia, Plovdiv, Varna, and Burgas) grew at the fastest rate and exhibited what could be described as a divergent growth pattern. A conspicuous change in this trend, however, occurred from the 1950s until the 1990s. The medium-sized cities began to grow at either the same or a faster rate than the larger ones, thereby generating a more convergent growth pattern that tended to erode the traditional differences in size between cities. In general, regardless of settlement size, growth rates toward the end of the twentieth century were significantly lower than those at the beginning, indicating a consolidation of the urbanization process in Bulgaria. A reduction in growth potential had become increasingly apparent toward the end of the century.

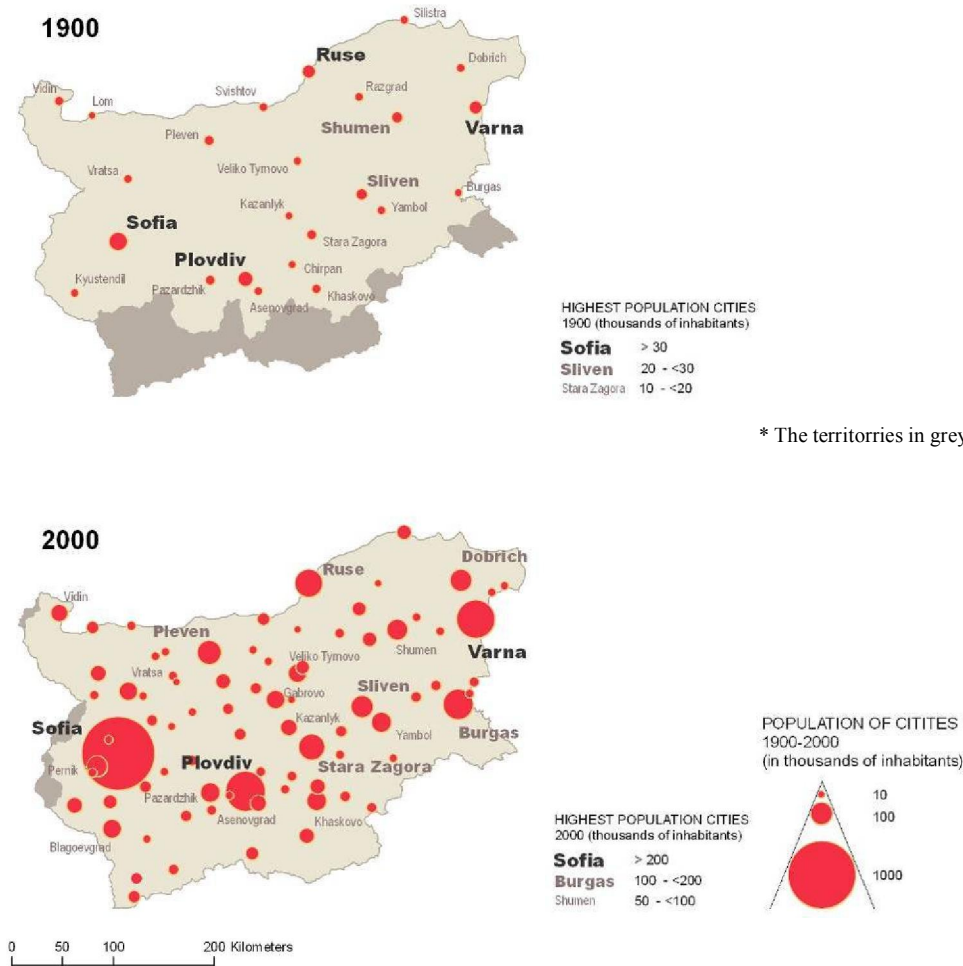
Figure 7 Population of the Largest Cities in Bulgaria, 1881-2001

	1881		1920		1946		2001	
CITY	POPULATION	% OF THE NATIONAL POPULATION	POPULATION	%	POPULATION	%	POPULATION	%
Sofia	20,501	0.69	154,025	3.17	525,710	7.49	1,170,842	14.76
Plovdiv	33,443	1.12	63,415	1.30	128,589	1.83	338,224	4.26
Varna	24,555	0.82	50,810	1.05	80,349	1.14	312,889	3.94
Bourgas	5,865	0.20	21,170	0.44	51,323	0.73	192,390	2.43
Rousse	26,163	0.88	41,652	0.86	57,833	0.82	161,453	2.04
Stara Zagora	15,258	0.51	25,314	0.52	38,325	0.55	143,420	1.81
Pleven	11,474	0.38	27,446	0.56	39,058	0.56	121,880	1.54
Dobritch	9,567	0.32	30,106	0.00	32,671	0.47	100,000	1.26
Sliven	20,248	0.68	28,590	0.59	35,343	0.50	100,366	1.27
Shumen	23,093	0.77	23,753	0.49	35,750	0.51	89,214	1.12

NOTE The population data for Dobritch in 1920 derives from the national census of Romania, conducted in 1930.

Analysis only partially confirmed our expectations. The significant changes in the hierarchy of the larger settlements occurred mainly before World War II, and the rapid growth in urbanization after the war did not change the order. Initially, the creation of the new state and the construction of the main railway lines led to significant changes in the economic hierarchy of Bulgarian towns and regions. But once this transition was complete (approximately coinciding with the period between the two world wars), the leading settlements cemented their hegemony, and the five largest settlements (Sofia, Varna, Plovdiv, Burgas, and Ruse) maintained their positions throughout the process of urbanization and industrialization.

Figure 8 Largest Bulgarian Settlements in 1880 and 2002*



*The territories in grey were part of Bulgaria in 1900, but not in 2000.

Source: Our own estimations based on census publications.

The rapid growth in urbanization that accompanied industrialization in Bulgaria after World War II left the pre-war economic order intact. Nor did it affect the economic composition of Bulgaria in the same way that the political change of 1878 did. The regions that experienced the highest rates of urbanization were the ones that had been the most important before the communist takeover. The political changes of 1944 and 1989 did not, therefore, break the pattern of regional economic composition in Bulgaria. Bulgaria's unprecedented concentration of population in just a few large settlements and regions since 1989, owed more to the decline of its peripheral regions than to the growth of its more developed ones. This increase in regional disparity could be indirectly attributed to the political changes that occurred when the state entered a severe economic crisis and abandoned some of its regulatory policies. When the government permitted citizens to move freely throughout the state and to leave the country, it was unable to continue its previous policy of balanced regional development.

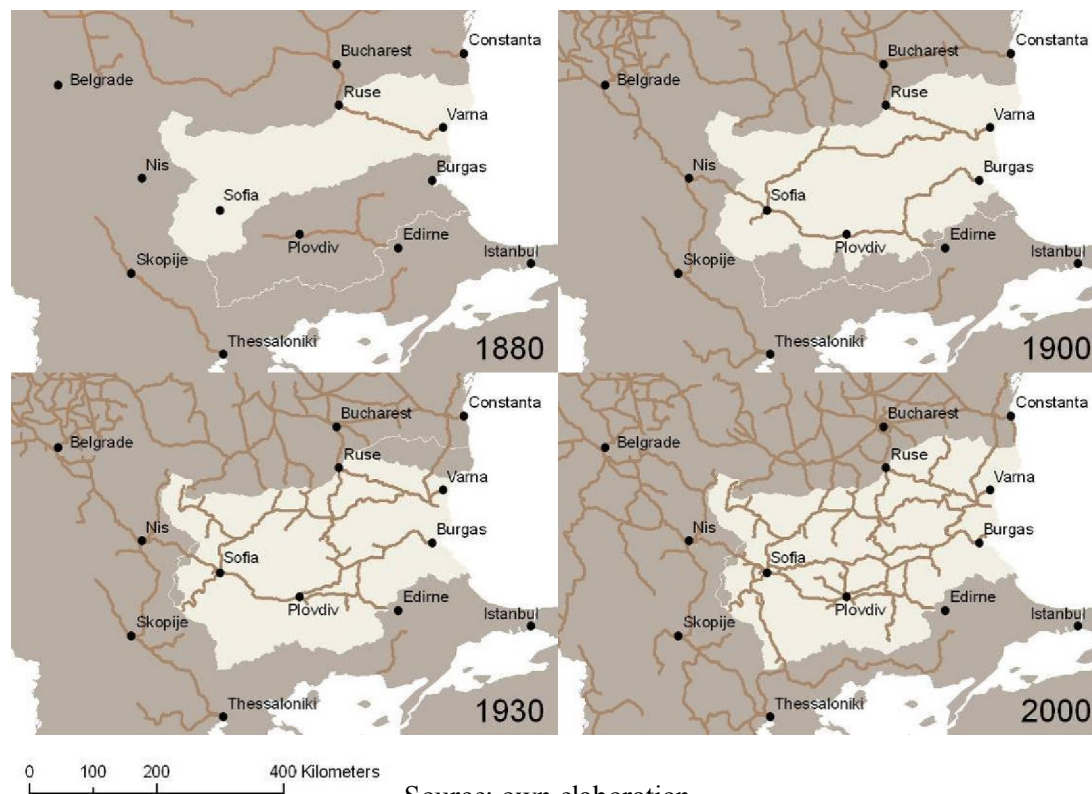
3.2.3 Railway Construction

The second important subject of this study is the expansion of the national railway network. The development of a national railway network tends to reduce the costs of interaction and trade while promoting population concentration and urbanization. The appearance of railway networks can change an existing economic order by improving contact between what were once geographically isolated settlements or regions. The GIS maps presented herein as Figure 9 are based on original maps and official documents produced by the Bulgarian National Railways. The use of GIS permits a better illustration of the evolution of the railway network in the Balkans and facilitates analyses of the relationship between railway construction and the redistribution of population.

When Bulgaria began its existence as an independent state in 1878, it had a single railway line, 223 km long, connecting the two ports of Varna and Ruse. The 1878 Treaty of Berlin obliged the Principality of Bulgaria to complete the missing sections of the international Vienna–Belgrade–Sofia–Istanbul railway line, which was completed in 1888. Subsequent Bulgarian governments tightly controlled the construction of the national railway network. The state purchased lines that had foreign ownership (such as former property of the Ottoman Empire) and contracted entrepreneurs to build new lines. It did not, however, allow any concessions for the

future private ownership of new lines. As a result, the pre-World War II governments were able to control the course of national development. This policy of public ownership, intended to protect national interest and independence, came at a high economic and political cost. The national network was further expanded and electrified during the communist period.²¹

Figure 9 Evolution of the Railway Network in Bulgaria, 1880-2000



²¹ For chronologies of the financial and political issues associated with Bulgaria's railway system, see Ekaterina Nikova, "Roads Connecting Roads: Infrastructure in South East Europe," *Bulgarian Academy of Sciences* (2007), I; Доросиев, ИВ, "Вложен капитал в държавните железници" (invested capital in the national railways), Във Юбилеен сборник 50 години Български железници (In anniversary collection "50 years Bulgarian railways"), С (1938), 115-157; Христо Станишев, *История на строежите и съобщенията в България от освобождаването до края на 1939г* (history of constructions and communications in Bulgaria after the liberation until the end of 1939) (Sofia, 1948), 148; Alexander Kostov, "Trade and Navigation on the lower Danube: Romania and Bulgaria 1880-1912," in Andreas Kunz and John Armstrong (eds.), *Inland Navigation and Economic Development in Nineteenth-Century Europe* (Mainz, 1995), 105-119; Г. Згурев, "Железопътното движение (The railway traffic)," Във Юбилеен сборник 50 години Български железници (In anniversary collection "50 years Bulgarian railways"), С (1938), 189-213. Rumén Daskalov, *Bulgarskoto obshestvo, 1878-1939* (The Bulgarian Society, 1878-1939) (Sofia, 2005), I-II.

The arrival of the railways should have facilitated international integration in the Balkans, but railway construction had only a minor effect on such integration because of a lack of cooperation between states. For example, several Bulgarian governments were forced to build railway connections to the Bulgarian port of Burgas because the Greek ports that were already connected were closed to them. Until the 1920s, Bulgaria had rail connections with only Turkey and Serbia. The lines connecting Bulgaria to Romania and Greece were not finished until the 1920s and after World War II, respectively. Even as late as 2009, Bulgaria had no railway connection to Macedonia, historically and culturally its closest neighbour.

Measuring the full extent of the social, political, and economic ramifications of Bulgaria's railway system is difficult. The data and maps presented in this study, together with literature previously published, offer only basic observations. The construction of the railway lines helped to advance economic development, but before World War II, the movement of passengers and goods was well below the capacity of the national rail network. Though the accounts show that the Bulgarian railways usually operated at a loss, the railway system was perceived, nonetheless, as an important long-term tool for social, cultural, and economic integration, well worth a state subsidy; profits were not the key consideration.²²

The distribution of railway lines played a fundamental role in shaping the urban hierarchy of modern-day Bulgaria. Due to the presence of the Stara Planina (Balkan) mountains that split Bulgaria into two almost equal halves, the first Bulgarian railway lines ran mainly between Sofia and the ports of the Black Sea, as shown by the map relating to 1900 in Figure 5. The only meeting point of the two parallel rail systems serving the north and south of the country was Sofia. By 1900, Sofia had already become the national transport hub. Moreover, ten of the twelve largest Bulgarian settlements in 2005 were already connected in 1900; the twelve largest settlements in 1920 were all connected by rail. It could be argued that these settlements were connected precisely because they were the most important centers in the urban hierarchy. The maps demonstrate that the tracks followed relatively straight routes (Sofia–Black Sea or Sofia–Istanbul). Settlements that did not fall on these paths were connected at a later date. Hence, significant industrial centers like Sliven did not have railway connections until the 1920s. Small settlements in or near the mountains, and in places like Svishtov on the River Danube, which was vibrant during Ottoman times, also became isolated after 1878. The lack of adequate infrastructure is probably one of the

²² Daskalov, *Bulgarskoto obshestvo*, 190

explanations for the decline of such places, and the slow growth of border districts is partially attributable to underdeveloped connections with neighboring states. Several regions and towns, however, received a substantial boost from the arrival of the railway--for instance, Sofia, Burgas, and Gorna Oriahovitsa--thus confirming Daskalov's contention that the railway had a greater impact on the development of settlements than vice versa.²³

3.2.4 Modifications to the regional economy

As previously mentioned, Bulgaria went through several political transformations that had varied, but always considerable, effects on the country's socioeconomic development. The findings suggest that most of the fundamental modifications to the urban hierarchy of Bulgaria and that of its regions occurred between 1878 and 1945. Nevertheless, the subsequent decades were also important in shaping the modern spatial and socioeconomic structure of Bulgaria.

The first important political events were the establishment of the Principality of Bulgaria in 1878 and its union with Eastern Rumelia in 1885. The pre-liberation economic structure of Bulgaria was different from the one that emerged after 1878. One immediate outcome of the Congress of Berlin (1878) was the de-fragmentation of the Bulgarian economy. Previously, within the framework of the Ottoman Empire, a vibrant economy had existed throughout the lands populated by Bulgarians--from the River Danube in the north to the Aegean Sea in the south and from the Black Sea in the east to almost what is present-day Albania. Within this area, administrative and commercial centers like Plovdiv, Ruse, Varna, Stara Zagora, and Thessalonica, which were usually ethnically diverse, interacted with burgeoning clusters of smaller, lively settlements in or near mountainous regions with predominantly Bulgarian populations and handicraft production. The latter were largely tied to agriculture and animal husbandry in rural zones. Moreover, Bulgarian producers and merchants had unrestricted access to the extensive Ottoman market, particularly that of Istanbul.

The establishment of the Principality had a considerable effect on this initial order. Bulgarian governments were faced with the need to integrate the new state socially, culturally, and, above all, economically. The most important reforms included the creation of a national currency and the unification of the fiscal and tax regimes, fostering the establishment of a single national market

²³ *Ibid.*, 191

within an integrated national infrastructure. The ethos of the new state was strengthened through national education system and compulsory military service.

These reforms produced significant modifications in the spatial organization of the country. Regions and settlements that had been important during the Ottoman period fell behind others that had not been so fortunate in the past. Sofia became the main center of administrative and political power in the new state, and trade connections with the Ottoman Empire gradually weakened. The construction of the railway system, the routes of which were largely determined politically, further abetted this new regional economic hierarchy. Sofia became the economic capital of Bulgaria and the Black Sea towns of Varna and Burgas became the country's leading ports, replacing the previously important Danube ports.

3.2.5 The rise of Sofia

Until 1878, the city of Istanbul--the capital of the Ottoman Empire--was powerful enough to impede significant urban development in Bulgaria. None of the more economically active settlements in Bulgaria, which included Plovdiv, Ruse, Turnovo, Sliven, and Shumen, had more than 30,000 residents. Thus, new founded Bulgaria had to foster its own economic centre. After 1878, when political circumstances positioned Plovdiv, the largest "Bulgarian" settlement, outside the Principality, the National Assembly chose Sofia as the capital of the new state. The geographical position of the new capital was certainly not one of its strong suits. According to Lampe, its relative geographical isolation was hardly conducive to economic development, particularly during the period prior to the development of the national railway network. The primary motivation for the choice of Sofia as the capital was that it was geographically situated in the center of "the Bulgarian lands". Like Athens, Madrid, and St. Petersburg, the Bulgarian capital was an economic center created purely by administrative and political means. After 1878, the majority of the national institutions were established in Sofia which rapidly led to the concentration of the political and cultural elite in the city. Sofia also became the main transport hub of the developing Bulgarian railroad network. Its rise to pre-eminence culminated with the concentration of financial and industrial power there after World War I.²⁴

²⁴ In 1878 only small part of the territories predominantly populated with Bulgarians received autonomy. Hence, the "liberation" of the rest of the Bulgarians became the leading national idea of pre war Bulgaria. The choice of Sofia which geographically in the situated in the center of these territories, for capital, was part of this effort.

After the war, the mass immigration and the concentration of industrial production in Sofia led to the rapid growth of the city's population. The capital became a large market that further intensified local industrial enterprise. By the 1930s, Sofia produced one-third of the state's industrial output and employed half of its industrial workforce. Between the wars, Sofia established additional railway connections with important ports, other Bulgarian settlements, and major European cities. The previous shortage of qualified human capital was rectified by Bulgarians generally improving their educational and entrepreneurial skills; most of the economic and intellectual elite of Bulgaria was now concentrated in the capital.²⁵

Sofia's share of the total population of Bulgaria increased fourfold between 1920 and 1975, inducing the authorities to introduce restrictions on permanent migration to Sofia and other large population magnets. Nevertheless, ordinary citizens found ways to overcome these regulations; the population of Sofia continued to escalate during the last decades of communist rule, despite the need for special permits to reside in the capital.²⁶

The restrictions on interregional migration disappeared with the fall of the totalitarian regime. As a result, the capital experienced a new wave of migration and population growth at the start of the twenty-first century. The demographic transition being long past, however, the growth rates of the rest of Bulgaria were far below those of the 1950s and 1960s. Furthermore, within the framework of the European Union (EU) and its relatively open borders, many Bulgarian citizens now prefer to emigrate, an option that was not officially available during the totalitarian period. Despite emigration and deteriorating living conditions, Sofia's rate of population growth has exceeded that of the national average.

3.2.6 The ports on the black sea

Sofia's share of the Bulgarian population increased twenty-one-fold during the period from 1881 to 2001. Burgas, at twelvefold, is the only other important town to undergo anything like

²⁵ Lampe, *Bulgarian Economy*, 16; Khristo Marinov, "Geografsko razpredelenie na promishlenostta v Bulgaria mezdu dvete svetovni vojni" (the geographical distribution of industry in Bulgaria between the two world wars)," *works of V.I.I Karl Marx*, I (1965), 7-14.

²⁶ Taaffe, "Population Structure," 433-457.

comparable growth during the same period. The other significant shift in Bulgaria's economic geography was the development of the Black Sea ports of Burgas and Varna and the relative decline of the ports on the banks of the River Danube.

The ascendance of sea transportation in the Bulgarian economy begun in 1842 after the ban on wheat export from the Ottoman Empire was lifted. After the creation of the state in 1878, the largest Black Sea settlements in Bulgarian territory were of great strategic importance for transport and trade. Their geographical accessibility, together with investments in infrastructure, had launched them into economic prominence.

In contrast to the Romanian government, the Bulgarian authorities preferred to develop the Black Sea ports instead of those on the Danube (by 1912, all of the major Romanian ports on the Danube were connected by railways, whereas only three Bulgarian river towns enjoyed such access; Ruse had already been connected before the creation of Bulgaria). Subsequently, ever since 1878 the Danube ports have failed to keep pace with the average national growth rate.

Varna on the Black Sea was an established town with a harbor that processed a large part of Bulgaria's wheat exports at a time when Burgas was still merely a name on the map. The Bulgarian authorities expended considerable effort to expand the port facilities and improve the infrastructure of both towns. Varna was connected to the major Danube town of Ruse by railway, but Burgas although connected via railways since 1890, remained isolated from the main Istanbul–Sofia–Vienna–Berlin railway system that crossed Bulgaria and the government took great pains to rectify the situation.²⁷ These investments transformed Burgas and Varna into vital commercial centers.²⁸

Varna faced economic difficulties after World War I when it lost contact with Dobruja, a province that provided a large part of the grain exports that passed through Varna harbor. The economy recovered when the connection was restored after World War II. During the totalitarian period, certain major industrial activities were concentrated in or around Varna and Burgas,

²⁷ Although connected via railways since 1890, Bourgas, part of the line that connected it to the Istanbul–Sofia–Vienna–Berlin was constructed by German entrepreneur baron Hirsch and own by his company since 1875. Hence it was not under the control of the Bulgarian government and practically Bourgas remained isolated. Bulgarian governments took considerable efforts to build alternative line or buy the existing one in the 1890s and the beginning of the 20th century, however, the solution was only achieved in 1908 when after the declaration of independence the state nationalized the line and latter bought it in 1910.

²⁸ Kostov, "Trade and Navigation," 330; Lampe, *Bulgarian Economy*, 23.

further increasing their industrial importance. These two cities were among the least affected by the fall of communism and the economic hardships of the transition. The rise of the tourist industry during the last decades of the twentieth century further increased the advantages of the regions around Varna and Burgas, especially along the coast.²⁹

The Ruse–Varna line was the only railway track in the Principality of Bulgaria in 1878, connecting the most important Black Sea port with the most important Danube port. A comparison of the respective evolutions of these two settlements reveals that Varna has grown at least twice as much as Ruse over the last 130 years (nonetheless, Ruse qualifies as “a success story” compared to other Danube towns) (see Figure 10). The only bridge over the Danube in Bulgarian territory, which was constructed between these towns during the 1950s, converted Ruse into an important transport nexus. None of the other Bulgarian Danube towns have direct ties with Romania via the Danube and the importance of the ports of Vidin, Svishtov, Ruse, and Silistra on the Danube declined.

Figure 10 the Percentage of the National Population in Varna and Ruse, 1881-2001

	1881	1900	1910	1920	1934	1956	1975	1985	2001	INCREASE FROM 1881 TO 2002
Varna	0.83	0.93	0.95	1.05	1.20	1.63	2.89	3.38	3.94	4.78
Ruse	0.88	0.87	0.84	0.86	0.87	1.16	1.83	2.07	2.04	2.31

SOURCE Authors’ calculations based on census data.

3.2.7 North versus south and the decline of the peripheral regions

To this point, all of the trends have been readily apparent, but several less apparent developments can be identified as well. The first decades of the twentieth century witnessed a kind of industrial and economic boom south of the Stara Planina mountains-between Sofia and the Black Sea--affecting the regions of Sofia, Plovdiv, Stara Zagora, Sliven, and Burgas, which

²⁹ Lampe and Jackson, *Balkan Economic History*. The Varna region produced ships, heavy machinery, textiles, diesel engines, industrial chemicals, food, and leather goods. The Burgas region engaged in oil refining and petro-chemical production, shipbuilding, food processing, canning, and fishing.

had the largest urban population and the best transportation infrastructure. Because the earliest railway lines were constructed in the south (former Eastern Rumelia), the southern regions had significant initial advantages, compounded by their proximity to the Ottoman Empire. Although its share of exports to Bulgaria constantly declined, the Ottoman market remained the leading destination for Bulgaria's agricultural, handicraft, and industrial production until World War I.

At first, the landscape in the north was better suited for agricultural production, whereas the more complicated terrain in the south encouraged urban activities. Once the infrastructure in the north began to develop, however, the disparities between the south (excluding Sofia) and the north decreased. From 1945 to 1989, Bulgaria was on the front line of the "Iron Curtain," with two NATO members as neighbouring states. Large parts of the Burgas region in the southeast were intentionally left underdeveloped and under populated for military and political reasons. Parts of the country located near the border of Turkey--Bulgaria's main "enemy" during the communist period and a member of NATO--and territories abutting Greece suffered a similar fate. Although relations with Yugoslavia and Romania were nominally friendly, they were not always cordial.

Transportation between the Balkan countries is still among the least developed in Europe. The lack of close economic ties between the Balkan states, particularly between Bulgaria and its neighbours, has worked against those regions located close to international borders. Although state policies during totalitarian rule mitigated regional imbalances to some extent, the subsequent transition to a market economy has proved devastating for the peripheral regions. Bulgaria's entry into the EU in 2007, which opened its borders with Romania and Greece, as well as ongoing infrastructural improvements, should help to boost the development of the peripheral regions and reduce the previous pattern of uneven regional growth.

Overall, the analysis herein demonstrates that Bulgaria's institutional framework and geographical position have been primarily responsible for the differences noted between regions; private initiative and local factors have played less significant roles. As a result, the Bulgarian state is currently experiencing economic difficulties because of an over-concentration of population and industry in a relatively small number of regions and towns.

Bulgarian society has undergone a process of profound socioeconomic transformation during the last 130 years. Once part of the Ottoman Empire with 90 percent of its population living in rural areas, Bulgaria has become a member of the EU with more than 60 percent of its population

living in large-or medium-sized towns. Sofia has emerged as the country's leading economic city, and the Black Sea ports of Varna and Burgas have flourished at the expense of the previously more important Danube ports. Most of the geographically less-privileged areas entered a period of relative decline following the construction of the country's main railway lines. The majority of these changes in Bulgaria's economic composition occurred before World War II; the rapid growth in urbanization from 1950 through the 1970s had little practical effect on the regional hierarchy. The fall of the totalitarian regime in 1989 was followed by a sharp increase in regional disparities, though, once again, without much of an effect on the spatial profile of the Bulgarian state. The country's EU membership and the removal of economic barriers with some of its neighbours could well initiate another shift in the economic and regional development of Bulgaria--an interesting topic for future studies.

Empirical data reveal a visible relationship between political events and institutional changes and between socioeconomic transformations and fluctuations in spatial inequality. Initially, the position of Sofia within the Bulgarian urban network was "Primus inter pares", and the capital transformed into the leading economical center due to the political and administrative powers received after 1878. Similarly, the growth of the Black Sea and the Danube ports was affected by the territorial changes and the transport investments made by the state. The institutional change of implementing the Soviet Economic model after 1944 triggered the deepest transformations of the Bulgarian society in 20th century- the urbanization and the industrialization and the collapse of the totalitarian model initiated an increase in the regional disparities

The experience of Bulgaria illustrates how, in newly established states or those in the process of formation, political institutions can play a major role in determining the path of regional development and trends in spatial inequality. The governments were able to influence significantly the regional development; by making relatively small investments in transport infrastructure which had significant long run effects due to the self-enforcing nature of increasing returns.

Chapter III. Regional changes and political discontinuities in Romania: 1859–2002. Demographic, urban and transport infrastructure indicators

4.1 Introduction

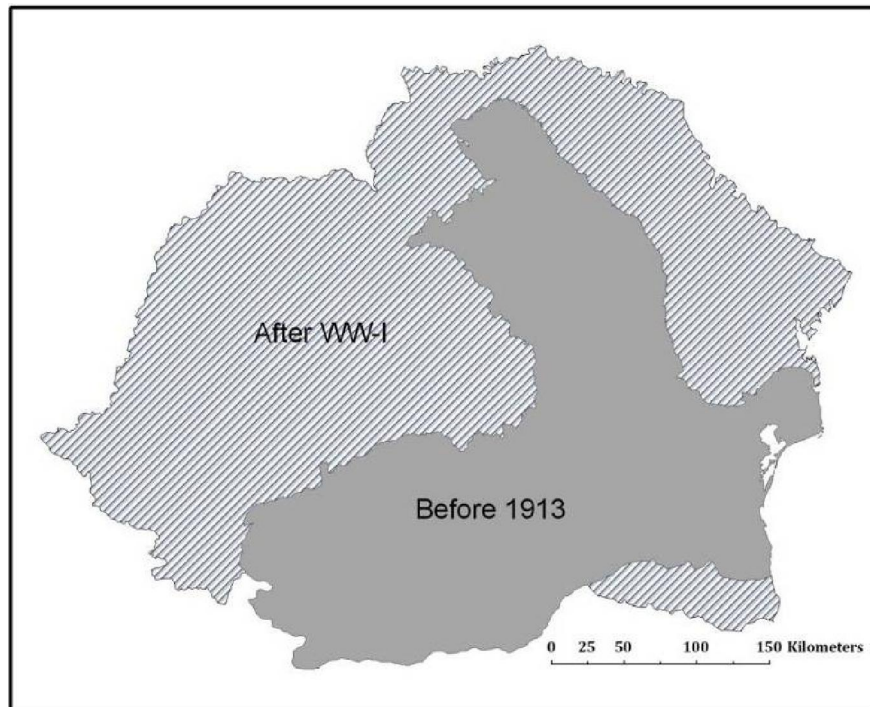
The studies of David Turnock offer the most extensive research into the socioeconomic development of Romania.³⁰ He has managed to explore a wide variety of problems, including the complex connections between industrialization, infrastructure and urban development from the early 19th century until the 1990s. The current study largely coincides with the general scope of Turnock's work, but the main focus here is on the influence of political changes and infrastructure on regional and urban development and relies on new and updated data. Moreover the problems are explored by the tools of Historical GIS which offers new perspectives for the analysis.

The leading question of the work is whether or not, and how, political and infrastructural developments impacted on Romania's regional economic composition and its urban hierarchy. Several important and radical political events have supposedly had a pattern breaking effect on the socioeconomic development of the country. The first was the establishment of the Principality of Romania in 1859, following the unification of Moldavia and Wallachia. This created a large state

³⁰ Turnock, D. (1986). "The Romanian economy in the twentieth century", St. Martin's Press, New York; (1989). *The human geography of eastern europe*. London: Routledge; (1998) *The making of eastern Europe: from the earliest times to 1815* (London: Routledge; (2001). "Railways and economic development in Romania before 1918", *Journal of Transport Geography*, Volume 9, Issue 2, 137-150; 2003. *The human geography of east-central europe*. Routledge studies in human geography. [Nouv. ed.] ed. Vol. 4. London: Routledge; (2006) *The Economy of East Central Europe, 1815-1989: Stages of Transformation in a Peripheral Region*, Routledge, UK .

north of the Danube and put an end to the parallel development of institutions in the two states. The second geopolitical change was induced by the Balkan wars and WW-I, when Romania significantly increased its territory and incorporated regions with more prosperous economies (Transylvania and Bukovina) than the original base of Romania and also relatively poor regions as Bessarabia. The enlargement of the country created the potential and bases for independent industrial development.

Figure 11 Territorial enlargement of Romania after WW-I



Source: own elaboration

WW-II also resulted in significant transformations in the socioeconomic and political order of Romania, as it became part of the Soviet sphere of influence. The resulting changes included the nationalization of land and industry, a growth in industrial activity, rapid urbanization and a radical change in the country's main international trading partners. Land reforms, industrialization and improvements in transport connections all had major impact on the urban development and spatial concentration of the country. In an ambitious attempt at social engineering and planning,

the communist government even embarked upon a reform aimed at the “systematization” of the national settlement structure.³¹

The fall of the Berlin Wall and the violent end to Romania’s totalitarian regime in 1989 marked the beginning of a new set of reforms. The transition to a market-oriented economy was accompanied by economic hardship and mass emigration and brought another shift in trading relationships. Total population declined, as did fertility rates, and economic and demographic difficulties again influenced spatial organisation in Romania. By observing regional changes in population density, urbanization rates and the evolution of Romanian towns, we have sought to understand the spatial repercussions of these structural and political transformations.

The chapter is organized into five sections. The first presents the data collection process, the methodology used for the creation of the main indicators (population density and urbanization rates) and how the GIS maps were produced. Section two outline the historical background in Romania during 19th and 20th century, which is important to understand the processes explored in the current study. The next section focuses on the results and the main trends in the national and regional development according to population densities and rates of urbanization, while the fourth section explores the evolution of the national railway network and its influence on the economic development of Romania. The text concludes with an analysis of the transformations in the country’s regional economic hierarchy triggered by the political and institutional transformations and the development of the railway system.

4.2 Data collection and methodology

The fundamental sources used in this study were national census publications that were found in the MZES library of the University of Mannheim in Germany. The information extracted from the official records was used to create data series including rates on population density and urbanization at regional level since the middle of the 19th century. While the first Romanian census was undertaken in 1859; it was only possible to find partial data from this early survey; the second census was conducted 40 years later, in 1899. Since 1899, the authorities have conducted

³¹Vezenkov, A. (2000). Систематизацията в Румъния при режима на Чаушеску, «Sistemizarea in Romania under the Ceausescu Régime», Historical future (Историческо бъдеще), issue: 12, 224-237.

national surveys at regular intervals, and the most recent census used in the current work was organized in 2002.

Figure 12 Census year and number of regions covered by the publication

Census	regions	Census	regions
1859		1956	16
1899	32	1966	40
1912	32	1977	40
1930	71	1992	42
1948	58	2002	42

Source: Own elaboration based on census publications

Although the reliability and quality of the socioeconomic data presented in some of the censuses are often unconvincing, particularly in the early surveys and in those conducted under the totalitarian regime, the population data can be accepted as fairly reliable. The population density was calculated from the *de facto* population and the surface area of the region concerned. Population data were directly extracted from census publications, while data relating to the areas of the administrative units occasionally required the use of additional sources, including contemporary administrative publications.

The second fundamental variable is urbanization. As one of the symbols and consequence of modernization and economic development, rates of urbanization can be used to trace “the evolution of a society during its structural transformation from an agrarian to an industrial-service economy” (Rogers and Williamson 1982), where there is otherwise a lack of reliable economic data. Although this still remains a subject of ongoing debate, mainstream literature generally accepts that urbanization is a result and consequence of industrialization (Kim and Margo, 2003) and since industrialization is the driving force behind economic development, urbanization rates can therefore be considered representative of economic growth (Berliner, 1977; Spengler and Myers, 1977). The urbanization process involves an increase in the share of the total population living in urban areas. It is usually the consequence of three separate factors: natural population increase; migration to urban areas from rural zones or other countries; or the reclassification of rural territories as urban areas. While the first two are natural and hold few surprises, reclassification can artificially modify statistics and suggest misleading trends. It should be noted that the definition of “urban” varies considerably both from state to state and over time. In some

states, towns must meet minimum population requirements, while in others they have to comply with certain socioeconomic or cultural conditions (relating to the infrastructure, specific buildings and institutions that they house) These variations call for a flexible methodology when working with statistics about urbanization at the international level. In the present study, urbanization rates corresponded to the share of population living in towns with at least 10,000 inhabitants. Although the methodology chosen is only one of numerous possibilities, this practical approach allows appropriate international and temporal comparisons.

In order to better understand the statistical information revealed by the census data, we created a GIS database including maps of the territorial-administrative units of Romania during the study period. These maps, which will be published in a forthcoming book (Flora, ET AL), plot administrative change in Europe over the last 130 years. The map sources are diverse and include censuses, historical and government publications, official documents and other sources. The utilization of GIS maps helped us to detect and analyze spatial transformations in the Romanian economy with greater accuracy. Unfortunately, the territorial structure of Romania has undergone a series of internal and external modifications and this considerably limited the possibility of making meaningful long term comparisons of regional development. Nevertheless, in several periods the regions remained almost unchanged, and therefore comparable. For example, from 1859 until 1912 and from 1966 until 2002 (See figure13) the regional structure was stable and, with the exception of the territories gained after 1912, the regions used in both territorial systems are generally comparable. The administrative structure used in the census 1930 is also similar to the other two, although the regions used in the 1950s were completely different and incomparable with the rest.

To partially overcome the problem associated with the instability of regional borders, data series were created that monitored changes in the populations of Romania's largest towns. Furthermore, we measured the historical changes in the level of primacy of the capital Bucharest with respect to other major Romanian towns. Since the development of regions tends to strongly correlate with the growth of their respective main cities, we feel that it is reasonable to examine change at both the regional and urban levels. This two-tier approach permits a more suitable analysis of changes in the spatial composition of the Romanian state.

Figure 13 Romania's regions: 2002



Source: own elaboration

4.3 Historical Background

The modern Romanian state developed from the former Danubian principalities of Moldavia and Wallachia along with Transylvania. Taking advantage of the decline of the Ottoman Empire, the Romanians eventually achieved emancipation with the unification of Wallachia and Moldova in 1859. After the 1877-1878 Russian-Turkish war, Romania became completely independent from Ottoman control. In contrast to Greece, Serbia and Bulgaria, the new state had good economic potential, based on the production of cereals and livestock and the availability of forests and minerals. Towards the end of the 19th century, commodity exports made Romania an important factor in the world grain market and the resulting revenues permitted the importation of the machinery and materials required for the development of domestic industry. This potential was not, however, fully fulfilled due to domestic socioeconomic problems resulting from social unrest. Pre-communist Romania was characterized by social contrasts which were unprecedented even

within the Balkan zone; the peasantry, who were mostly serfs, lived in extreme poverty, while the landowning elite enjoyed excessive luxury and wealth.

The Balkan wars and WW-I brought the Kingdom of Romania a significant increase in territory: the annexation of South Dobrudja from Bulgaria; Transylvania and Bukovina from Austro-Hungary; and Bessarabia from Russia (see Figure 11). These new territories transformed the geographical political, ethnic and economic reality of Romania. The territory almost doubled in size and the kingdom was given a genuine possibility for industrial and economic growth with new territories that were rich in resources, and particularly minerals, and provided an enlarged national market. However, the Romanian state emerged from the war as a very economically, ethnically and socially heterogeneous unit. The former Austro-Hungarian provinces had the best infrastructure and were the most industrialized, but many production plants were now cut off from their traditional markets; furthermore, there were relatively few railway links across the Carpathian Mountains due to the previous frontier status of the region. The economic and cultural integration of the enlarged state required improvements to and reorganising the nation's infrastructure in order to adapt to the new reality. Additionally, major reconstruction was needed to repair war damage. The agrarian reform of 1921 broke up the country's large estates and gave more land and rights to the peasantry. The exportation of cheap wheat was no longer sustainable and the state needed to industrialize based on its own resources and its own market.

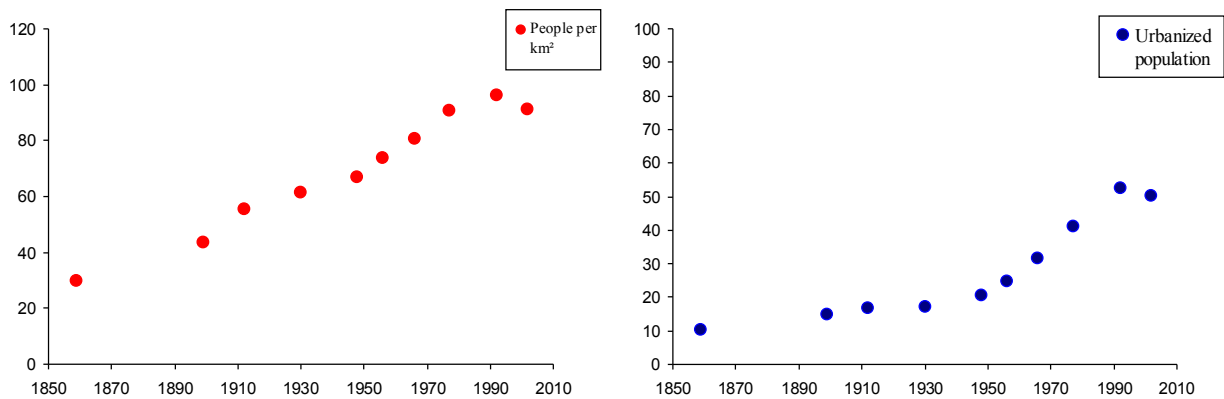
WW-II and its aftermath had an enormous impact on the country, with the replacement of the ruling elite and the implementation of a Soviet socioeconomic system. After WW-II, Romanian society entered an era of transformations. The state became part of the Soviet Block which implied a huge reorganization of both society and the national economy. Between 1950 and 1989 administrative and political systems were developed to incorporate every public institution and economic unit into a network that was controlled and managed by the Communist Party. Socialist ideology considered urbanization as development per se and secondary activities and heavy industry were given priority over services and agriculture. Industrialization mainly focused on rapid accumulation and obtaining quick returns on investment. During the totalitarian period, social engineering in Romania reached considerable heights, with attempts to "systematize" society, with the prohibition of abortion in order to increase the population, and with the severe economic hardship of the 1980s, etc. However, the excesses of the Ceausescu regime came to an abrupt and bloody end in 1989. The transition to a market oriented economy in the 1990s proved

difficult and, as a result, Romania suffered considerable economic difficulties, mass emigration and social problems. Nevertheless, in 2007 Romania together with Bulgaria became the latest members of the European Union, which could be viewed as a sign of a successful transition.

4.4 Population and urban development at the national and regional levels

Romanian society has undergone a great transformation since the unification of Wallachia and Moldavia (1858), with the share of its urban population increasing fivefold and population density tripling in less than 150 years (see Figure 14). However, the pace of the growth has varied over time and from region to region.

Figure 14 Levels of urbanization and population densities in Romania: 1859-2002



Source: Own estimations based on census publications.

4.4.1 Years of population growth: 1859-1913

In the middle of the 19th century, the state was largely rural with only one in ten Romanians living in towns with at least 10,000 inhabitants. By the end of the century, the urban population had increased to 15%. At the same time, population density grew from 28 to 45/ km². Although these numbers were high compared to Romania's neighbour Bulgaria, they were below average values for West Europe at the time. During the first decade of the 20th century the population density increased by almost 20% to 55 p/km². Even so, the urban share only increased by 2% compared to 1899 and Romania entered WW-I as a predominantly rural state.

The regional picture is more complex. During the second half of the 19th century there was no real change in the spatial concentration. Naturally, the most populated and urbanized regions were Ilfov: the region around the capital Bucharest, and the region around Iași, the former Moldavian capital. The regions near the Black Sea, which had remained rather underdeveloped, had the lowest population densities in the entire state. In terms of levels of urbanization, the leading region is also Ilfov, followed by three regions with similar levels of urbanization: Iași and the neighbouring regions of Covurlui and Braila, with the two major ports of Galati and Braila. The spatial and urban concentration of population did not experience any change during the first decade of the 20th century and therefore the maps for 1899 and 1912 are almost identical. However, the region of Tutova suffered a rather unusual decline in urbanization, with its main town of Barlad losing one third of its population between 1899 and 1912 (see figure 15 and 16).

4.4.2 The interwar period: 1920-1939

The authorities only managed to organize one census during the Interwar period (in 1930).³² This revealed a considerable increase in total population after WW-I, mainly because of the territorial expansion. The population density also increased to 61 inhabitants per km². This rather slow growth in population density could be partially explained by war losses: during WW-I, the Romanian territories lost more than 748,000 lives. There was also emigration to Hungary, although Romania's population generally remained within its national borders.

The interwar period was harsh for agriculture due to the fragmentation of holdings and a fall in productivity. The great depression further damaged the Romanian economy and, as a result, the increase in urbanization during the interwar period was more a consequence of the pauperization of the peasantry than of industrial growth. Many peasants moved from rural areas to the nearest major settlement or to Bucharest in search of non-agricultural income. Even so, the share of the urban population only increased by 1% and urban growth was mainly concentrated in Bucharest. In 1930 Bucharest had more inhabitants than the combined populations of the next six largest cities in the kingdom. There were three areas with high population densities; these were, the

³² Bulgaria, which had experienced great economic, political and social problems after losing two wars in the 1910s, managed to organize three censuses during the interwar period. Yugoslavia, which like Romania was one of the big winners of the war but experienced problems integrating its new territories and minorities, organized two.

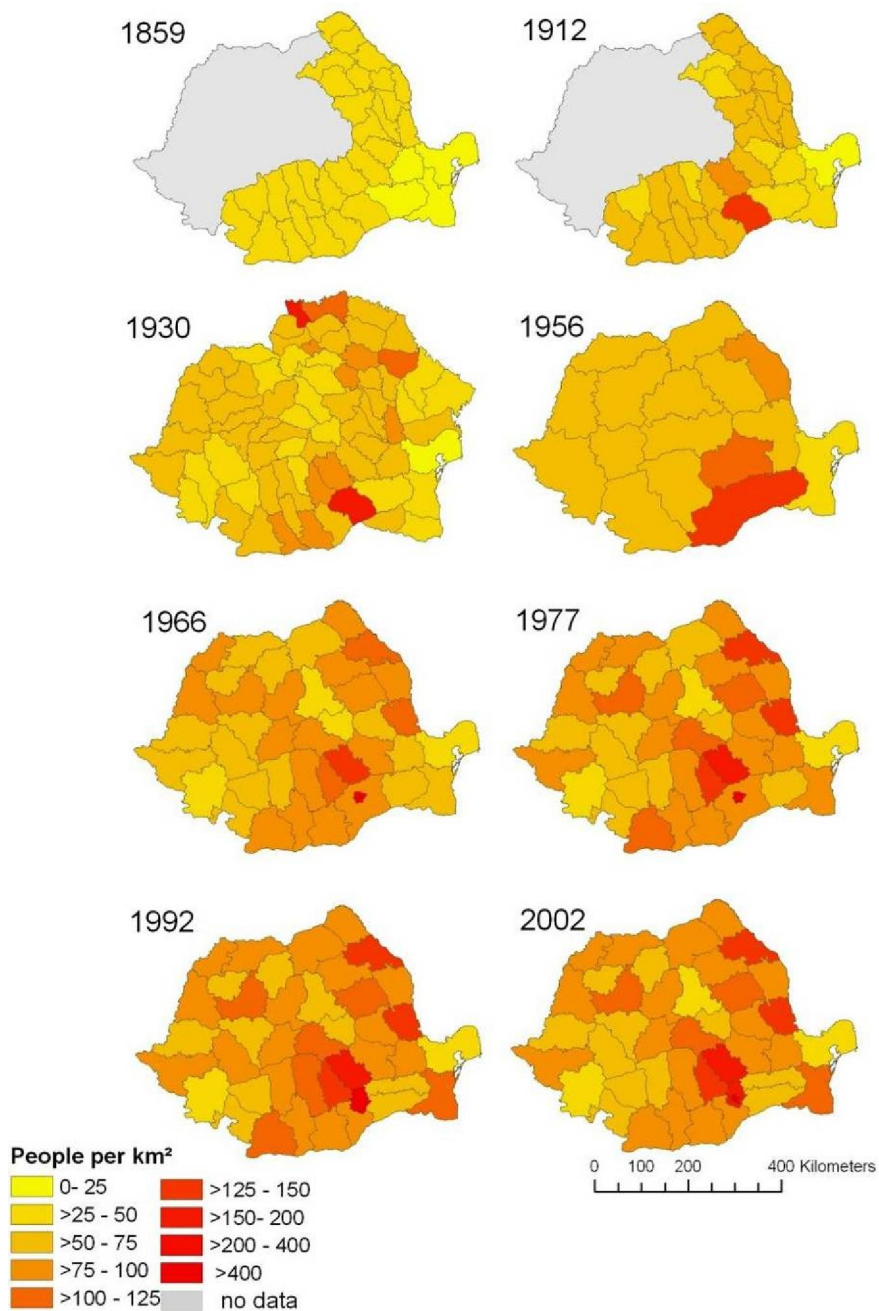
already mentioned, Bessarabia in the north, the new regions in the west and the regions along the Danube River in the south (see figure 15 and 16).

4.4.3 Decades of transformation: 1945-1989

The reforms introduced by the new rulers- the communist party- after WW-II transformed Romanian society. Collectivization cut ties with the land, forcing the young into factories in the major cities. Within three decades (1948-1977), the share of urban population doubled (from 20 to 41%) while population density rose to 90 per km². After the 1970s, this growth continued, but at a slower pace, and in 1992, two years after the fall of the Ceausescu regime, the percentage of urban population was around 52%. This increase came mostly from the growth of old towns and cities due to interregional migration rather than from natural growth or the development of a large number of new towns. The increase in the national level of urbanization resulted in a reduction in regional disparities, though some regions, such as Ilfov, Hunedoara and Cluj in Transylvania, and Constanta had higher than average levels of urbanization.

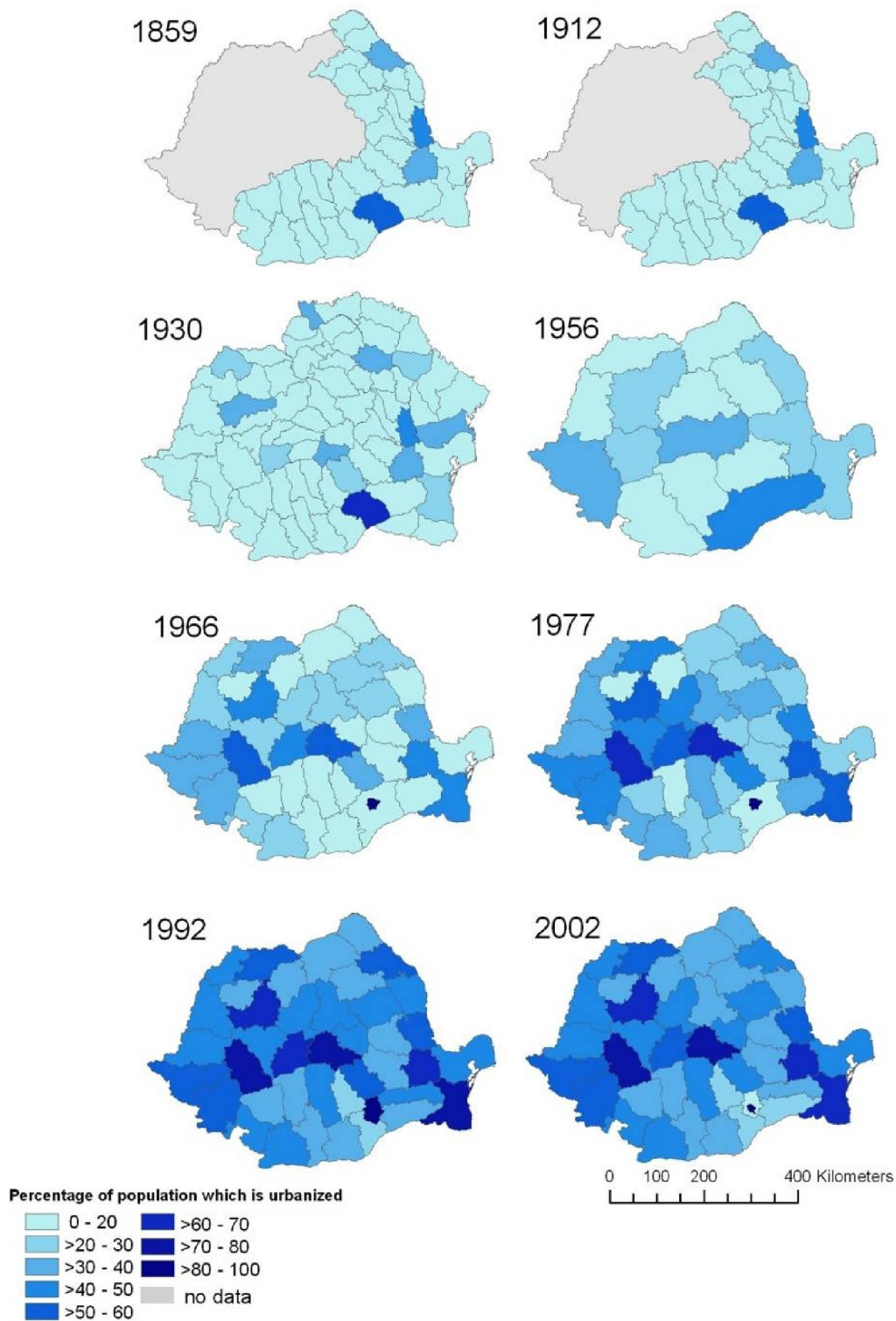
The population of Bucharest significantly exceeded those of all the other cities and by the 1970s it had approached two million inhabitants. The other major cities that grew considerably during the communist period were the Black sea port of Constanta and the old Moldavian capital of Iași. The growth of the latter was part of apparent trend in the redistribution of population from the west to the south-east of the country, and particularly to the Black Sea area, during the second half of the 20th century. The regions that lost population are Moldavia, Muntenia and Maramures. As a result, towards the end of the century, the eastern territories of Romania were significantly more populated than they had been at the start of it. Although the northeast increased its share of the total population, the towns and cities of this region did not grow at the same pace and the most of the immigrants from the countryside moved on to other regions. In contrast, in the West, and especially in the northwest, population was lost, but the level of urbanization increased considerably.

Figure 15 Romania: population growth at regional level 1859-2001



Source: Own calculations based on census data.

Figure 16 Romania: urbanization levels increase at regional level 1859-2001



Source: Own calculations based on census data.

4.4.4 Transforming again: 1989-2002

After 1989, due to lower fertility rates, the ageing population and – above all - emigration, the total population of Romania fell considerably. The level of urbanization also experienced a small reduction, falling to 50%. The removal of restrictions over internal and external migration unleashed a potential that had been accumulated for decades and many Romanians abandoned their places of residence in order to search for better economic and social possibilities. This affected the spatial concentration and caused the reversal of the trend of equal development that had characterised the previous decades. Romanian population then began to concentrate in several specific regions and cities. While the regions in the west, and, especially the territories obtained after WW-I, are still more urbanized than the national average, the greatest change in urbanization and density occurred in the Black Sea regions which started the 20th century as the areas of least population and with very low levels of urbanization, but have begun the 21st century as leaders in both categories. All these regional developments have been greatly influenced by the progressive development of Romania's transport infrastructure and especially of its railway network.

4.5 The development of the Romanian railway network

4.5.1 Railways before WW-I

The development of the railway network was a major factor behind the modernization of Romania in the late 19th century and it continued to play a leading role in the industrialization and socioeconomic development of the country well into the second half of the 20th century. The fact that the fifteen largest Romanian cities in 2002 were already connected to the railways in the 1870s demonstrates the historical influence of the railways over the present day economic geography of Romania.

The creation of an integrated national market after the removal of trade barriers in 1848, unification in 1859, and independence in 1878, as well as agrarian and fiscal reforms, paved the way for a boom in Romania's grain exports. This would, however, have been impossible without the development of the national railway system. The first railway line to be established in Romanian territory before WW-I connected the river Danube to the Black Sea. The Cernavoda-

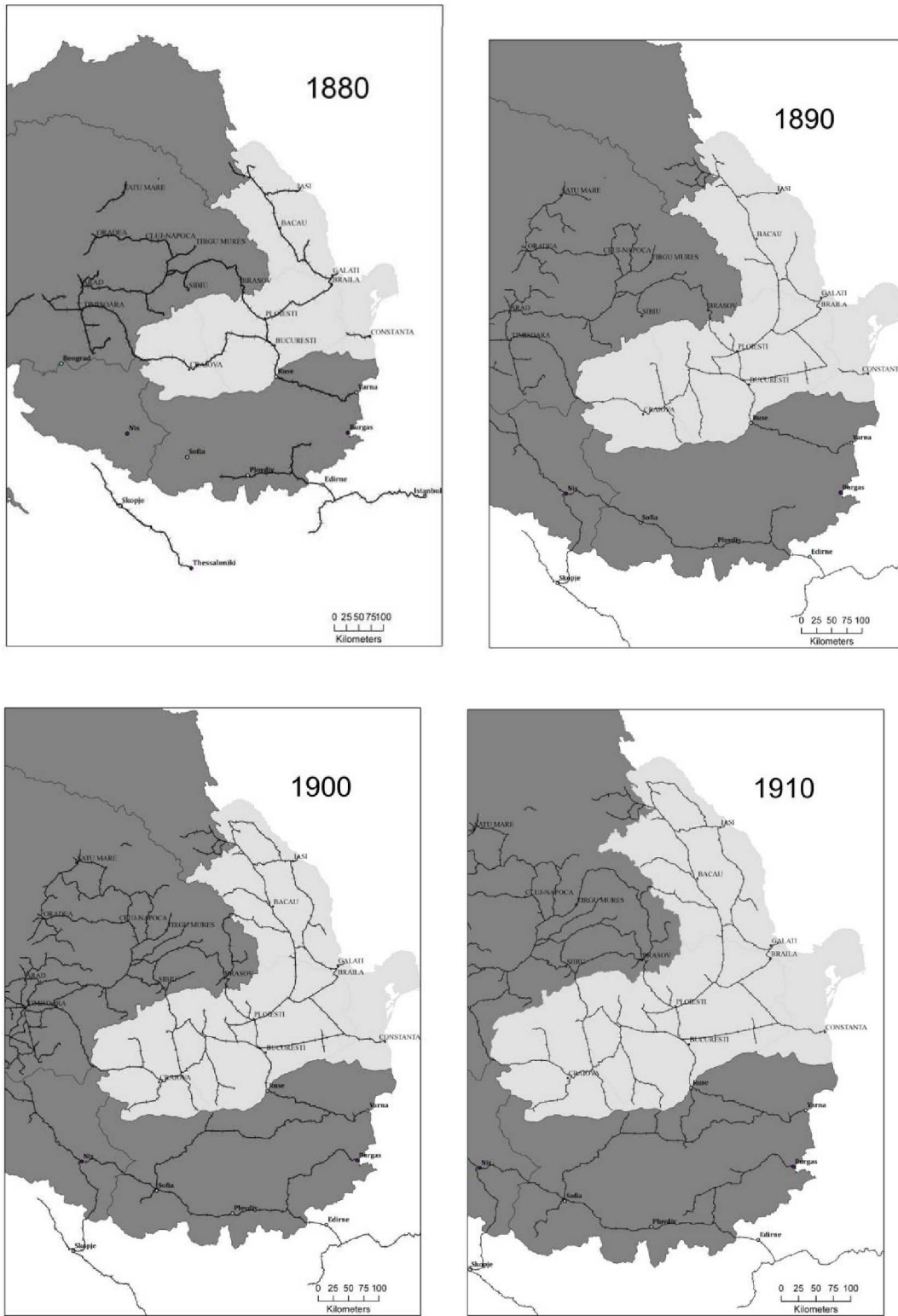
Constanta line was constructed by British engineers in 1860 and ran through what, at the time, was the Ottoman territory of Dobrudja.³³

In the beginning, the only practical projects were short, isolated, lines connecting the Danube ports with the interior. The first railway to be built in what was officially Romanian territory was the line from Bucharest to Giurgiu that was constructed in 1869; this was soon followed by larger projects. Iași was connected by rail in 1870 and Galati in 1872. The line from Galati to Bucharest and Pitești (1872) then reached Varciorova on the Austro-Hungarian frontier in 1875. In Transylvania, the railway links were naturally oriented towards the west. The connection between Brasov and Bucharest via the Prahova valley was completed in 1879. Construction continued during the 1880s and 1890s and connections between Bucharest and Moldavia were improved in 1881, while the capital was linked with Constanta in 1895. The number of cross border lines was also increased, with connections with Reni (1877), Ghimet-Palanca (1899) and Raul Vadului (1901); existing lines were also improved and extended (Turnock, 2001).

In the late 19th century, international interest in receiving Romanian grain exports and the consequent availability of foreign capital allowed Romania to build a railway network that was much superior to those of other Balkan states (see Figure 17). During the first decade of the 20th century, Romania's socioeconomic problems and the efforts of its neighbors, and particularly Bulgaria, reduced these differences. Nevertheless, before WW-I, Romania had a better developed railway network than any of the other Balkans states (Serbia, Bulgaria and Greece).

³³ On the other side of the border the British built a similar, parallel, but longer, line connecting Ruse and Varna; this was also the first railway line in the future Bulgarian territory.

Figure 17 the Romanian railway network in the context of the Balkans: 1880-1910



Source: own elaboration

4.5.2 The Railways after WW-I

After WW-I, Romania's infrastructure needed a fundamental reorganization; the newly acquired territories were cut off from their previous economic ties and although the territories gained from Austro-Hungary enjoyed the benefits of well-developed railways, they still had to be integrated into the Romanian network. There was great interest in the Black Sea and Danube ports and in expanding traffic associated with trade with the Middle East and beyond, in which the Romanian ports had an important role to play. However, the socioeconomic problems of the interwar period limited ambitious plans for the expansion. As a result, in the 1920s, it was only possible to extend the Roman-Bacesti line as far as the Vaslui-Iași line, at Bucharest (1921), and to complete the line between Arad and Oradea. Later, just before WW-II, Resita was connected to Caransebes, Vatra Dornei to Liva Mica and some lines in Dobrudja were also connected to Mangalia and Tulcea.

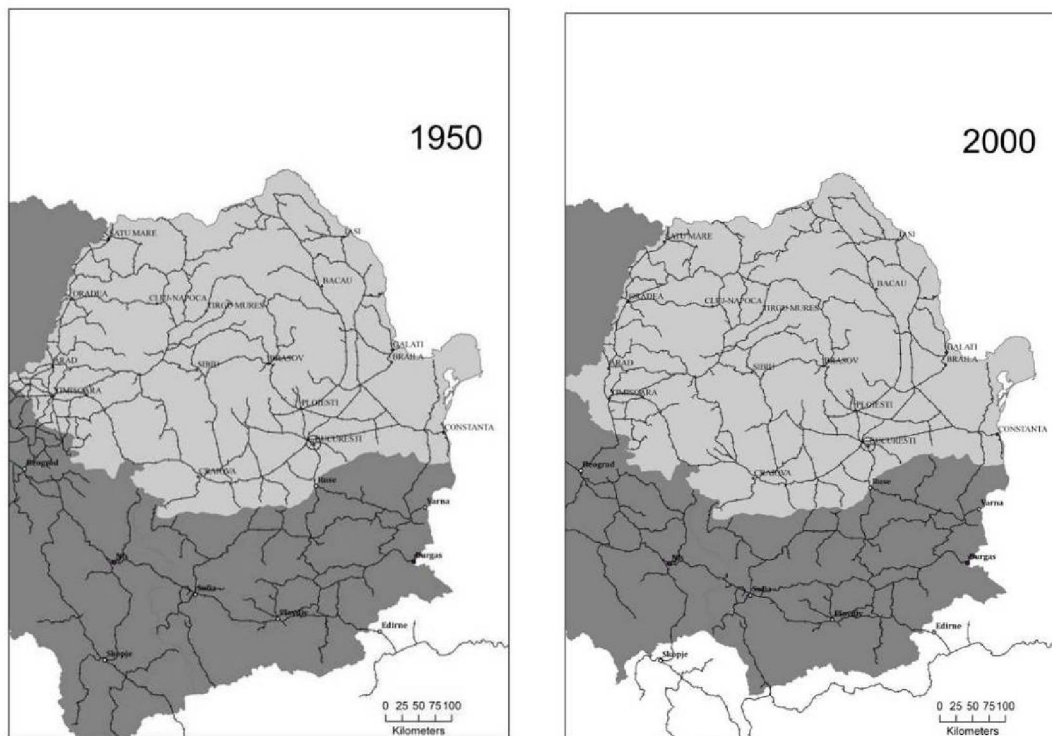
4.5.3 The Railways after WW-II

After WW-II, railways continued to play a crucial role for the socioeconomic progress of Romania. In the 1950s, they were clearly the most important transport medium, being responsible for 94% of passenger traffic and 83% of ton/kilometre freight shipments.³⁴ Considerable railway construction took place in the 1940s and 1950s with the completion of the lines from Tecuci to Urziceni, Bucarest, Rosiorii de verde and Craiova, the link between Tirgu Jiu and Petrosani (Bumbesti-Livezeni) and the branch line from Salva to Viseude Sus in Maramures. Then, in 1964, a new line from Suceava to Gura Humorului replaced the earlier line from Darmanesti.

Although, rail traffic increased considerably during the following decades, the network was gradually electrified and narrow gauge lines were essentially restricted to the former Hungarian territories, the overall importance of railways declined. Road and sea transport became more important for both passengers and goods and railways ceased to play such a pivotal role in urban and regional development. The main lines of Romania's modern railway network had been established by the 1950s and the changes that took place during the last decades of the 20th century, with the construction and closure of lines, were largely insignificant. (See Figure 18)

³⁴ Turnock, D. (1986). "The Romanian economy in the twentieth century", St. Martin's Press, New York, p 223.

Figure 18 Romania's railway network: 1950-2000



Source:own elaboration

Railways and ports have played a crucial role in shaping the urban network and regional centres grew particularly rapidly after the arrival of the railway. Moreover, railway access was also a major consideration when selecting administrative centres. Together with industrialization, the development of infrastructure has had a major influence on the organisation of Romania's spatial economic order.

4.6 Spatial and urban modifications in the Romanian economic hierarchy

Constant political and territorial changes played an imperative part in the spatial development of Romania. In line with territorial changes, infrastructural developments and political transformations, many cities and regions experienced periods of fast modernization and progress while others suffered relative decline or simply advanced at a slower pace. The most notable developments of the last 150 years have been the remarkable expansion of the capital, Bucharest,

and the notable growth of the Black Sea city of Constanta. These two cities were among the greatest beneficiaries from the development of new infrastructure, while the historical cities of Iași, Braila and Galati suffered the negative consequences of these political and infrastructural changes.

4.6.1 The development of the capital Bucharest

Over the entire period, the greatest transformation occurred in and around Bucharest. Before unification in 1859, Moldavia and Wallachia had developed in parallel, with their own national institutions, including their respective capitals of Iași and Bucharest. At the beginning of the 19th century, Wallachia was part of the Ottoman trade network and was economically less developed than either Moldavia or Oltenia further to the north, which benefitted from their economic ties with the Habsburg Empire. However, towards the end of the century, with the creation of the railway network and a series of political changes and economic reforms, Wallachia became the most developed province in terms of its urban settlements and infrastructure. In 1859 the population of Bucharest was almost twice the population of Iași, while a century later the former had eleven times more inhabitants than the latter. The previously mentioned political events and the construction of the railways played a pivotal role in the development of the capital. The independence of Romania made Bucharest the economic and transport centre of a state with good potential for economic growth. It had a population that constantly increased over subsequent decades and by the beginning of the 20th century it had a larger population than the other Balkan capitals of Belgrade, Athens and Sofia combined. The importance of Bucharest within Romania continued to increase until the industrialization of the 1950s and 1960s. Although differences between the capital and the second tier of Romanian cities were reduced during the communist period, in 1977, Bucharest still had a larger population than the next seven cities together. The Romanian capital is a clear example of a primate city that has experienced continuing growth in population and infrastructure; in this respect, it is a typical Eastern European capital.

According to the infamous Zipf's Law, within a country, the distribution of city sizes normally follows a Pareto distribution with a Pareto index equal to 1. However this rule does not apply for Romania.

We calculate the primacy of the capital as suggested by Rosen and Resnick (1980): by comparing the ratio between the largest city and the sum of the next five cities (Primacy I) and the ratio between the largest city and the sum of the next 30 cities (Primacy II). Rosen and Resnick

use the top 50 towns and cities to measure primacy II, but because of the late urbanization of Romania, we decided to reduce the size of this group to 30 (See Figure 19).

According to both results, the importance of Bucharest within Romania constantly increased until it peaked in the 1940s. Before the socialist reforms and the true start of national urbanization and industrialization, urban and economic growth was concentrated in the capital. The territorial gains after WW-I made Bucharest the most important city in one of the largest states in Eastern Europe and exacerbated the inequality between Bucharest and the rest of Romania's settlements. The year 1948, which was representative of the interwar period, saw Bucharest with more inhabitants than the next eleven Romanian cities combined.

The implementation of the Soviet system and an overall increase in national levels of urbanization had levelling effect on urban and regional development and the gap between the capital and the rest of the state was then reduced under communist rule. During the communist period, the second tier of cities subsequently remained far behind the capital, but they generally grew faster than Bucharest. After the 1960s, as in many other East European countries, Romanian governments followed a policy of balanced regional development which included increased investments outside Bucharest combined with restrictions over internal migration.

Figure 19 Evolution of the primacy of the capital Bucharest within Romania

	Bucharest	Next five cities	Next 30 cities	Primacy I	Primacy II
1859	121734	166931	-	0.73	-
1899	276178	287320	-	0.96	-
1912	341331	320101	755205	1.07	0.45
1930	639040	531650	1671393	1.20	0.38
1948	1041807	515123	1616125	2.02	0.64
1956	1177661	648335	2021856	1.82	0.58
1966	1366684	835686	2718805	1.64	0.50
1977	1807239	1310666	4164913	1.38	0.43
1992	2067545	1683864	5617225	1.23	0.37
2001	1926334	1569573	5180003	1.23	0.37

Source: own estimations based on census publications.

Although Bucharest lost population after the fall of the Ceausescu regime, the economic problems of the last 20 years and the removal of restrictions on migration have led to stabilization in the gap between the capital and the rest of the state. Romanian citizens now find themselves free to move to other places that offer greater socioeconomic opportunities and many have chosen either to leave the state or to move to Bucharest.

Meanwhile, the former Moldavian capital of Iași lost its administrative functions and suffered economic eclipse due to the decline in Black Sea-Danube commerce in the late 19th century. Furthermore, the city was badly destroyed during WW-II and lost its large Jewish community. During the first decades of communist rule, the position of Iași within Romania's urban hierarchy was further reduced and, at one point (in the 1950s), five other Romanian cities had more citizens than the former Moldavian capital. Nevertheless, during the second half of the century, Iași gradually recovered and entered the 21st century as Romania's second largest city. The position of Romania's second largest city had been held by Chisinau during the interwar period, Cluj-Napoca in the 1950s and 1960s, Timisoara in the 1970s and, most recently, by the country's largest port, Constanta. All of these "second tier" Romanian cities are similar in size and they had all continuously grown at a similar pace during the 20th century. The only exception to this trend was Constanta which, due to its strategic position and with the help of infrastructural developments, outgrew the other Romanian cities during the 20th century.

4.6.2 Comparisons between the Danube and Black Sea regions and settlements

Another key development during this period was the progress made by Romania's port settlements and their respective regions. Romania has three groups of ports: The Danube ports in the south, which are important for trade with Central Europe; the twin ports of Braila and Galati, in the north; and the Black Sea ports. Although the Danube flows into the Black Sea in Romanian territory, its delta is divided into three main branches, none of which is well-suited to navigation. Braila and Galati are accessible via the Sulina branch of the Danube, but shipping carriers are limited to a 25 000 ton capacity. In this context, the balance between the three groups of port settlements depended on political circumstances and infrastructural developments; the latter included the construction of railway lines and canals and improvements in port facilities.

In the middle of the 19th century, the twin harbours of Galati and Braila, which respectively served the principalities of Moldavia and Wallachia, were the most important Romanian ports. Interestingly, after unification, both cities continued to develop, in parallel, at a similar pace and they would probably eventually merge to become a single unified city. However, following the creation of the Romanian state in the 19th century their growth was checked by the development of the Danube ports to the south and the emergence of Constanta on the Black Sea.

Before WW-I, the Danube was more important for Romanian trade than the Black Sea and governments favoured the development of the Danubian ports.³⁵ The first railways were built to connect the inland territories with the Danube (*by 1912, all of the major Romanian ports on the Danube were connected by railways, whereas only three Bulgarian river towns enjoyed such access, with one of these constructed back in Ottoman times*). The Romanian ports also received large-scale investment for the improvement of their harbour facilities. The main objective was to facilitate the exportation of Romanian cereals to Central and Western Europe.

In 1878, Constanta and the rest of Northern Dobruja were ceded to Romania by the Ottoman Empire. The new territories contained large minorities and had formed part of the Ottoman Empire for a long time. As a result, during the decades after 1878, these territories remained largely underdeveloped and under populated. However, Constanta became Romania's main seaport and was gradually converted into the transit hub for many of Romania's exports and by the 1930s, over half of Romania's national exports passed through its harbour. Moreover during the communist period Romania developed major Sea Fleet which further increased the role of the Constanta harbour. The authorities clearly favoured the development of Constanta as an important infrastructural hub for international trade and, after an initial failed attempt in the 1950s, connected the Danube to the Black Sea in the 1980s via the Constanta–Chernavoda Canal; this was the single most expensive project in Romanian history (Turnock). The port facilities were also greatly improved in the 1970s. Hence, while at the beginning of the 20th century seventeen Romanian cities had greater populations than Constanta, eight decades later, during last years of the communist regime, Constanta was the second largest city in the state.

Compared with Constanta, the importance of the historical ports Braila and Galati greatly diminished. Until 1984 Braila and Galati still enjoyed certain advantages in terms of connections

³⁵ Kostov, A., "Trade and Navigation on the lower Danube: Romania and Bulgaria 1880-1912," in Andreas Kunz and John Armstrong (eds.), *Inland Navigation and Economic Development in Nineteenth-Century Europe*, Mainz, 1995, p. 105-119.

with Danube and Black Sea transport, but with the completion of the canal, this changed. The direct connection between the Danube and the Black Sea also had a positive impact on the towns, cities and regions along the River Danube.

The balance between the Romanian ports has been the result of a complex set of factors that have included: the construction of railways and canals, investments in port facilities, international economic (trade) relations, and territorial and political developments. Variations in these factors determined the economic and population balance between the three groups of ports, which shifted frequently. The more rapid growth of Constanta was the natural result of its geographical position; once the Romanian economy opened to international trade and transport costs were reduced by the development of the railway network and the construction of the canal, the Black Sea city outgrew the other ports.

4.6.3 Transylvania and Bukovina

The integration of the former Austro-Hungarian provinces of Bukovina and Transylvania has been an important issue in Romania's internal development ever since their acquisition after WW-I. Although these new provinces were rich in resources and initially more developed than other regions of Romania, the post WW-I borders cut them off from their previous economic ties. For example, the railway network of Bukovina and Transylvania was mainly oriented towards Austro-Hungarian territory. The new reality was particularly difficult for two of the most important cities in the new territories: Arad and Oradea, which are located almost on the border with Hungary and which were literally cut off from their natural hinterland. Over time, the importance of Arad and Oradea has gradually declined. Even so, they still remain important centres. Other towns in the regions which are better positioned for the new reality, as Cluj-Napoca, Timisoara and Brasov, have now become established as leading centres within Romania, having experienced stable economic development during the second half of the 20th century.

4.6.4 The hierarchy of Romanian towns and cities

The most important towns in Romania in the late 19th century were Bucharest, Braila, Galati, Iasi, Craiova, Ploesti and Botosani, all of which had populations of over 30 000 in 1899. The acquisition of several new cities, including Brasov, Cluj, Arad, Oradea, Timisoara and Chisinau, after WW-I naturally altered the country's urban hierarchy. In fact, Chisinau was the country's

second largest city during the interwar period, but it was lost after WW-II. The previously mentioned Oradea and Arad declined due to the loss of their economic ties with Hungary and gradually fell out of the group of the ten largest Romanian settlements.

Although urban population growth really started in earnest in the 1950s, the Romania's modern urban structure was largely shaped before WW-II. It is important to underline that there have been no significant changes in the group of the ten most populated cities in Romania since the 1960s. This group includes Bucharest, Iasi, Cluj, Timisoara, Constanta, Craiova, Galati, Brasov, Ploesti and Braila. It should be noted that most of Romania's largest cities are located on or near the country's periphery; for example, Bucharest, Iasi, Constanta, Galati, Braila, Timisoara, and Craiova are all located within 80 km of external borders. The only exceptions are Brasov, Cluj-Napoca and Ploesti.

4.7 Conclusion

Romania society has undergone a process of profound socioeconomic transformation during the last 150 years. From being a vassal state of the Ottoman Empire with a rural population of approximately 90%, Romania has become a member of the European Union with half of its population now living in large or medium-sized settlements. During this period, Bucharest, the former capital of Walachia, has become established as Romania's leading economic centre, while Iasi, the old capital of Moldavia, has become part of large group of second tier cities of similar sizes. Other spatial transformations have included the development of the Black Sea regions, and particularly of the city of Constanta, which has become a major international port, and the integration of the former Austro-Hungarian provinces of Bukovina and Transylvania.

Empirical data reveal a visible relationship between the development of new infrastructure and changes in regional composition, with railways and canals playing an important role in the shaping of Romania's modern regional and urban hierarchy. The growth of Bucharest and Constanta has, to a large extent, been the result of advances in infrastructure. There has also been a strong connection between institutional change and socioeconomic developments. Territorial expansion after WW-I, the arrival of the soviet army in 1944, and the end of the totalitarian

regime in 1989, have all played their part in breaking the previous pattern of socioeconomic development in Romania.

Even so, it must be stressed that the link between socioeconomic transformations and changes in spatial order is less clear than we had imagined at the beginning of this research. While the establishment of Bucharest as the national capital and the decline of Iasi could largely be attributed to the political unification of Moldavia and Walachia and the decline of Arad and Oradea would seem a direct result of border changes after WW-I, most of the other changes that have taken place have probably been the result of infrastructural developments. The main increase in urban population during the communist push for modernization took place in what had previously been the leading towns, cities and regions; the only notable exception to this was Constanta, which benefited from advances in transport.

Finally, it must be added that there is a visible link between political changes and the level of spatial disparities, particularly after WW-II. While communist rule had a leveling effect on Romania's regions, economic difficulties seem to have promoted a concentration of population.

Chapter IV. Before, during and after Yugoslavia: Demographic, urban and transport infrastructure indicators from Yugoslavia and its successor states.

"I am the leader of one country which has two alphabets, three languages, four religions, five nationalities, six republics, surrounded by seven neighbors, a country in which live eight ethnic minorities". Tito³⁶

5.1 Introduction

The focus of the third chapter is the area of modern Serbia, Croatia, Slovenia, Bosnia and Herzegovina, Macedonia, Montenegro and Kosovo, which formed Yugoslavia between 1918 and 1990.³⁷ During the 20th century, the region experienced unprecedented, even for the standards of the Balkans, political, economic and territorial instability, which profoundly affected its socioeconomic development.³⁸

The transformations started with the disintegration of the Austro-Hungarian and Ottoman Empires, and the creation of the Kingdom of Serbs Croats and Slovenes in the aftermath of WW-I. The territory of the new Kingdom covered around 255,000 km² and stretched from Bulgaria in the East to Italy in the West, and from Austria and Hungary to the Adriatic Sea. Interwar Yugoslavia was a centralized, state governed and firmly controlled by the Serbian royal dynasty and elite, who endeavored to eradicate historical and cultural differences and create a new strong and united Slavic nation. This model proved to be unsuccessful and Royal Yugoslavia collapsed at the beginning of WW-II. After the war, Yugoslavia resurrected in the form of a socialist federation of six republics and two autonomous regions. The new federal model guaranteed the national governments significant autonomy inside the economic system that combined soviet with western practices. In the early 1990s, after the breakup of the SFRY (Socialist Federal Republic of Yugoslavia), from the territories of Yugoslavia emerged the sovereign states of Serbia,

³⁶ Davies, Robin. "A Valedictory Letter from Sarajevo: behind Ethnic Cleansing". http://hdr.undp.org/docs/network/hdr_net/HDR2005/bosniawar.rtf. Retrieved 2008-06-25. Paraphrased in: "Socialism of Sorts". TIME Magazine. 1966-06-10. <http://www.time.com/time/magazine/article/0,9171,942012,00.html>. Retrieved 2008-06-25. Altered in: Borrell, John (1990-08-06). "Yugoslavia The Old Demons Arise". TIME Magazine. <http://www.time.com/time/magazine/article/0,9171,970851-1,00.html>. Retrieved 2008-06-25.

³⁷ Yugoslavia actually means South Slavs, which is a classical misnomer, as the other Slav nation Bulgaria did not form part of the federation. Geographically Bulgaria is more southern than Serbia, Croatia or Slovenia.

³⁸ Including several military conflicts: The Balkan wars - 1912-1913, First World War in 1914-1918, Second World War 1940-1945, the military conflicts that followed the breakup of Yugoslavia 1991-1995 and the Kosovo War in 1999.

Montenegro, Bosnia and Herzegovina, Macedonia, Croatia, Slovenia and most recently Kosovo. During the 1990s, all the states adopted the western models of a market oriented economy with varying success.

The hypothesis of the current work is that each of these geopolitical transformations had a pattern breaking effect on economic development, the spatial concentration of the population and the regional inequality of Yugoslavia, as the local economies had to adapt several times to altered territorial and political realities. The other determinant for the spatial growth was the development of modern transport, particularly the railways. The development of the railroad network was also affected by the political transformations and became an important tool for the integration of Yugoslavia. In this particular function the evolution of the railway network and its influence over the distribution of the population is also a subject of the current study.

Figure 20. Yugoslavian successor states in 2011



Source: own elaboration

As explained in the introduction of the thesis, to test the declared hypothesis we have constructed a database with historical, statistical, geographical and transport information about the

region. This will permit important observations over the population growth, the urbanization at national and regional level, and the development of the urban network of Yugoslavia in long run.

The first section of the chapter centers on data availability and the administrative and territorial changes in the region during the period of observation. As explained in the introduction of the thesis, the main difficulties of the study come from the constant changes in the national and administrative borders and the lack of homogenous historical information at regional level. The case of Yugoslavia is no different. The next section is a short account of the political changes, and particularly the political efforts for integration of the region during the 20th century. The third section reflects on the integration of the railway infrastructure, which played a significant part in the economic and political integration of Yugoslavia. The 4th and 5th sections explore the evolution of population density and the increase of the urbanization levels at federal, republican and regional level. The results are associated with political and economic changes. The chapter concludes with a section focusing on the development of the urban network and the role of political and economic changes, and railway construction in the growth of the cities and urban disparities.

5.2 Territorial changes and Data collection

As indicated previously, the area of study went through frequent border and political transformations. As a result, the data had to be collected from census publications issued by different states.

Figure 21. Census publications used in the study

<i>Austria – Hungary (Slovenia, Croatia)</i>	<i>Bosnia and Herzegovina</i>	<i>Yugoslavia</i>	<i>Serbia</i>	<i>Successor states</i>
1859	1879	1921	1860	1992 (Croatia)
1869	1885	1931	1890	1994 (Macedonia)
1880	1895	1948	1895	2001 (Croatia)
1890		1953	1900	2001 (Macedonia)
1900		1961	1905	2001 (Slovenia)
1910		1971	1910	2003(Montenegro)
		1981	1991	
			2001	

Source: Own elaboration

Yugoslavia emerged on the European map after WW-I in the territories previously shared by two Empires and four independent states (see Figure 22). These included: Serbia - which annexed

during the Balkan wars (1912-1913) what is known now as Kosovo; Macedonia and half of the Ottoman province Sandjak; Montenegro - independent since 1878 and expanded in 1912-1913 through the other half of Sandjak; large parts of Austro-Hungary: that included both former Austrian and Hungarian lands: Carnolia and Dalmatia. Moreover, parts of Styria, Carinthia and Austrian Littoral, the Hungarian province Croatia - Slavonia and parts of Hungary: Baranya, Bácska, Banat, Prekmurje, Medimurje, Fiume and Bosnia and Herzegovina; and finally, minor territories that were previously part of Bulgaria - Tzaribrod and Bosilegrad.³⁹

Figure 22. The states in the Western Balkans in 1910 and 1930



Source: Own elaboration

³⁹ Milojevic, Borivoje Z., "The Kingdom of the Serbs, Croats, and Slovenes: Administrative Divisions in Relation to Natural Regions" *Geographical Review*, Vol. 15, No. 1 (Jan., 1925), p 70.

Consequently, the data referring to the period before 1918 was mainly extracted from census publications of Austro-Hungary and Serbia. Both states kept statistical records that were reasonably well organized and adequate for the standards of the time. Croatia, Slovenia and modern Northern Serbia formed part of Austro-Hungary and data on these territories was taken from imperial censuses issued in 1857, 1869, 1880, 1890, 1900 and 1910. Although, Bosnia and Herzegovina had also been under Austro-Hungarian control since 1878; only special enumerations were conducted in the province by the Austro-Hungarian authorities in 1879, 1885, 1895 and until 1910 when Bosnia and Herzegovina were effectively included in the last census of Austro-Hungary.

Meanwhile, Serbian authorities had been issuing national enumerations regularly since the mid 19th century. The current research uses data at national level from the 1830s onwards, while the regional data is from the censuses taken in 1890, 1900 and 1910. However, the territory of Serbia during the 19th century was only a fraction of the present one (see Figure 23). Unfortunately, the pre-1914 regional data for the other territories of Yugoslavia is incomplete.

Figure 23. Differences in the territory of Modern Serbia and the kingdom of Serbia in 1911

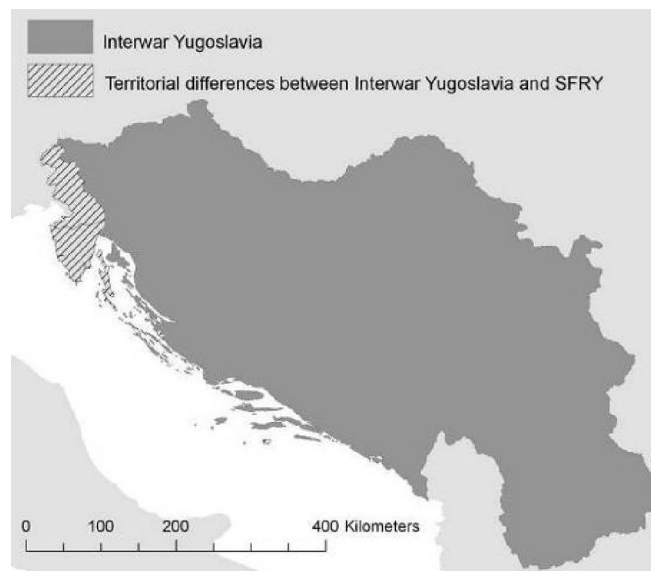


Source: Own elaboration

The data on all states for the period 1921-1991 was taken from the censuses issued in Yugoslavia with the exception of the territories that, during the interwar period, were under Italian control and whose data is available in the Italian censuses of 1921, 1931 and 1936.

The introduction of the new constitution in 1921 was followed in 1922, by the adoption of a new territorial structure. The country was subdivided into 33 regions (oblast) ruled by the central government. The new “oblast” units had no relation with earlier administrative divisions. They were used in the first census of what was initially called Kingdom of Serbs, Croats and Slovenes and took place in 1921. The next one was carried out in 1931 through a new and unique administrative framework. In 1929, in an effort to strengthen and consolidate the new state, the government abandoned and replaced the 33 “oblasts” with nine macro regions that functioned only until WW-II. The new regions did not correspond to boundaries between ethnic groups or to pre-World War I imperial borders. The population data from 1921 was recalculated according to the new divisions and is available in the publication of the 1931 census.

Figure 24. Territorial differences between interwar and socialist Yugoslavia



Source: Own elaboration

After WW-II, the concept of a three nations state was revised and after WW-II, Yugoslavia officially consisted of six nations and two autonomous regions: Together, with the original three nations Serbia, Croatia, and Slovenia, the status of republics and nations was given to Macedonia, Bosnia and Herzegovina, and Montenegro. The boundaries of the republic of Bosnia and

Herzegovina were similar to those of the Austro-Hungarian province Bosnia and Herzegovina. However, the socialist republic of Serbia was larger than the state of Serbia that existed before WW-I. It included territories annexed in the 1910s from Austro-Hungary, the Ottoman Empire and Bulgaria (see Figure 23). The Socialist republics Montenegro and Croatia were also larger than the 19th century Montenegro and the Hungarian province - Croatia and Slavonia, respectively. Later in 1974, Serbia was additionally divided internally, as the Albanian population received autonomy in Kosovo and Metohija, and the Hungarians in Vojvodina.

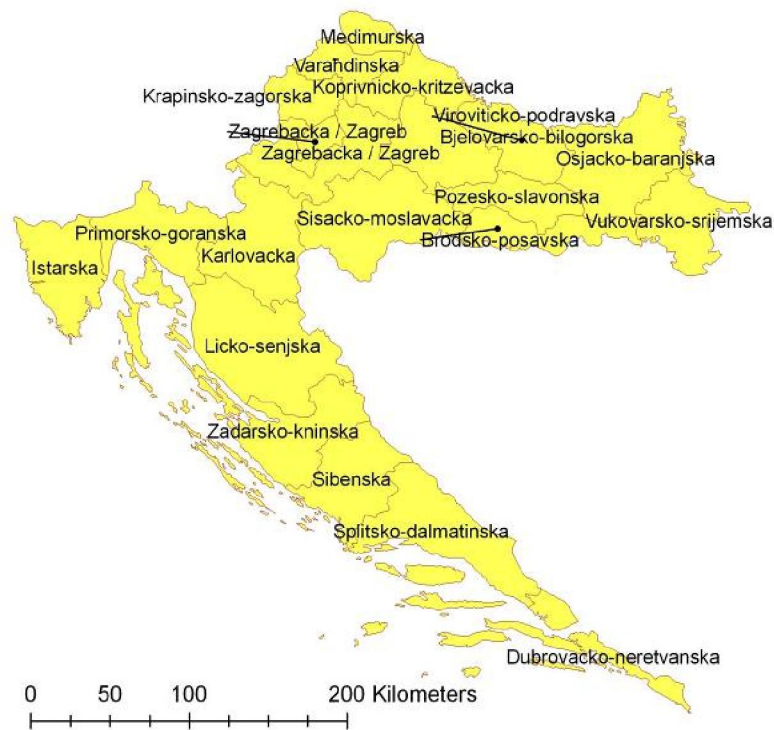
The interwar administrative divisions were dropped and the six republics effectively became the second administrative level of Yugoslavia. Post WW-II Yugoslavia did not have the intermediate NUTS 3 type regional subdivision; therefore, a large part of the information for the period 1948-1990 is at republican level. The exceptions are Croatia and Serbia where the data has been recalculated historically within the current NUTS 3 subdivisions. In Serbia, it goes back to 1948 and includes 25 regions (see figure 25), while in Croatia the regional data has been available since 1857 (see Figure 26).

Figure 25. Modern Serbian regions



Source: Own elaboration

Figure 26. Croatian zupanja (regions)



Source: Own elaboration

The first post-WW-II enumeration took place in 1948. It did not cover Zone B of the city of Trieste.⁴⁰ Until the dissolution of Yugoslavia, regular censuses had been taken every decade - 1953, 1961, 1971, 1981 and 1991. In the early 1990s, SFRY (Socialist Federal Republic of Yugoslavia) disintegrated and was succeeded by the sovereign states of Serbia, Montenegro, Bosnia and Herzegovina, Macedonia, Croatia, Slovenia and most recently Kosovo.

Since 1990, enumerations have been issued regularly by the successor states. The exceptions are Bosnia and Herzegovina, and Macedonia. As previously noted, due to the civil war and the lack of a strong central power, the data on Bosnia and Herzegovina is only partial, while in Macedonia the first census in 1991 was hampered by the refusal of the Albanian minority to participate. When the political issues were temporarily settled, the authorities issued a new enumeration 3 years later. The data for all states since 1990 is at regional NUTS 3 type level. Only the smallest SFRY republic Montenegro is presented at the national level.

⁴⁰ Kosinski, L. A., *Population...* p.285

After the territorial and administrative changes the focus moves towards the efforts for the political integration of Yugoslavia.

In order to understand the spatial and economic transformations in Yugoslavia one needs to take an account for the internal political transformations that occurred during the 20th century.

The new state, initially named Kingdom of Serbs, Croats and Slovenes, faced challenging difficulties with its integration. While the rest of the Balkan countries were already highly centralized and relatively homogeneous, the Kingdom remained an agglomeration of regions with a distinctive historical and cultural heritage and was geographically divided by mountains and rivers.⁴¹ Culturally Yugoslavia was internally divided by the borders between Orthodox and Catholic traditions, between Ottoman and Austro-Hungarian political and economic heritage, and between the Latin and Cyrillic alphabets. As a result, the population of the former Austro-Hungarian lands was mainly Western Christian, the population of Serbia, Macedonia and Montenegro followed the Eastern Orthodoxy, while a large part of the population of Bosnia and Herzegovina, and Kosovo were Muslims. Moreover, the state had to rebuild from the ravages of war, integrate the different currencies and custom areas, and repair, reorganize and improve the railway network. At the same time the economy was in dire need of capital and skilled workers.

To solve these problems King Alexander and the Serbian elite chose a path of extreme centralization and although, the Kingdom was founded as a three nations state, the interwar Yugoslavia adopted a centralized administrative system where Serbian leadership and primarily the Serbian King held firm control. The resistance of the other ethnic groups led to tense political and social atmosphere that often ended in bloody incidents. Infamous examples are the shooting of five Croat deputies in the National assembly by a Serbian colleague in 1928 and the notorious assassination of the Yugoslavian King in Marseille (1934).⁴² As a result, at the beginning of the WW-II, Yugoslavia disintegrated rapidly only to be resurrected towards its end on entirely different bases.

The royal dynasty and the interwar leadership were replaced by the communist party with its charismatic leader Josip Broz Tito who, during the war, led the resistance against German occupation. The concept of a three nation's state was revised and Yugoslavia reemerged as a

⁴¹ At most, the other countries in the region had one large minority like the Turks in Bulgaria or the Hungarians in Romania.

⁴² One of the earliest political assassinations caught on camera:
<http://www.youtube.com/watch?v=B8ZLj7x1vN4>.

federation of autonomous Socialist republics: the original three nations Serbia, Croatia, Slovenia and the new nations: Macedonia, Bosnia and Herzegovina, and Montenegro. The trends of decentralization found deeper support in the constitution of 1974, which transformed the republics into fully functional self-governing units. Moreover, the Albanian population received autonomy in Kosovo and Metohija, and the Hungarians in Vojvodina. Apparently, only the Slavic nations received the status of nation, while Albanian and Hungarian minorities had to settle with autonomy. The basic presumption and hope of convergence into a Yugoslav nation was effectively abandoned. At that point, Yugoslavia became more of a confederation than a federation (Roggemann 1980).

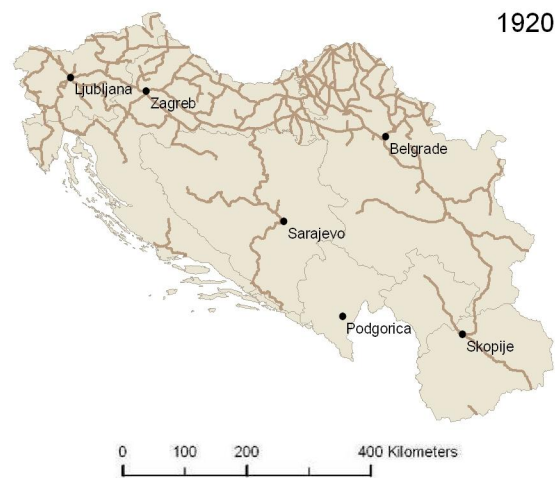
With the death of Tito in 1980, the state lost its symbolic and uniting figure. Throughout the 1980s, the problems and differences between the republics deepened. Finally, at the beginning of the 1990s, the economic problems, ethnic tensions and internal political conflicts provoked the dissolution of SFRY. Croatia, Slovenia and Macedonia left the federation in 1991, Bosnia and Herzegovina in 1992. The borders of the new states of Serbia, Montenegro, Bosnia and Herzegovina, Croatia, Macedonia and Slovenia followed the exact boundaries of the republics in the federation. Serbia and Montenegro – the two remaining republics of Yugoslavia founded the Federal Republic of Yugoslavia in 1992. The two republics existed in their former SFRY boundaries, however without the previous autonomies. The Albanians in Kosovo were stripped of their autonomy in 1987 and excluded from the political affairs of the state. The tensions escalated in the second half of the decade and ended with the NATO intervention in 1999 and the declaring of the independence of the province in 2008. The federation was transformed in 2003, into the Union of Serbia and Montenegro, and three years later in June 2006, Montenegro declared independence, which Serbia accepted with no complications. In legal terms, Serbia fully succeeded the affairs of the former federation. Effectively, in 2006, all former Yugoslav republics became independent states. The federal structure of Yugoslavia and the functional system of self-government adopted after WW-II facilitated the formation and the nation building of the republics, especially in those that had not been nation states before 1918.

Another critical problem concerning the integration of Yugoslavia was the state of the railway network.

5.3 Railway construction in the territories of former Yugoslavia 1840-2000

The reshaping and the improvement of the railway network was a vital issue for the successful integration of Yugoslavia. In 1918, there was an enormous lack of railroad coverage between the former Austro-Hungarian territories; particularly the northern parts and the rest of the new state (see Figure 27). Moreover, most of the existing lines were built to serve interests outside the territory of Yugoslavia. The inequality and the character of the lines available endangered the functioning of Yugoslavia as a single state.

Figure 27 Railways in Yugoslavia in 1920



Source: Own elaboration

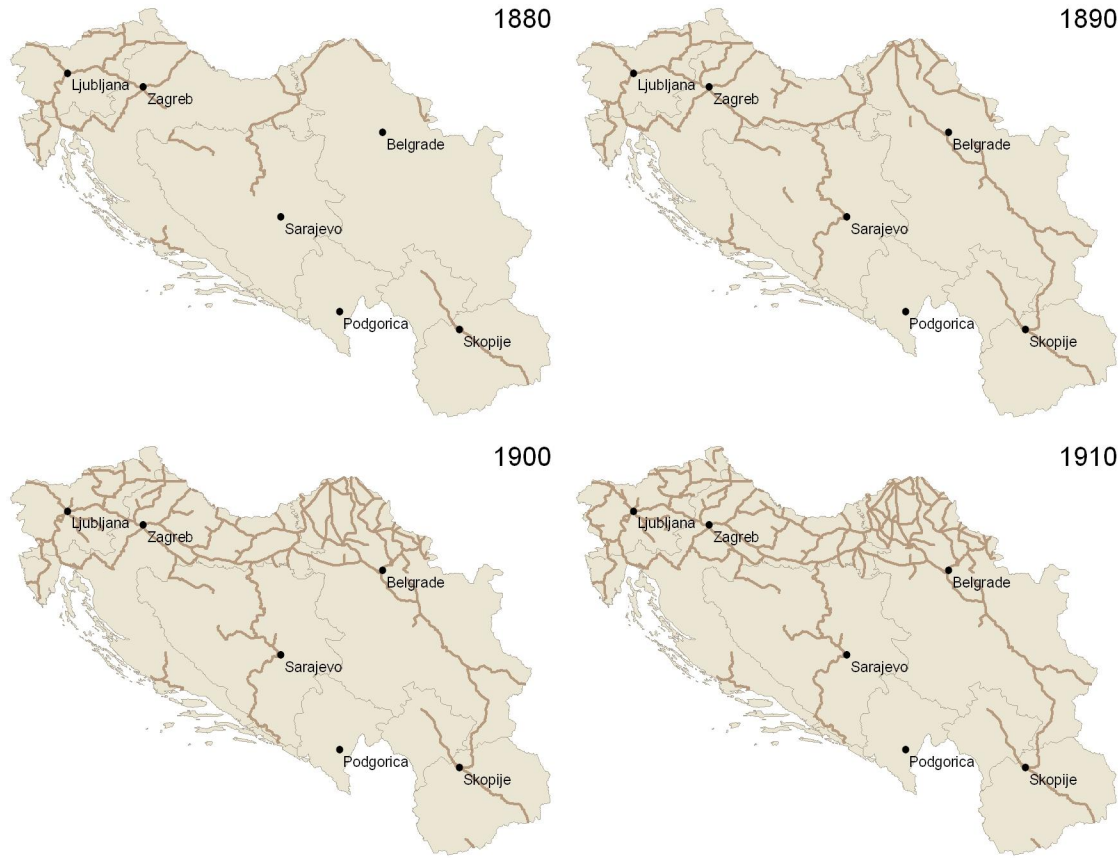
The infrastructural inequality widened during the late 19th and early 20th centuries, as the existing states of that time: Serbia, Montenegro, Austria-Hungary and the Ottoman Empire built railways with diverse intensity. Austria-Hungary managed to construct a dense railway network on its territories, while the poorer principality of Serbia only succeeded in the completion of several lines that formed part of larger international rail routes and even in that case, the completed roads mainly served the political and economic interests of Austria-Hungary or the other Great Powers. That was a typical situation for the pre-WW-I Balkans, where the railroad building depended on complicated international, economic and political factors. The territorial and economic interest of the Dual monarchy and other Great Powers were the major force behind the construction of most of the Balkan lines during the 19th century. Austria-Hungary played a particularly decisive role in the successful completion of the railway line that connected Central and Western Europe with the

Ottoman capital via Serbia and Bulgaria. After the Berlin Congress (1878), Serbia expanded its territory and was declared an independent state. However the signed treaty also obliged Serbia to construct the railway line from Belgrade to Vranje and the Turkish and Bulgarian borders. With tremendous financial difficulties and political pressure from Austro-Hungary, the line was opened in August 1884. This was effectively the first railroad in the Serbian territory and the two main cities, Belgrade and Nis were connected in 1884. (See Figure 28)

Railroads in the Yugoslavian territory had been constructed earlier by the Ottoman Empire and Austro-Hungary. By the 1840s and 1850s the rail lines started to emerge in the territory of modern Slovenia and Vojvodina. The former had its first railway connection completed in the 1840s, when the Austrian Empire built the Austrian Southern Railway – connecting Vienna, and the main commercial port of the Empire Trieste, the same line also connected the Slovenian city Maribor to Graz in 1844. The line was extended and reached Ljubljana in 1849. By the 1850s, the most important urban centers of Slovenia were connected by railway to the rest of Central and Western Europe, while Serbia, Macedonia and Bosnia didn't have any railroads for another 2 decades. During the 1860s and 1870s, Austro-Hungary continued the expansion and more parts of modern Croatia, Slovenia and Vojvodina were covered by the railroad network. (See Figure 28)

Figure 28. Railroads in the region before the creation of Yugoslavia





Source: Own elaboration

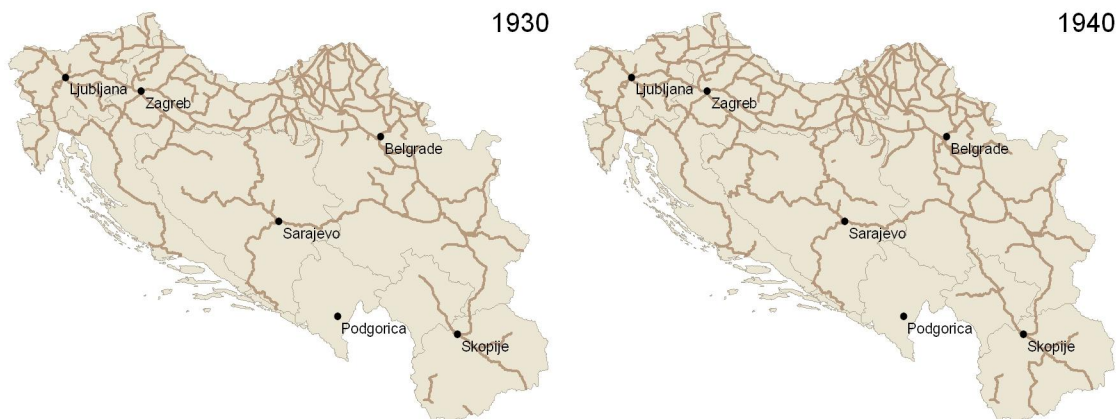
Overall by the 1910s large parts of the future Yugoslavian territories that were under the control of Austro-Hungary were covered by the railways. The exceptions were the southern or coastal parts of future Croatia and Bosnia and Herzegovina, which was only officially annexed in 1908.

Meanwhile, in 1874 another line in the future territory of Yugoslavia was opened in the Ottoman Empire. Skopje and Kosovska Mitrovica were connected as part of the major Ottoman railway route crossing the Balkans - starting from Thessaloniki. This road passed through the future Yugoslavian territories of Macedonia and Kosovo. The same line was later connected with the railway completed on Serbian territory in 1884 and these two remained the sole standard gauge railroads in Serbia until WW-I, while Montenegro had no railways constructed before the creation of Yugoslavia.

The creation of Yugoslavia suddenly transformed the geopolitical and economic realities for the most of the territories, particularly the former Austro-Hungarian lands. The centre of power transferred from Vienna in the North, to Belgrade in the East. Rail links to the new capital from some of the new provinces such as Dalmatia were obstructed by the difficult terrain. Moreover, during the war the railways suffered extensive damages and required considerable repairs. In 1925, a narrow-gauge line was extended from Vardiste to Uzice in Serbia, making a more direct link possible between Split and the capital Belgrade. However Zadar and the northern parts of Dalmatia remained isolated from the new capital. Meanwhile, in the 1930s, a program of improvements was introduced in Bosnia and Herzegovina and works began on the line between Metkovic and Sarajevo and the line between Knin and Bosanski Novi.

Despite of attempts of the governments to strengthen the integrity of the state by building several new, mostly narrow gauge lines, the railway network in Yugoslavia remained rather undeveloped. The country faced considerable economic and political difficulties and could not completely solve the infrastructural problems, which limited the development of stable intraregional economic links as the economy remained mainly locally-based and rather poor.

Figure 29. Yugoslavia railway between the World Wars



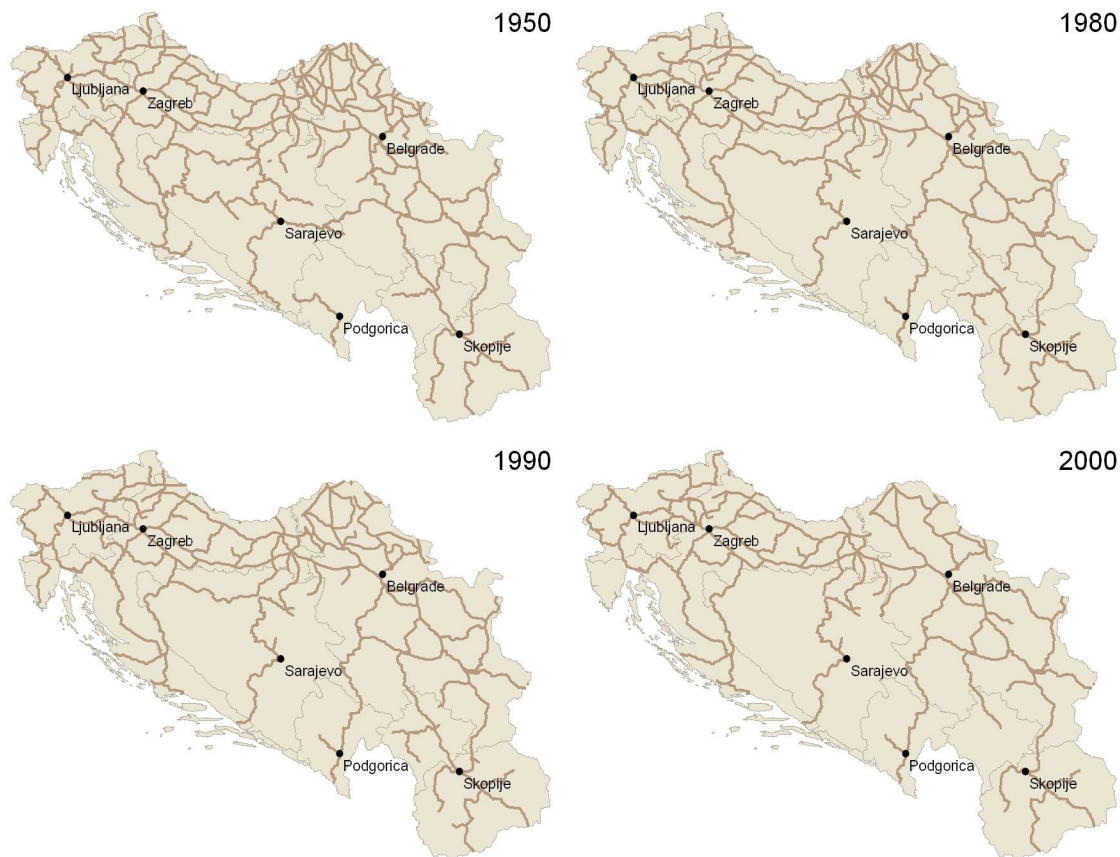
Source: Own elaboration

Immediately after WW-II, efforts were focused on the repair of the network destroyed during the War. Subsequently, the country's railway system went through considerable reconstruction and improvements. The most important routes were the lines from Sezana (from Italy), Jesenice (from Austria) and Spielfeld (from Austria) via Zidani to Beograd. These major lines were connected

with the seaports, particularly Koper, Rijeka, Kardeljevo (Ploce), and Bar. The opening of the railway from Belgrade to Bar in 1976 completed this project. In 1964, the federal government introduced a modernization program on the national railways that included the electrification of the railways and the mass closure of narrow and unprofitable lines. In 1970, the first electrified line Belgrade – Sid – national border was opened.

Just before its dissolution in 1990 the federation network consisted of about 9,300 kilometers of rail lines, one third of which were electrified. However, parts of the country still lacked adequate connections. The mountains restricted the railway development in areas of Bosnia, Southern Serbia and Kosovo. The Dinaric Alps separate the inland from the Adriatic coast and impeded transport connections. Overall only two lines linked the interior with the seaports, the Zagreb-Split-Sibenik line and the Sarajevo-Ploce line. These deficiencies limited the ability of Yugoslavia to take full advantage of its mineral resources.

Figure 30. Evolution of the railroad network in Yugoslavia after WW-II.



Source: Own elaboration

The railroad network along the Vardar and Morava rivers was superior as it served international traffic and linked the republican capitals of Ljubljana, Zagreb, Belgrade, and Skopje while Ljubljana at the western end of Yugoslavia was the meeting point for lines coming from Italy and Austria.

The dissolution of Yugoslavia fragmented the railway network, while war destructions from the 1990s additionally worsened the infrastructure. The railways were also affected negatively by economic problems, the trade embargo on Serbia and reduced passenger traffic due to the rise of private car ownership. The mid-nineties saw an intensive rehabilitation of railway lines in Vojvodina (Secanj–Vrsac, Kikinda–Banatsko Arandjelovo, Horgos–Kanjiza). The new independent states had to adapt the national infrastructure to the new borders, however at the beginning of the 21st century there were already plans for some form of reintegration of the railway network from the successor states.

As one may note, the political changes considerably affected the way railroads were built in the area. Simultaneously, the construction of the railways influenced the regional and urban composition of the region. The data shows that the more urbanized regions enjoyed better railway connections while the increase of the population in many cities and regions thrived after the connection to the railway network. The reduction of the railway inequality between the regions of Yugoslavia is a clear example for the leveling effect of the existence of Yugoslavia.

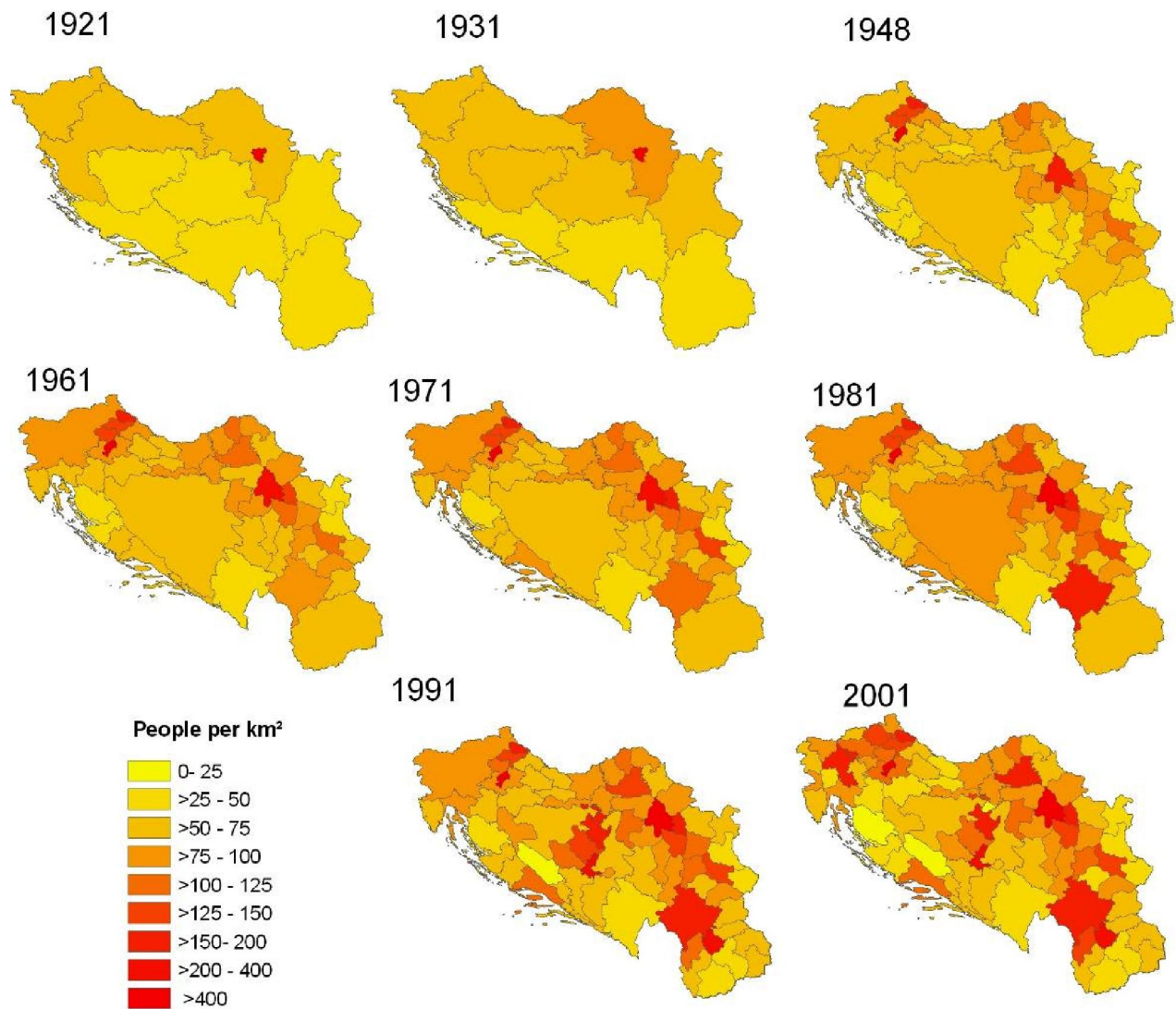
After presenting the two leading factors influencing the spatial changes; political developments and the construction of the railways, we may now concentrate on the results concerning the population increase, urbanization and relate these events. The next section focuses on the population growth of Yugoslavia and its successor states at national and regional level.

5.4 Density rates

When Yugoslavia was created in the aftermath of WW-I, it had just over 12 million inhabitants. This number increased to 15.7 million in 1948 and before the breakup in 1991 the federation already had twice the population of 1921, or more than 90 people per km². Initially, the former Austro-Hungarian territories, Slovenia, Croatia and Vojvodina in the North were more populated than the Southern parts of the kingdom (see figure 31). Apparently, before WW-

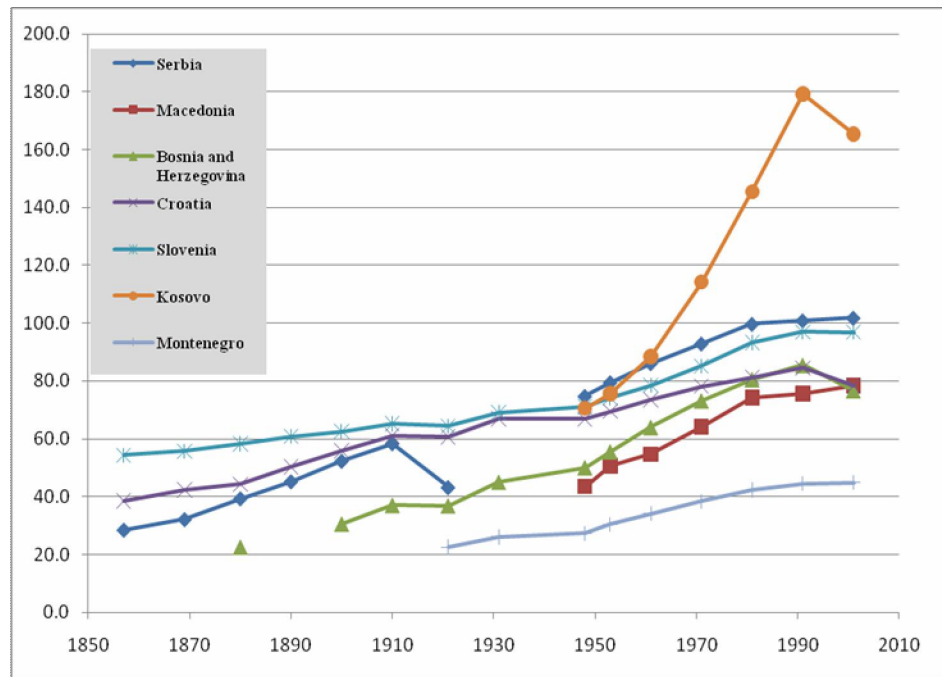
In the economic conditions in Austro-Hungary were better, and the demographic transition was in a more advanced phase. Subsequently, the differences were gradually reduced. The population growth in Southern Serbia and Kosovo was particularly significant and in 2001 the density of the latter was the highest among all the successor states. Meanwhile, the other “southern republics”, Macedonia and Montenegro, doubled their population during the existence of Yugoslavia. Even so, both remained less populated than Slovenia and Croatia. After the breakup of Yugoslavia, the population growth stagnated in all of the successor states.

Figure 31 Regional density rates in Yugoslavia 1921-2001



Source: Own elaboration based on census data.

Figure 32 Density rates of the Yugoslavian republics



Source: Own calculations based on census data.

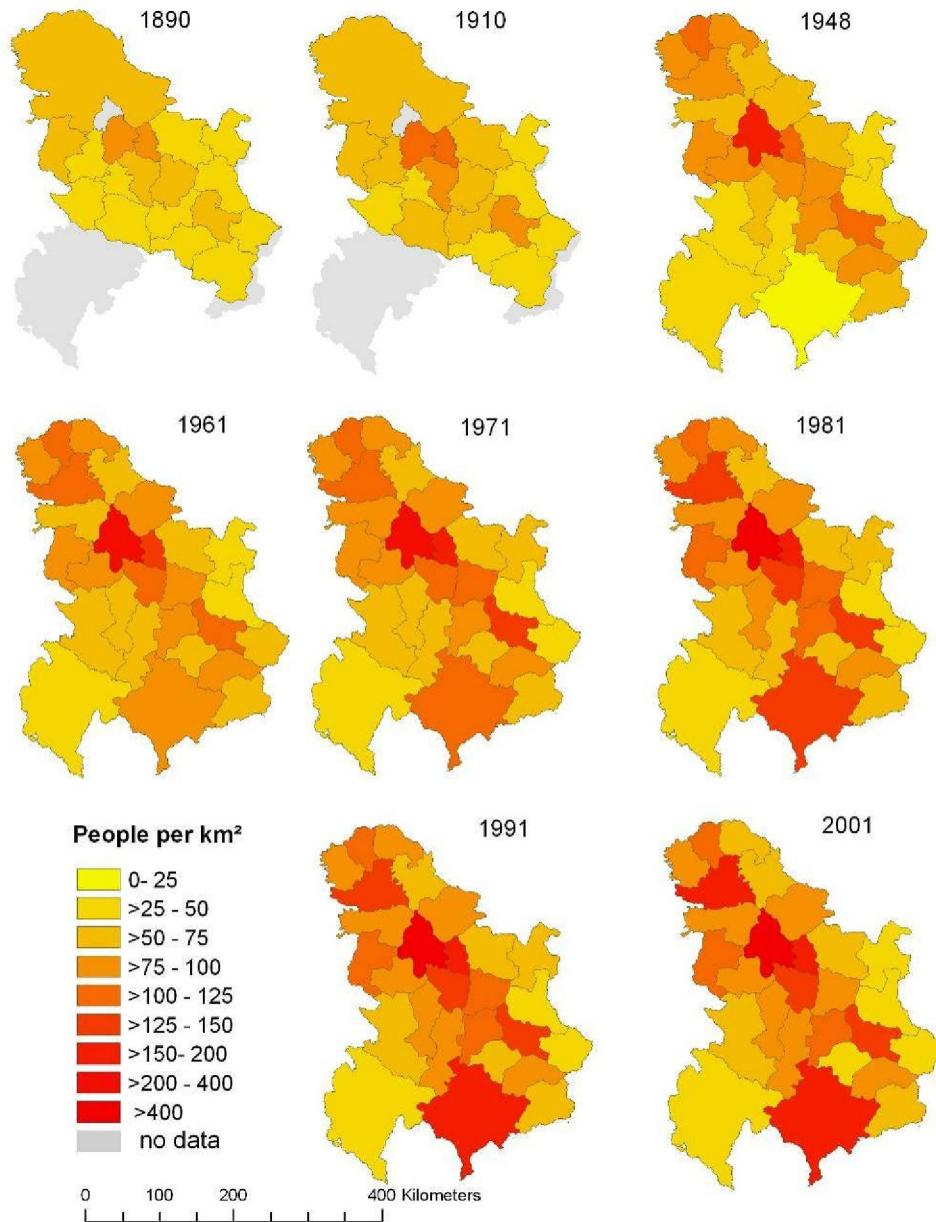
5.4.1 Serbia

The dynamics of the population growth varied significantly among the republics: the density rates of the leading Yugoslav nation Serbia increased five times between the 1830s and the 2000s. In the mid 19th century, the country was mostly dominated by forests and uncultivated lands, hence in the 1830s the density was under 20 people per km². However, until 1910 the population reached almost 60 people per km². The differences between the regions were moderate and the population density rarely exceeded 50 people per km². The exceptions included Belgrade and Smederevo in the north, which in 1910 already had a density above 100 people per km². Overall, the regions in the north and the center were more populated than the south and the periphery. Other provinces with higher than average density were Kraguevac and Nish. As Kraguevac region is close to Belgrade and Smederevo, just before the decade of wars – the 1910s -an area of population concentration formed in Central Northern Serbia (see Figure 33).

The stable population increase at national level was interrupted by the World Wars. Serbia remained occupied by its opponents for a large part of both the wars and its territories were among the main warzones. During WW-I, Serbia lost around 16% of its population, while the

casualties of Yugoslavia in WW-II were around 11%, mainly Serbians.⁴³ Nevertheless, the population recuperated rapidly after both wars and the stable growth continued until the 1990s when the density reached approx. 100 people per km².

Figure 33. Density rates in Serbia and Montenegro 1890-2002



Source: Own elaboration based on census data.

⁴³ Erlikman, Vadim (2004). *Poteri narodonaseleniia v XX veke: spravochnik*. Moscow.

After the territorial expansion of WW-I and the annexation of the province now called Vojvodina, the former “North” around Belgrade became the center within the new boundaries. Vojvodina was more populated than most of the prewar Serbian territories. Consequently, after WW-I there were two areas of population concentration: one in Central Serbia - around Belgrade including Smederevo and Kraguevac, and another in Vojvodina in the north (see Figure 33). After WW-II, the demographic concentration in Central and Northern Serbia continued, while the population of eastern and southwestern regions situated near the borders with Bulgaria, Romania and Montenegro increased at lower rates. Still, the growth of Kosovo, which was then in Southern Serbia, exceeded the growth of all other states and at the beginning of the 21st century, independent Kosovo has become the most densely populated state in the Balkans. After 1990, the increase stagnated as the country faced demographic and economic problems. As a result, at the beginning of the 21st century, the density rates at national level remained at around 100 people per km². Meanwhile after the breakup of Yugoslavia, the regions on the periphery, suffered from depopulation. The notable exception is the traditionally, densely populated northwest.

5.4.2 Croatia

Similarly to other Eastern European states, in Croatia - the second largest Yugoslav nation- the demographic transition preceded economic development. It started in the late 19th century and during the three decades before WW-I, the population increased at unprecedented rates, with the highest growth recorded in the 1880s. The transition was completed by the 1970s and during the 1980s the population increased by only 3.5%.

Throughout this natural increase, migration was an important factor influencing the size and the structure of Croatian population. Overseas emigration during the 1880s left entire areas depopulated. After WW-I, the flows reoriented from overseas to other European states. Overall, from the mid 19th century until 1948, about 800,000 people left Croatia. During the 1960s as part of a widely common phenomenon that distinguished Yugoslavia from the other communist states in the Balkans, laborers from Yugoslavia and especially Croatia were permitted to seek better wages in Europe. The loss of the Croatian workforce was counterbalanced by the inflow of migrant workers from other Yugoslavian republics. The immigrants preferred to settle in urban centers and affluent regions; hence the result was an increased urbanization and further spatial

concentration of the population. Overall, from 1857 to 1990 the population doubled, in spite of the population losses suffered during the World Wars and the waves of emigration (see Figure 34).

Following the breakup of Yugoslavia, Croatia experienced negative population growth. The military conflict, emigration and economic problems caused a 7% loss of the total Croatian population during the 1990s. More than a million inhabitants left Croatia, while 300,000 settled there - mostly immigrants from other ex Yugoslavian states.

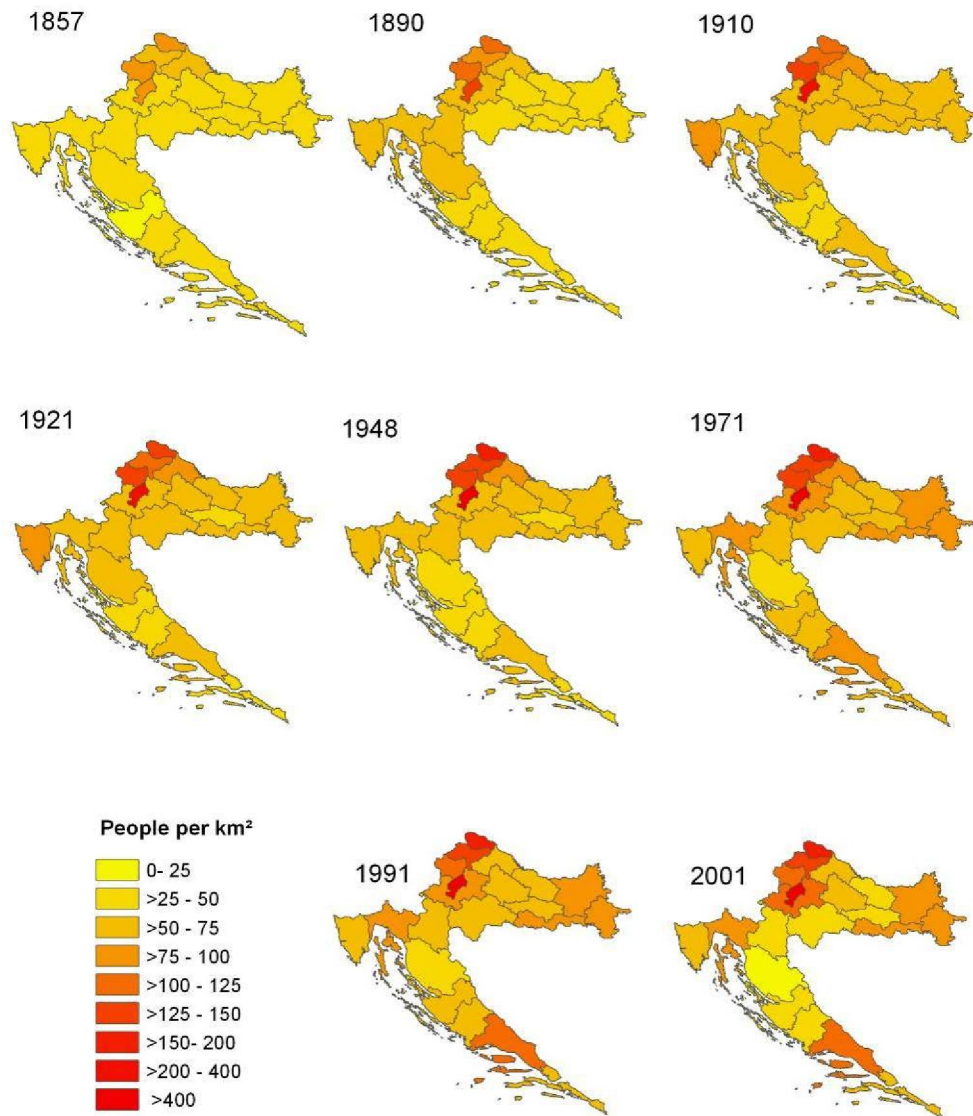
Figure 34 Population growth between censuses in Croatia

census year	1857	1869	1880	1890	1900	1910	1921	1931	1948	1953	1961	1971	1981	1991	2001
Density (people per km ²)	38.5	42.4	44.3	50.4	55.8	61.1	60.8	66.9	66.8	69.5	73.5	78.2	81.3	84.5	78.4
1857 as a base	100.0	110.0	115.0	131.0	145.0	158.8	158.0	173.7	173.4	180.6	190.8	203.1	211.1	219.5	203.6
growth compared with previous censuses		9.9	4.5	13.9	10.8	9.5	-0.5	9.9	-0.1	4.1	5.7	6.4	4.0	4.0	-7.2

Source: Own calculations based on census data.

In the mid 19th century, the only area with a higher than average population concentration, was the region around the largest city, Zagreb. During the following decades the population continued to converge mainly in the northern parts of Croatia. After WW-II, the spread of the population polarized and the demographic flows were directed towards four regional centers (Zagreb in the north, Split in the south, Rijeka in the northwest and Osijek in the east). Gradually these areas transformed into regions with a higher than average population concentration. The increase in the Osijek region took off immediately after WW-II; while the areas of Rijeka and Split followed a few decades later.

Figure 35. Evolution of the regional population density in Croatia 1857-2001



Source: Own elaboration based on census data.

5.4.3 Macedonia, Bosnia and Herzegovina, Slovenia and Montenegro

During the first decades of the 20th century Macedonia was the most unstable area in the Balkans. The region was suffering from ethnic tensions and military struggles, which caused the migration of parts of the population to Bulgaria, Turkey or overseas. The establishment of socialist republic of Macedonia after WW-II pacified the area and boosted its economic development. Overall, during the 20th century the population of Macedonia doubled. The highest

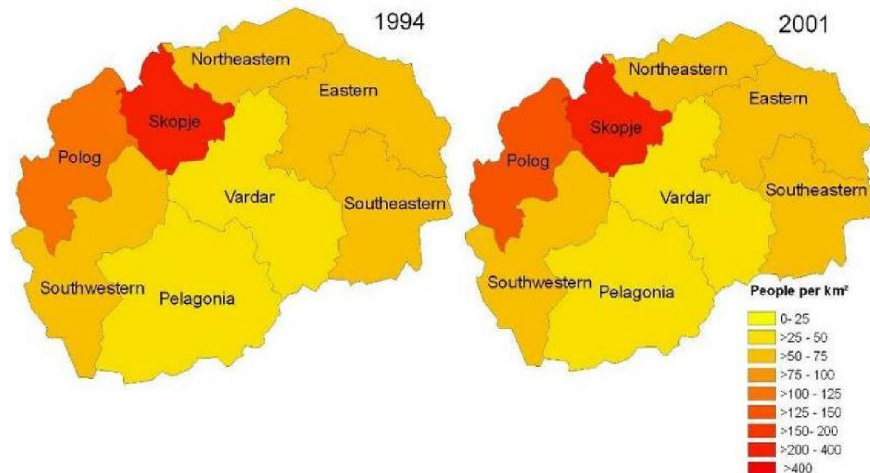
growth occurred during the three decades after WW-II when the central communist government made great efforts towards the development of the poorer regions of SFRY, Macedonia included. Subsequently the population density increased from 43.5 in 1948 to 74.2 people per km² in 1981. In the 1980s the growth decelerated and at the beginning of the 21st century the density rates were similar to the levels of the 1980s (see figure 36). The population is unevenly dispersed throughout the country, for example the regions of Skopje and Polog in the north and northwest are the most densely populated, whereas the southern regions are less populated (see Figure 37).

Figure 36. Urbanization levels and density rates of Macedonia 1900-2001

	density	urbanization
1900	35.3	
1921	31.5	
1931	36.9	
1948	43.5	21.2
1953	50.7	23.6
1961	54.7	33.1
1971	64.1	42.6
1981	74.2	50.9
1994	75.6	55.9
2002	78.4	59.3

Source: Own calculations based on census data.

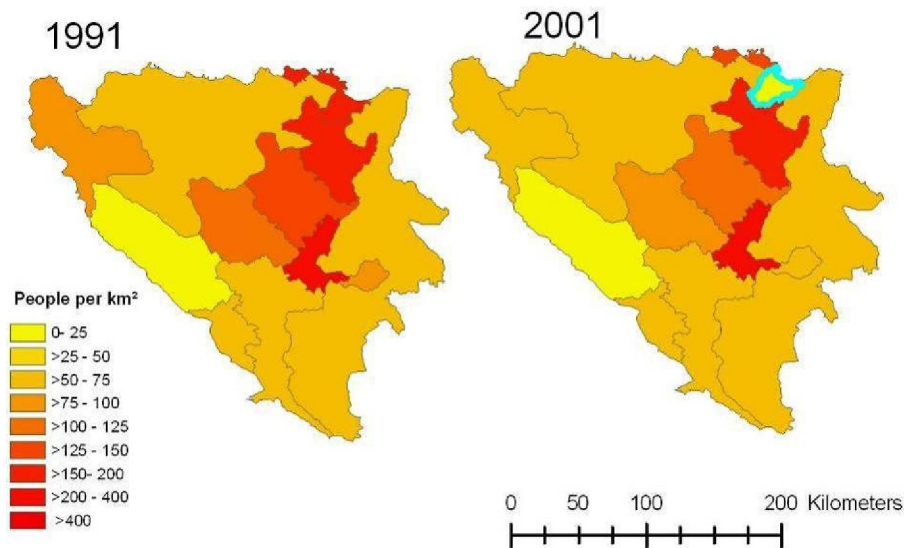
Figure 37. Regional density rates of Macedonia



Source: Own elaboration based on census data.

In less than a century, the population of Bosnia and Herzegovina - the other conflict zone in Yugoslavia - multiplied four times⁴⁴. The initial population growth started when the province came under Austro-Hungarian control in 1878. The increase continued during the Yugoslav period and was only interrupted by the two world wars. In the 1990s, during the civil war in Bosnia and Herzegovina, the population decreased due to war losses and emigration. The country is landlocked and dominated by mountains. The population is largely concentrated in Central Bosnia, Sarajevo, Tuzla and Zenica – Doboј, all of which are situated inland (see Figure 38).

Figure 38. Density evolution in Bosnia and Herzegovina⁴⁵



Source: Own elaboration based on census data.

The republic that experienced the most moderate population increase during the existence of Yugoslavia is Slovenia. In 1921, Slovenia already had more than 60 people per square km over an area dominated by mountains. The end of WW-II accelerated the overall growth and the density reached almost 100 people per square km in the 1990s. Similar to the other republics, during the

⁴⁴ Macedonia and Bosnia and Herzegovina are the two regions of Yugoslavia that suffered most from ethnic conflicts during the 20th century. At the beginning of the century, Macedonia was the “Apple of Discord” in the Balkans and suffered continuously from bloody ethnic struggles. Bosnia and Herzegovina had a similar fate towards the end of the century and during the 1990s was devastated by the infamous civil war.

⁴⁵ No official data on the Brcko region for 2001- the region is marked in blue on the map.

1990s the population growth stagnated. The data from 2001 reveals that the regions in the center, the north and northeast were more greatly populated than the rest of the country.

Figure 39 Regional population density of Slovenia in 2001



Source: Own elaboration based on census data.

The population of Montenegro doubled during the “Yugoslav period”. It grew by more than 10% per decade from the end of WW-II until the 1980s when the rates of growth started to slow down. During the 1990s, the state struggled with economic difficulties and suffered from emigrations, which halted the population increase. Due to its mountainous landscape, the smallest of the Yugoslav republics also happened to be the least populated.

Figure 40. Population and urbanization data from Montenegro

year	density	population	growth between censuses	Urbanization levels
1921	22.5	311341	100	0
1931	26.1	360044	115.6	2.8
1948	27.3	377189	104.8	3.8
1953	30.4	419873	111.3	8.3
1961	34.2	471894	112.4	15.3
1971	38.3	529604	112.2	26.3
1981	42.3	584310	110.3	34.7
1991	44.5	615035	105.3	44.3
2003	44.9	620145	100.8	49.5

Source: Own calculations based on census data.

Overall, during the 20th century, the growth of the population and the migration from rural to urban areas augmented the regional disparities in the Yugoslav republics. The population

converged in the large urban centers and the regions of the main cities emerged as the areas of the highest population concentration. The abandonment of the soviet economic model together with the regulatory measures initiated a new phase of further concentration of the population in all states, apart from Slovenia. The effects of the geopolitical changes are more noticeable in the evolution of the urbanization levels.

5.5 The rise of urbanization levels

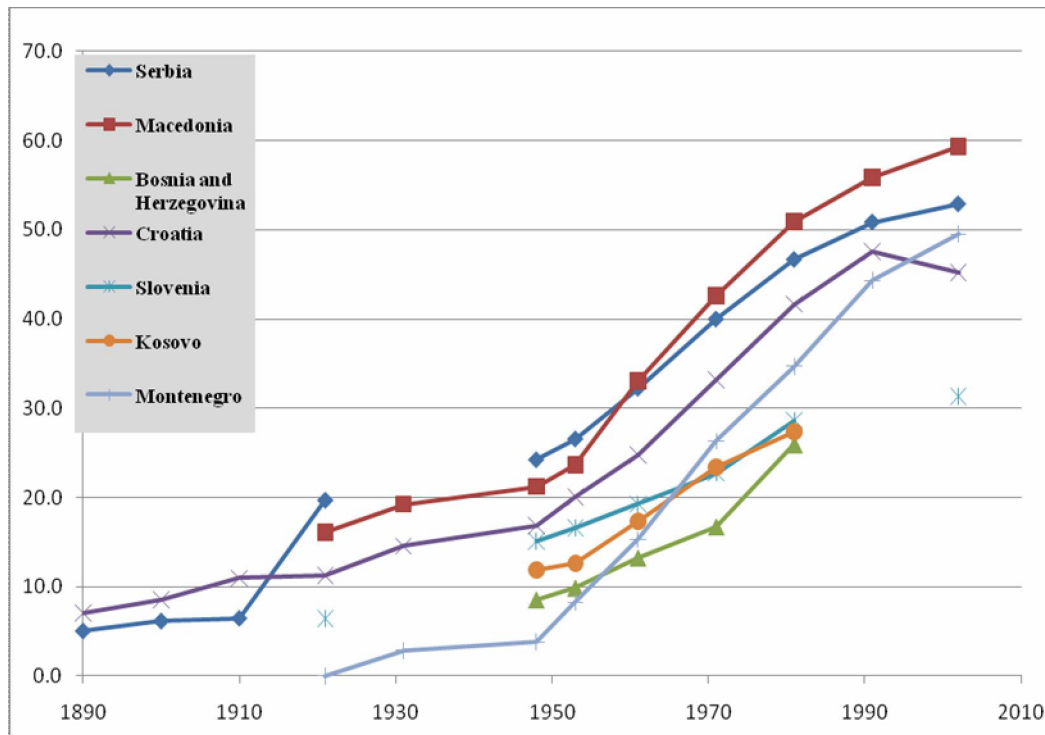
The large migrations from rural areas to the cities were probably the biggest transformation in Yugoslav society during 20th century. In 1918, the Yugoslav economy was dominated by agriculture and with the exception of the regions around Belgrade, Zagreb and especially the former Austro-Hungarian provinces of Vojvodina and Northern Croatia, all regions were extremely rural, particularly Southern Serbia and Montenegro (see figure 41). The interwar period brought little change to this situation and around the time of WW-II approximately 80 percent of the Yugoslav population still lived in rural areas or small towns.

The implementation of the Soviet economic model after WW-II triggered substantial economic reorganizations. The aim of the new regime was to represent the interests of the urban working class and as such most of its policy decisions favored urban development and industrialization. Industrialization had two goals; first to boost the economy and second to “improve” the class structure of the society by increasing the amount of industrial workers. This was achieved by transferring labor force and resources from rural to urban areas. The government obliged the agricultural producers to sell their production for lower than the market prices. The accumulated capital was invested in industry. Meanwhile, without a means of survival, the peasants moved to the urban areas in search of better employment opportunities. Although socially painful, this mechanism employed by the Soviet regime was adopted in most of the Eastern European states after WW-II. The results were mass movements from rural to urban areas and an increase in industrial production.

At the beginning of the 1950s, after the escalation in conflict between Stalin and Tito, Yugoslavia diverged from the classical soviet economic system, yet the large flows of rural population to the cities carried on. The size of the urban population increased at a high rate in all republics – particularly in Montenegro and Macedonia. However, in spite of this considerable

growth, in 1990 Yugoslavia still ranked as one of Europe's least urbanized countries. After the dissolution of the federation, the size of the urban population in most of the former republics continued to increase. The exception was Croatia, whose urban population actually decreased after 1991. (See figures 41 and 42).

Figure 41. Evolution of the Urbanization levels in the Yugoslav states (1890-2005)



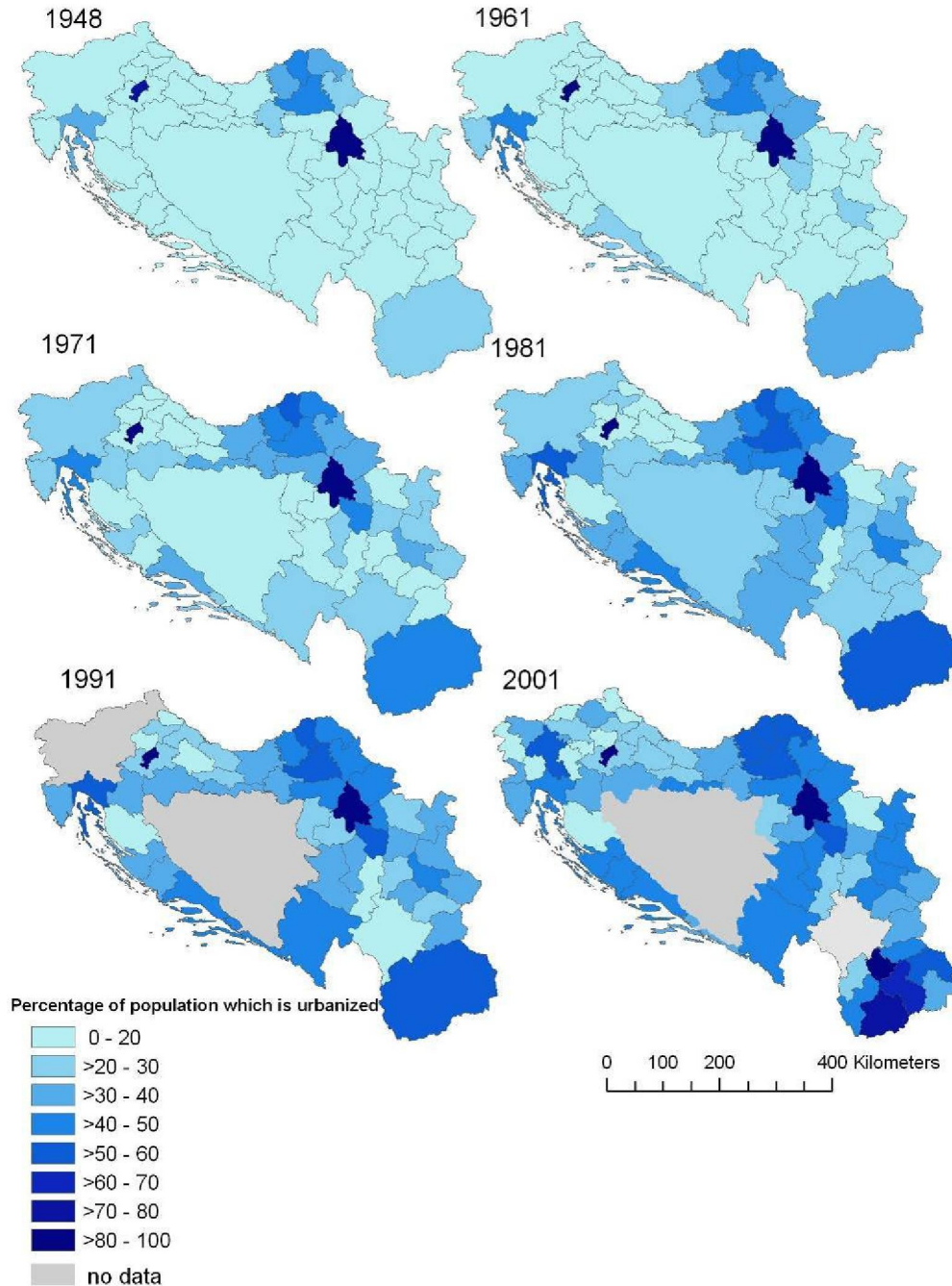
Source: Own calculations based on census data.

During the first decades after the war, the most urbanized regions were mainly former Austro-Hungarian territories located in the interior around Belgrade and Vojvodina. However, during the later stages, the urban levels in the rest of the federation increased at higher rates, and between the 1970s and 1990s the regional inequality was moderately reduced as urbanization spread from the inland to the coastal areas and from north to south. (See figure 42)

The trend reversed after 1990 and the population started to converge again in the leading regions, particularly the ones around the republican capitals, while many areas located on the periphery of the new states suffered a decrease in size of the urban population. Overall, both the implementation and the abandonment of the central planning after WW-II and in the 1990s, respectively, caused, at least initially, the increase or regional disparities in Yugoslavia.

In view of all this, I will now focus on the growth in each republic at national and regional level where possible.

Figure 42 Urbanization levels Yugoslavia 1948-2001



Source: Own elaboration based on census data.

5.5.1 Serbia and Montenegro

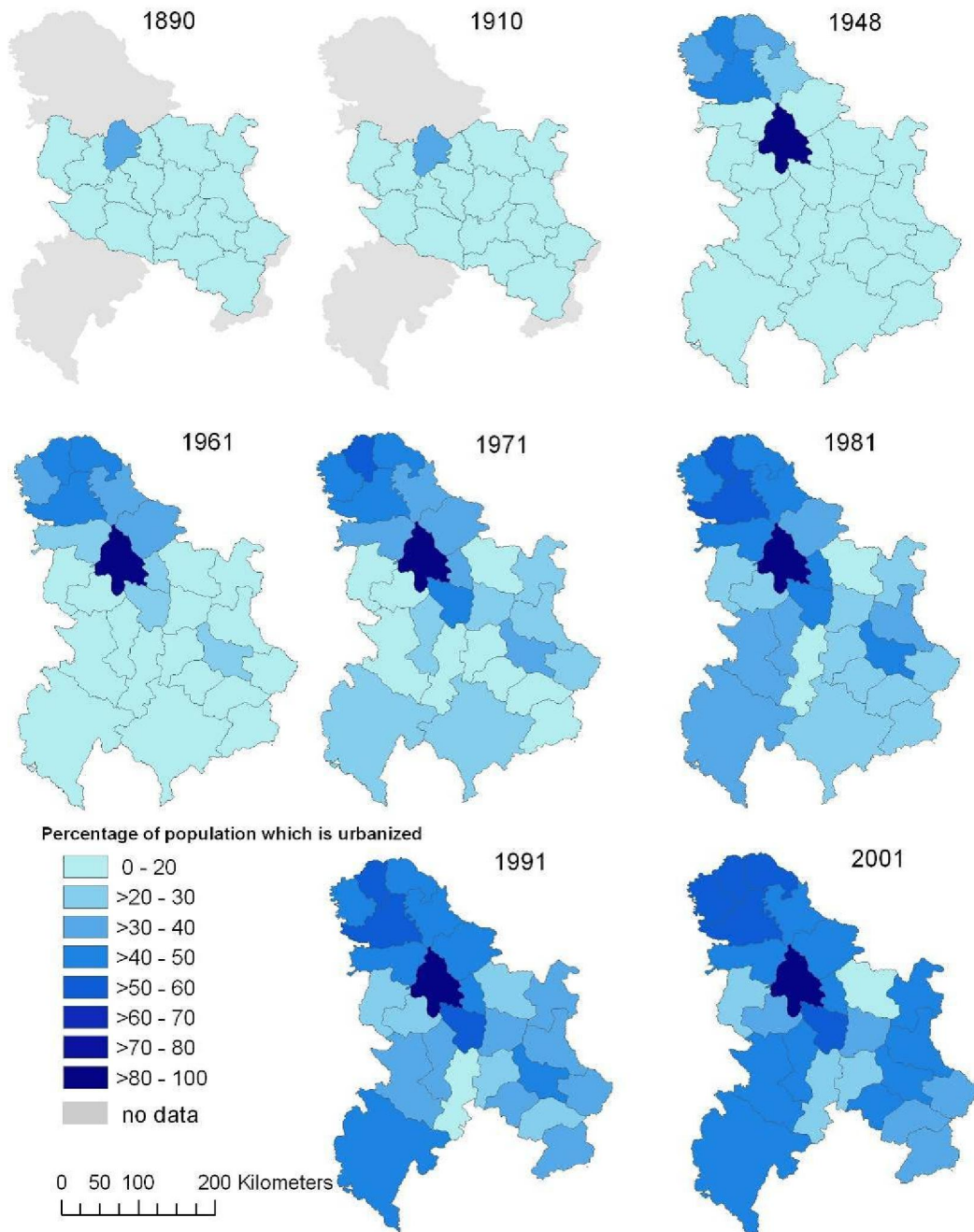
Probably, the greatest beneficiary from the creation of Yugoslavia, during the early decades of its existence, was Serbia. Before WW-I, Serbia was extremely rural and less than 10% of its population was settled in cities with at least 10,000 inhabitants. In this context, the regional disparities were low and only the region of Belgrade stood above the others with just over 30% of the population of the region living in the city.

The wars in the 1910s altered the Serbian economy and society in several ways. The economic potential and importance of Serbia and its capital city, Belgrade, increased considerably as they respectively became the leading nation and the urban center of a large kingdom that included territories that were richer and economically more developed than Serbia proper. The annexation of the more urbanized Vojvodina province in the north, with its large urban centers increased the national urbanization rates, which reached approx 20% immediately after WW-I. This also affected the regional composition of Serbia, as all regions in Vojvodina were more urbanized than all the other regions in old Serbia, apart from Belgrade.

Interwar urban growth was slow, however, after WW-II, similar to other Eastern European states; Serbia went through significant socioeconomic transformation. The size of the urban population increased significantly from just over 20% in 1948 to 40% in the early 1970s and reached 50% in the early 1990s. The increase in urbanization continued after the breakup of Yugoslavia; however, with just over 50% of the population living in large and medium sized cities in 2001, Serbia is still among the least urbanized countries in Europe. (See figure 43)

During the first three decades after WW-II the urban population was concentrated mainly in Northern Serbia and Belgrade. The differences were gradually reduced, especially after the implementations of measures supporting a more balanced regional development in the 1970s. After the 1970s, urbanization “spread” to the rest of the country. Even so, in 1991 Northern and Central Serbia were the most urbanized parts of the state. During the 1990s the gap between Belgrade and the rest of Serbia widened, however the regional disparities in the rest of Serbia were further reduced.

Figure 43. Regional urbanization rates in Post WW-II Serbia and Montenegro



Source: Own elaboration based on census data.

Montenegro, the other South Slav nation that was independent before 1918 also benefitted greatly from the creation of the large Slav federation. During the existence of Yugoslavia the rural Montenegrin society was profoundly transformed. Urbanization started practically after

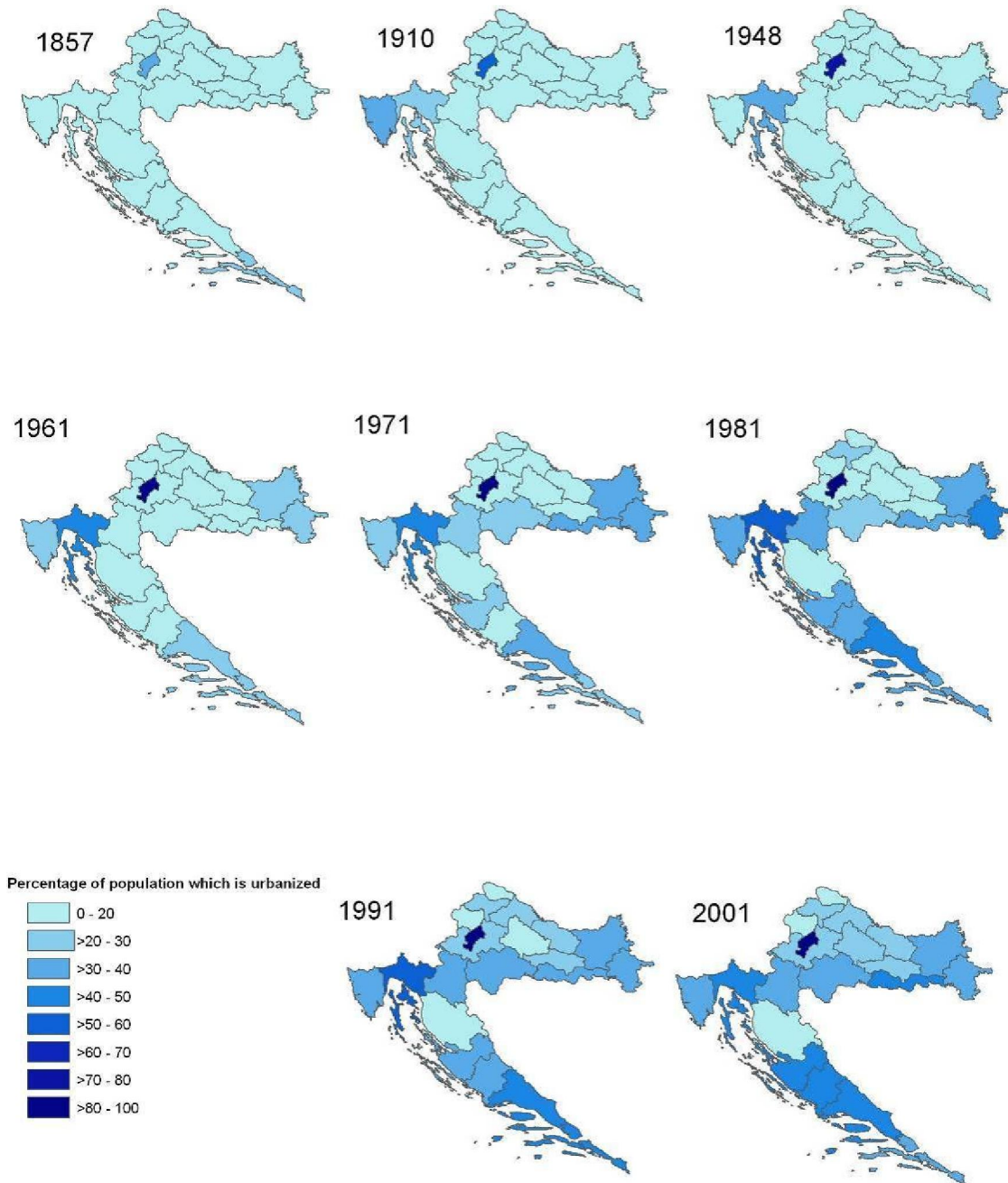
WW-II and in 40 years the levels increased from 3.8 to 45%. This was a direct result of the policy of economic transformation and industrialization implemented by the new communist regime in Belgrade. After the dissolution of Yugoslavia, urban growth continued, at a more moderate pace. Nevertheless, the deceleration was the result of a consumed potential for urban growth, rather than the direct outcome of the breakup of Yugoslavia.

5.5.2 Croatia

As a former Austro-Hungarian territory, before the creation of Yugoslavia, Croatia enjoyed slightly higher urbanization rates than Serbia. However, after the changes made to the frontiers in 1918 the Croatian territories lost part of their urban population as many non-Slavs, mainly Italians and Austrians (Germans), preferred to emigrate from the new Slavic state. In spite of their loss, during the interwar period the trend of slow but steady urban growth continued. The establishment of the communist regime and the implementation of the Soviet economic model triggered mass migration from rural to urban areas. During the second half of the 20th century, the urban population increased with higher rates and in the 1990s almost half of the Croats lived in towns with at least 10,000 residents.

Four areas had a historically higher concentration of urban population in Croatia: Most importantly the regions around the capital Zagreb, in the northwest of the country, the two coastal areas; Rijeka and Pula in the southwest, Dubrovnik and Split in the southeast, and Osijek in the northeast. After WW-II the same four areas, where the largest Croatian cities were located; Split, Osijek and Rijeka, were the first to urbanize rapidly. In the 1970s, the governments at federal and republican level adopted a policy of promoting equal regional development, which consisted of a considerable redistribution of funds for the developed of the back-warded regions. Effectively, during the 1970s and 1980s, the gap between the regions was moderately reduced as the urban population in the less urbanized regions increased at higher rates. However, the dissolution of Yugoslavia resulted in the establishment of a strong central power in Croatia, which was required by the war effort and the risk of separatist tendencies. As a result, the capital Zagreb strengthened its primacy. During the last decades of the century and especially after the establishment of independent Croatia, the development of the tourist industry in the coastal regions boosted the development of the southern regions, which were among the least populated and urbanized at the beginning of the 20th century.

Figure 44. Regional urbanization rates in Croatia 1857-2001



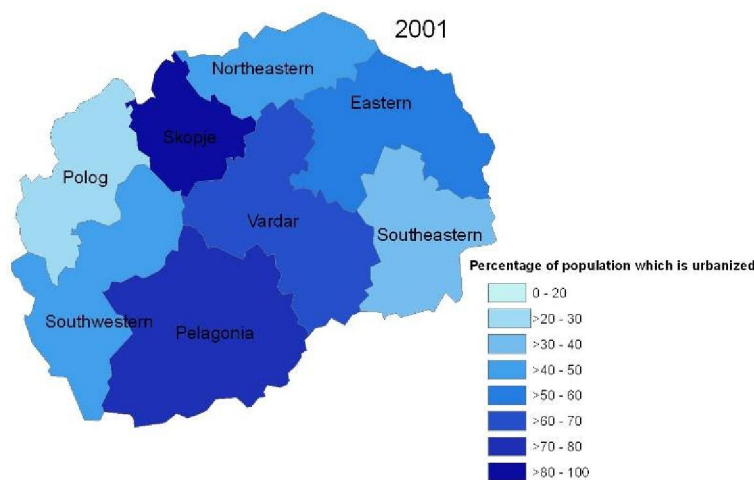
Source: Own elaboration based on census data.

5.5.3 Macedonia

The Macedonian lands underwent stable but slow urban growth during the decades before WW-II. In the 1930s, only about 20% of the population lived in towns of more than 10,000

inhabitants. Industrialization and the economic reorganizations in Communist Yugoslavia triggered a process of rapid urbanization and in 25 years the size of the urban population doubled. At the beginning of the 21st century it reached around 60%. As one of the poorest regions of Yugoslavia, Macedonia received special attention from the central government in Belgrade and the federal investments in the Macedonia were higher than in the more advanced republics. Most of the urban population is concentrated in the Skopje region in the north and Pelagonia in the south, with Vardar between them also enjoying higher rates of urbanization.

Figure 45. Macedonia: Regional urbanization levels 2001



Source: Own elaboration based on census data.

5.5.4 Bosnia and Herzegovina

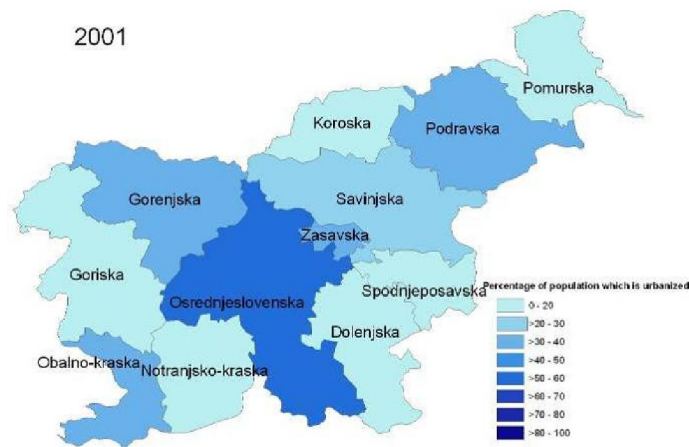
Being initially another of the poorer republics in Yugoslavia, Bosnia and Herzegovina progressed economically, after the establishment of the Communist government, using its natural resources to fuel industrial development. Unfortunately, due to the civil war in the 1990s and the decentralization of modern Bosnia and Herzegovina the data on urbanization levels is incomplete. There is no official demographic information for parts of modern Bosnia, especially the self-governing Brcko district. Hence, the data covers only the period 1948-1981. Over 30 years the size of the urban population of the republic increased five times. Even so, in 1981, only a quarter of the Bosnian population was urban, which was the lowest rate in Yugoslavia at that time.

5.5.5 Slovenia

The idiosyncratic case of Slovenia is rather peculiar. The state is the richest among the successor states; however, the size of the urban population is relatively low. This is an extraordinary outcome of the unique economic model of Slovenia where in 2002 only 32% of the population lived in towns with at least 10,000 residents, however only 5% worked in agriculture. Hence, Slovenia is a country with one of the highest proportions of a “deagrarisied” population where the rural population is employed in secondary and tertiary activities in nearby urban areas.⁴⁶

During the immediate post war period the size of the urban population increased significantly, similarly to the rest of the federation. However, since the 1970s the local government has promoted equal regional development and favored small towns and underdeveloped regions. The improvements in transport and communications, the accessibility of urban settlements and the quality of rural life favored the urbanization of the countryside and even encouraged suburbanization from the 1980s onwards. This may explain the deceleration in the growth of the urban population since this time.

Figure 46 Urbanization levels in Slovenia



Source: Own elaboration based on census data.

Overall, in Yugoslavia the increase in urbanization affected the spatial spread of the population as the citizens converged in a smaller number of settlements. Naturally, the rates of

⁴⁶ Nataša Pichler-Milanović, The effects of policies and planning regulation on urban sprawl in Slovenia and Ljubljana urban region, URBS PANDENS, May 2005

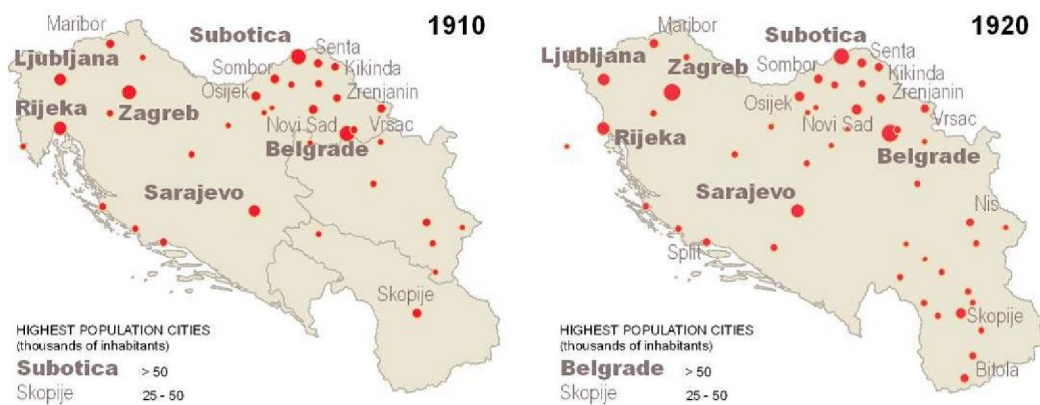
urbanization growth varied among the republics and especially between regions. The trends of the concentration depended on various factors - among them geographical and transport accessibility or access to natural resources. For example, the Adriatic coast was actually cut off from the inland by the Dinaric Alps and remained rather less urbanized until the 1960s and 1970s.

However, probably the most important factor was path dependence, as initially the regions with higher urbanization rates were the main receptors of migration flows, thus promoting the increase in regional disparities. As noted previously, the instability of the regional borders and the lack of NUTS 3 type administrative division for most of the 20th century in Yugoslavia, constrained the analyses. In this context, we have taken another perspective on the problem and focused on the development of the urban network and cities, to explore the historical trends in the spatial concentration of the population.

5.6 Cities: Evolution, Primacy and Hierarchy

During the 20th century the urban network of the region expanded with unprecedented rates. After WW-I, about 1 million people lived in less than 40 urban centers, while at the beginning of the 21st century approximately 10 million are now living in more than 200 cities. The establishment of the state in a new territorial, economic and political framework and the consequent reshaping of the infrastructure affected the economic geography and the settlement network of the area. (See Figure 47 and 48)

Figure 47. Largest cities in the territories of Yugoslavia in 1910 and 1920



Source: Own elaboration based on census data.

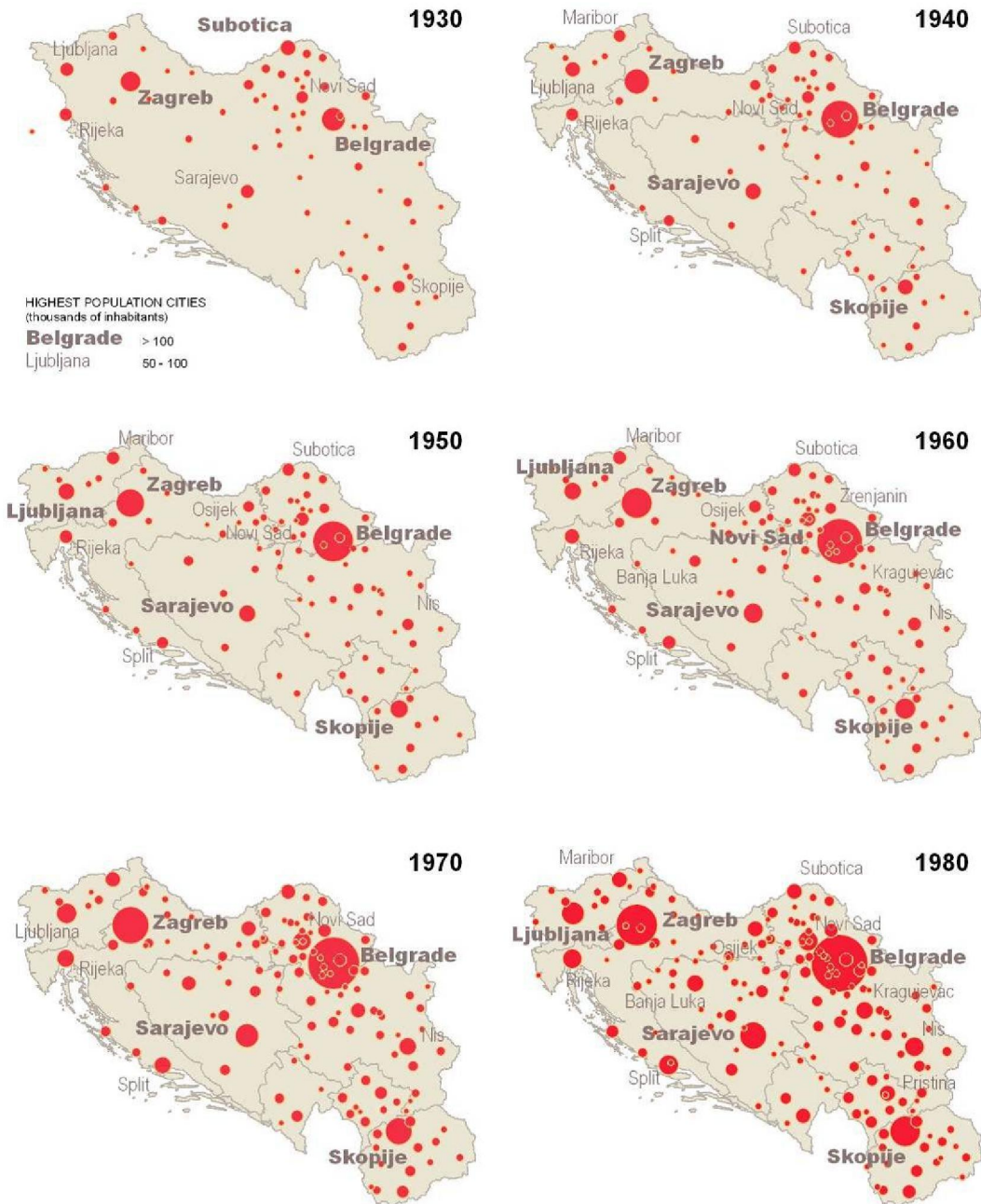
Initially, the creation of the kingdom of Serb Croats and Slovenians promoted the development of the Serbian urban centers. The establishment of Belgrade as the capital boosted the development of the Serbian city and soon it transformed into the most important center in Yugoslavia. By 1948, Belgrade already had twice the population of the second city Zagreb. The post WW-II trend was different as the growth of the Croatian and Serbian cities had been rather harmonized and balanced, while the urban centers in the smaller republics, particularly the capitals, increased at a greater pace.

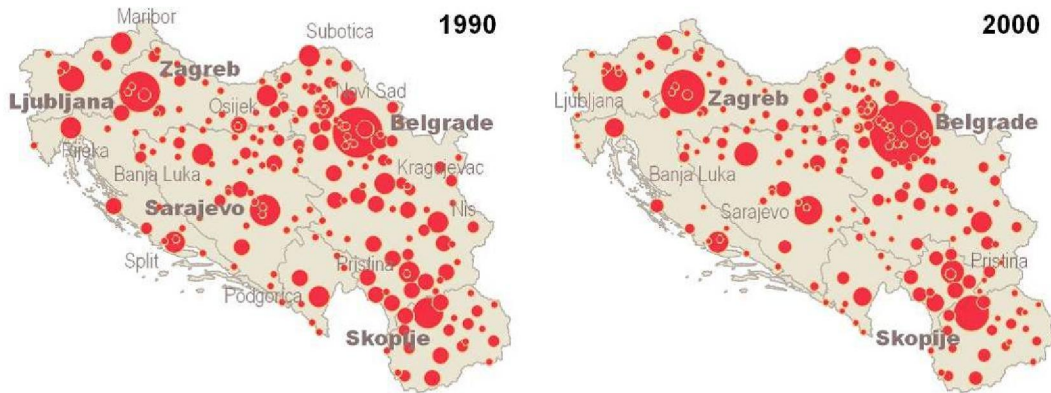
In 1910, the ten largest cities on the future territories of Yugoslavia included four from Croatia, three in Serbia, and one from Slovenia, Bosnia and Herzegovina, and Macedonia. Eight decades later in the last years of Yugoslavia, this group was more balanced and featured three cities from Serbia (Belgrade, Novi Sad, Nis), three from Croatia (Zagreb, Split, Rijeka), two from Bosnia and Herzegovina (Sarajevo and Banja Luka) and the capitals of Slovenia, Macedonia and Kosovo: Ljubljana, Skopje and Pristina, respectively. The group includes five of the republican capitals and the main cities of the two autonomous regions. As noted in the other Balkan states, despite the fact that urban growth took off only after WW-II, the main adjustments in the top end of the hierarchy occurred during the interwar period. Since 1948, the five leading cities have always been the capitals of the republics; Belgrade, Zagreb, Skopje, Sarajevo and Ljubljana. The coexistence in Communist Yugoslavia had a rather leveling effect on the republics, whereas in Royal Yugoslavia the Serbian dominance mainly favored the growth of the Serbian cities. (See Figure 48)

The areas where cities grew fastest during the second half of the century were Kosovo, Southern Serbia, and Macedonia. Meanwhile the former Austro-Hungarian cities in Slovenia, Croatia and Vojvodina grew only moderately. After the disintegration of Yugoslavia, the fastest growing towns were in Kosovo and Republika Srpska in Bosnia and Herzegovina. These included the towns of Kosovo Pole, Prizren Orahovac in Kosovo, and Bijeljina, Banja Luka, Derventa, Zvornik in Republika Srpska. The simple explanation is that the natural increase of the population in Kosovo is higher, while the towns of Republika Srpska “benefitted” from migrations of Serbs from other Bosnian territories. The trends at republican level depended on various factors including the development of infrastructure, geographical position or the policy decisions taken at federal or republican level. Notably, from 16 cities that had more than 100,000 inhabitants in 2000, only Sarajevo, Podgorica and Prizren had no railroad connection in 1910.

Thereby, the results support the assumption that railway access and administrative importance, as in the case of the republican capitals, transform easily into demographic increase and economic growth.

Figure 48. Historical growth of the largest cities of Yugoslavia





Source: Own elaboration based on census data.

The quality and the availability of the data on urban population vary among the republics.

5.6.1 Serbia

In the case of Serbia, the data goes as far back as the 1830s. However, the population of the largest city Belgrade did not reach 10,000 residents until the 1850s. Before the annexation of Nis in 1878, the capital remained the only settlement with more than 10,000 residents within the Serbian territory at the time. Shortly after, towns like Kraguevac, Leskovac and Pozarevac also reached the 10,000 mark. Subsequently, Belgrade continued to grow at a higher pace than the other Serbian cities and by 1910 the capital had a larger population than the next five largest towns together.

The incorporation of significant new territories from 1913-1919 reshaped the urban hierarchy. The lands annexed from Austro Hungary had been significantly more urbanized and included several towns that were larger than any others in prewar Serbia, apart from Belgrade. Vojvodina in the north enjoyed a vastly superior railway network and although the former Austro-Hungarian province was cut from its previous economic ties, during the interwar period the urban system of Serbia was dominated by Belgrade and towns situated in the north like Subotica, Novi Sad, Senta and Sombor. The 1920s and 1930s were years of adjustment to the new economic and geographical realities. Another city from Vojvodina Novi Sad became established as the second largest city of Serbia, while others like Sinta and Sombor lost their importance. Meanwhile the old Serbian towns Nis and Kraguevac significantly increased their populations and entered the group of leading towns. The present day order was established

around the 1940s and since 1971 there has been no change in the hierarchy of the five leading cities.

In order to calculate the primacy of the capitals within each state, a simple method suggested by Rosen and Resnick (1980) has been applied: It consists of comparing the ratio between the largest city and the sum of the next five largest cities (Primacy I) and the ratio between the largest city and the sum of the next 30 largest cities (Primacy II). Rosen and Resnick use the top 50 towns and cities to measure primacy II, but because of the late urbanization of the Balkan states, in this study the later number is reduced to 30. Even with this reduced coverage the “primacy II index” is not always available as until the 20th century no Balkan state had 30 cities with 10,000 inhabitants or more.

During the 20th century the importance of Belgrade increased vastly as it was the capital of a large and important state. As previously noted, the Serbian capital was overwhelmingly the most important city in prewar Serbia. However, because of the incorporation of the towns of Vojvodina: Novi Sad, Subotica, Sombor and Senta, the index of primacy I for Belgrade was reduced from 1.09 in 1910 to 0.48 in 1921. From that historical point the primacy of Belgrade increased continuously. Its dominance reached unprecedented levels in the 1950s and 1960s and since then has been modestly reduced. Towards the end of the century Belgrade had the size and potential to be the capital of a populous state, however its “domain” was considerably reduced in the 1990s. As a result, the levels of primacy in modern Serbia are higher than any other successor states and only compared to Athens in the Balkans.

Figure 49. Primacy levels Serbia (Belgrade/top 5-30)

	Primacy I	Primacy II
1890	0.83	
1900	0.87	
1910	1.09	
1921	0.48	
1948	2.44	0.91
1953	2.49	0.93
1961	2.50	0.93
1971	2.32	0.89
1981	2.29	0.86
1991	2.30	0.85
2002	2.28	0.84

Source: Own calculations based on census data.

The experience of the second largest Serbian city in 1921 was quite different. While Subotica in 1921 had almost the same population as Belgrade and three times the population of the third city Novi Sad, it was negatively affected by the territorial change. Separated from the economic and cultural mainland, being a border-town in Yugoslavia it gradually descended in the national hierarchy and now it is only the fifth largest town in Serbia with a population that is 16 times lower than the capital. Other cities in Vojvodina like Senta, Kikinda, Sombor, and Becej had a similar fate and were among the cities that grew the slowest during the 20th century.

Because modern Serbia is landlocked, there is no major sea port. Even so, the second largest city Novi Sad transformed into an important transport center as it resides on the bank of one the largest European rivers, the Danube. Thus, the Serbian case is comparable to Bulgaria and Romania where the second or third largest city is a major port. This trend is also repeated in the Croatia.

5.6.2 Croatia

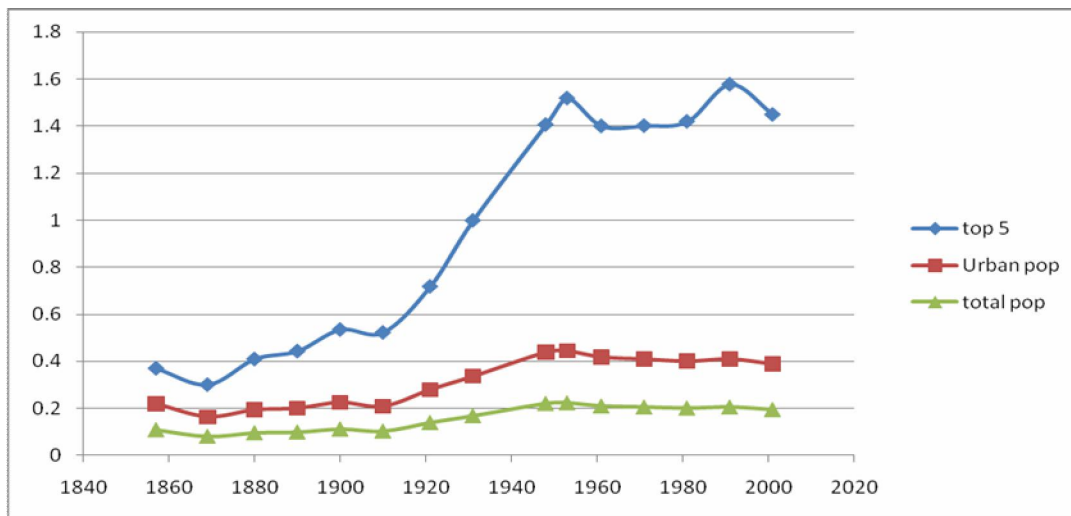
If any particular political event triggered any changes in the hierarchy of the Croatian towns, it was WW-I, it put the country in a different geopolitical and economic position. Leading cities from the mid 19th century like Karlovac, Otočac, and particularly Gospić, grew moderately and gradually fell behind new urban centers like Rijeka, Osijek and especially Split. The creation of Yugoslavia suddenly located Karlovac near borders on the periphery of a large new state, which hampered its economic growth, while Gospić did not grow, probably partially because of the late construction of the railway connection to the city. Interestingly, the port town Pula in the Istria peninsula, developed rapidly during the second half of the 19th century, and over four decades multiplied its population 5 times starting in 1869 with only around 11,000 inhabitants, becoming, in the process, the third largest town in the territory of modern Croatia. However the dissolution of Austro-Hungary and the massive emigration of the Italian minority after WW-II halted the development of the town and in 2001 Pula had a smaller population than in 1910.

The present day capital Zagreb had already been established in the mid 19th century as the national economic center, even though for centuries Croatia, like Slovenia, had been governed by a political center outside of their territory. During the subsequent decades it became the primary destination for the population flows and the concentration of economic activities within Croatia. The Croatian capital entered the 20th century as a modern European town, especially for the

standards of the Balkan Peninsula. The population of Zagreb continued to increase with high rates throughout the entire 20th century with the most impressive growth recorded in the 1920's when the residents of Zagreb went up by 70 percent.

The administrative and political reforms in Yugoslavia after WW-II established the Socialist republic of Croatia with the capital Zagreb, which further strengthened the primacy of the city within Croatia. Although the concentration of political, demographic and economic power in Zagreb continued during the Socialist period, the introduction of regulatory measures during the 1970s moderately reduced the gap between the capital and the rest of the Croatian leading centers. However, the war in the 1990s resulted in a further concentration of population in the capital as many emigrated from war zones. Towards the end of 20th century around 20% of the Croatian population lived in Zagreb.

Figure 50 Primacy of Zagreb in Croatia. The population of Zagreb compared historically to the population of the next five cities, total urban population, and total population of Croatia from 1857 to 2001



Source: Own calculations based on census data.

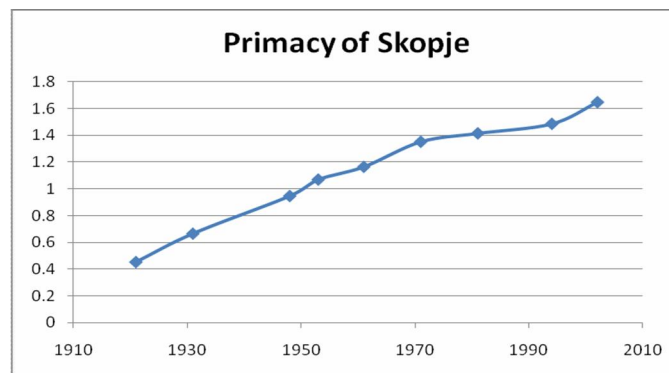
As previously noted, similar to Bulgaria, Romania and Serbia, the second largest town is a port city that emerged and developed after a significant political modification in the economic position of the national territories. The growth of the second city Split took off after the creation of the Kingdom of Serbs, Croats and Slovenes. The other two major coastal cities Rijeka and Zadar remained temporarily under Italian control and Split effectively turned into the most important port of a new large state, which boosted its economic development. After WW-II, Split

transformed into a major industrial centre specializing in the shipbuilding industry. As a result, during the communist period, its population increased three times. However, the economic problems of the 1990s and the breakup of Yugoslavia negatively affected the city. In the years following 2000, Split regained momentum and economic growth took off again with the focus shifting onto tourism. From being just a transition center, Split is now a major Croatian tourist destination.

5.6.3 Macedonia

In Ottoman times the main economic centre of the Macedonian lands was the city of Thessaloniki. However, during the Balkan wars (1912-13) the port was annexed by Greece and the political border separated it from the lands of the modern Macedonian state. In that context, Skopje, which at the beginning of the century was the leader among several cities in the territory of the future Macedonia, emerged as the primary economic centre. After WW-II the city became the capital of the new Macedonian Socialist republic and rapidly transformed into a major industrial and economic centre, a process briefly interrupted by a devastating earthquake in 1963.

Figure 51. The evolution of the primacy of Skopje: The population of Skopje compared with the population of the next five largest cities combined



Source: Own calculations based on census data.

Overall, since the creation of KSCS there were only small movements in the hierarchy of the Macedonian towns. Throughout the 20th century Bitolja, Prilep and Kumanovo stayed behind Skopje as the most populated cities and there were only small changes within the hierarchy of the 10-15 largest towns. Notably the population of Kumanovo grew with higher rates than the other major cities in Macedonia. However, the differences between Skopje and the rest increased

significantly, particularly after 1944. Contrary to the experience of the other republics, the importance of Skopje with Macedonia augmented even during the last decades of the communist period. In the present day, one third of the Macedonians live in Skopje

5.6.4 Bosnia and Herzegovina

As already mentioned, the data on the population of the cities in Bosnia and Herzegovina is incomplete. Nevertheless the primacy of the main town Sarajevo was overwhelming for centuries. The other urban centers Banja Luka, Mostar Zenica, Tuzla and Brcko grew at a similar pace during the 20th century, while Bijeljina, which was among the leading towns in the middle of the century, could not maintain the same pace of growth and descended in the national urban hierarchy. Being landlocked, BaH lacks a major urban center and port.

5.6.5 Montenegro

As a small country, the dimensions of Montenegro differed considerably from the larger Yugoslavian republics and even in modern times the population of the main urban center of the country is less than 200,000 people. Although, Montenegro existed autonomously for several decades prior to WW-I, the predominantly mountainous and rural economy failed to promote the growth of urban centers. In 1910, the capital of the Kingdom Cetinje had less than 6,000 inhabitants and was probably the smallest capital in Europe. The integration of the Montenegrin lands within Yugoslavia boosted the development of the economy and with that the development of the cities. The new main city Podgorice reached the milestone of 10,000 in 1931 and remained the only such town until the 1950s when Nikšić extend to that mark. Podgorice was declared the capital of the socialist republic of Macedonia after WW-II and the city emerged as a major socioeconomic and cultural centre. Until 1970, Nikšić and Podgorice developed at a similar pace and only after 1971 a gap opened between the capital and the second city. In the 1980s, the population of Podgorice surpassed the population of all the next five cities combined. The economic development of the city was jeopardized by the economic problems of the 1990s and the breakup of Yugoslavia; however it remains the main centre of the Montenegrin economy.

5.6.6 Slovenia

As part of the former Austro-Hungary, Slovenia developed several urban centers during the 19th century. The two leading cities of Slovenia are Ljubljana and Maribor, which were far more

populated than the other Slovenian towns during the entire 20th century. Today Ljubljana is one of the smallest capital cities in Europe; however, for a long time it had the status of the economic, cultural, administrative and political centre of the Slovenians. After the WW-II its population increased considerably due to industrialization and immigration from other parts of Slovenia and other Yugoslav republics. Despite being the largest city, Ljubljana comprises only about 15 percent of the total Slovenian population. The relatively low primacy rate of the capital city is related to the nature of the settlement network of Slovenia and the regional policy; since the 1970s, the republican authorities aimed at balancing “polycentric” development. However, the “primacy I” ratio increased from 0.8 in 1953 to 1.2 in the 2000s.

Maribor is the only other city in Slovenia with a population exceeding 50,000 inhabitants; however it has grown at a moderate rate since WW-II. Although since the 1980s, the growth of the population of the Slovenian capital has diminished, the gap between Ljubljana and Maribor widened during the second half of the century.

Overall, during the century there has been a considerable increase in the number and size of the cities in Yugoslavia. The growth of the settlements in the territories that previously belonged to the Ottoman Empire, such as Kosovo, Southern Serbia, Macedonia, and parts of Montenegro, surpassed the growth of the former Austro-Hungarian cities in Croatia, Slovenia and Northern Serbia. Thus, the institutional framework of Yugoslavia effectively promoted the reduction of the spatial disparities between the north and south, between the territories of the former Austro-Hungarian and Ottoman empires. Even so, only small movements occurred at the highest levels of the urban hierarchy, as the leading cities sustained their positions. The largest urban centers benefited from good transport connections and the concentration of administrative and economic power. The ones that went into decline after the establishment of Yugoslavia suffered from reduced economic importance with the new boundaries or the exodus of ethnic minorities. Urban growth during the second half of the century had little impact on the urban hierarchy. However, the political, economic and territorial changes after 1990 altered again the urban composition of the area. Although the successor states emerged on their republican territories, the conversion of the boundaries from administrative to national had a lasting effect on the spatial composition of the local economies, particularly on the urban network. However, it is too early to assess the effect of these changes.

5.7 Conclusion

By exploring the changes in the population density and urbanization levels at national, regional and urban level we intended to find out how and to what extent the territorial, political and economic transformations influenced the spatial concentration of the population and the development of the urban network in the territory of former Yugoslavia. The results revealed that the political events from the 1910s, 1940s and 1990s had a pattern breaking effect as expected; the territorial changes of 1918 and 1991 altered the spatial concentration of the population and the development of the railway construction, while the institutional reforms after WW-II had a major socioeconomic effect as they triggered the processes of mass urbanization and industrialization.

After 1918, the national railway network had to be adapted to the new political and economic situation as the economy suffered from uneven transport accessibility. Moreover, initially, there was a clear connection between the level of railway access and the level of urbanization as the regions with better railway accessibility enjoyed the highest urbanization rates. Generally, in 1919, the former Austro-Hungarian territories were more densely populated, urbanized and enjoyed a superior infrastructure. The existence of Yugoslavia reduced regional inequality in all these fields. Between 1920 and 1990 the high rates of population density and urbanization spread from north to south along with the improvement of the railway network.

The rapid urban growth after WW-II promoted the concentration of the population in a smaller number of settlements; however it failed to provoke changes in the urban hierarchy of the region, as the population initially converged in the developed cities.

Overall, the existence of Yugoslavia had a leveling effect on the Yugoslav nations and the disparities in urbanization rates or population density between the republics was reduced. The political and economic framework adopted in Yugoslavia after WW-II promoted the strengthening of the Yugoslavian nations. The decentralization of Yugoslavia and the promotion of the republican capitals as independent economic and political centers made possible the successful establishment of republics as independent states. However, the breakup of Yugoslavia was not a simple political fragmentation, as it was also accompanied by a profound political and economic transformation in the region. Therefore, one might expect that the trend of spatial concentration of the population after 1990 in all successor states revealed by the data to be the result of both the economic and territorial transformations.

In conclusion, the territorial and infrastructural changes had a stronger impact on the regional composition or spatial development than the economic changes. In that sense, we may expect further changes in the region in the future after the supposed entrance of all Yugoslav states into the EU.

Chapter V. Railways, regions and the urban network in the Balkans during a century of political transformations 1900-2000 ⁴⁷

At the beginning of 19th century, practically the entire Balkan Peninsula was under the political control of Austria and the Ottoman Empire. During the next two centuries the region underwent a series of profound political and territorial alterations. In the mid 20th century, the same territory was shared by six states, while at the start of 21st century the independent countries had risen to eleven. The extraordinary political fragmentation was complemented by a series of profound socioeconomic transformations that included an unprecedented increase of population, rapid urbanization and the development of modern infrastructure.

The current study aims to analyze and evaluate the spatial repercussions of these changes. The main suggestion is that the political and territorial modifications together with the construction of railways altered the economic geography of the region and prompted consecutive shifts in the regional distribution of the population. Moreover, the political changes probably affected the development of the urban network and influenced the socioeconomic imbalances of the Balkans.

To check this theory we gathered historical data from eleven modern states located in the Balkans. The database includes; geographical information - the modifications of the national and regional borders, transport information - the development of the railway network, and socioeconomic data- the evolution of urbanization and density rates at regional level and the growth of the Balkan cities.⁴⁸ The creation of the database permits the establishment of an overall vision over the spatial development of the region and facilitates the analysis of the regional shifts and spatial adjustments provoked by the political changes and the construction of railways.

The article is organized into five sections. The first one centers on the geographical extent of the study, the data collection and methodology. It presents the difficulties with the creation of a

⁴⁷ Stanev K., (2011) Railways, regions and the urban network in the Balkans during a century of political transformations 1900-2000, *Etudes balkaniques* 2011, III (forthcoming).

⁴⁸ For information on the evolution of the administrative frontiers in Central and Western Europe See Jordi Martí, *The administrative map of Europe. Continuity and change of the administrative boundaries (1850-2000)*, "Geopolitics" 10, 2005, p. 791-815.

homogenous database and the main methodological problems related to the lack of regional and territorial continuity. The second section focuses on the evolution of railway network and its influence over the uneven spatial development. Section three and four examine the regional development of the Balkans from the perspective of two main indicators applied in the study - population density and urbanization levels. Finally, the last part of the text focuses on the development of the urban network. We determine the factors influencing the uneven urbanization growth; explore the changes in the urban hierarchy and the rise of urban inequalities in the Balkans.

6.1 Territorial extent, data collection and methodology

The definition of exactly which states belong to the Balkans depends on the criteria that are applied. The current study uses the broader, geopolitical meaning of the term Balkans and includes data from eleven states which cover an area of more than 750,000 sq. km. These states are Albania, Bosnia and Herzegovina, Bulgaria, Croatia, Greece, Macedonia, Montenegro, Romania, Serbia, Slovenia and Kosovo. Although for centuries the largest Balkan city has been Istanbul, the study focuses mainly on the states that emerged during the 19th and 20th century” and Turkey and Istanbul are not included in the study. (See figure 52)

The construction of a homogenous database for an area with such a turbulent political history as the Balkans requires the use of publications from numerous existing or already disappeared states.⁴⁹ However, often countries use distinct definitions for most of the indicators presented in the censuses and furthermore the classifications often differ in the censuses of the same state. Hence, the main challenge of the work is to create an internationally comparable data series derived from censuses with varying quality, conducted by diverse methodologies on the background of frequently changing administrative structure. To avoid various approximations and adjustments that could considerably distort the original data, the indicators have to be as simple as possible. The leading criteria for the choice are the potential for international comparability. Therefore, the basic variable used in the study is the density of population. It is available at national and regional NUTS 3 type level.⁵⁰ The data on the *de facto* population is extracted from

⁴⁹ Albania, Bosnia and Herzegovina, Bulgaria, Croatia, Greece, Macedonia, Montenegro, Romania, Serbia, Slovenia, Kosovo, Austro-Hungary and Yugoslavia

⁵⁰ NUTS (Nomenclature of Territorial Units for Statistics) used by Eurostat.

the census publications, while the gathering of information concerning their borders and area of the regions often requires the use of secondary sources like other contemporary publications.

Figure 52 the states included in the study



Source: own elaboration

The second important indicator employed is the level of urbanization. The definition of “urban” may vary considerably between countries. In the current study, the urbanization rates represent the share of the population living in towns with at least 10,000 inhabitants.⁵¹ Although

⁵¹ The same definition is used in: Jan De Vries, *European urbanization, 1500-1800*, Cambridge, Mass:Harvard University Press, 1984; Bosker, Maarten and Jan Luiten van Zanden, “*From Baghdad to London: The Dynamics of Urban Growth in Europe and the ArabWorld, 800–1800*,” CEPR Discussion Paper 6833, 2008; See also Bairoch, Paul, Jean Batou and Pierre Chèvre, *La population des villes Européennes, 800-1850*. Librairie Droz, Genève, 1988.

the chosen method is only one of various possible options, this practical approach serves the objectives of the research well as it permits feasible international and historical comparisons.⁵²

Once completed, the database allows the creation of series with historical maps representing the development of the states and regions according to the available indicators. This permits us to identify the trends of growth and to distinguish any pattern breaking effects related to political and economic transformations. However, the lack of historical continuity in the regional borders in all of the states considerably restricts the possibility for empirical analyses in long run. In this context, the cities stand as a rare stable entity and the analysis of the development of the urban network offers an additional perspective on the historical trends of the spatial growth. The growth of the cities, the movements in the urban hierarchy and the increase of the urban disparities can help reveal the spatial trends in economic development. For similar reasons, the importance of the railroads is mainly evaluated in relation to the development of the urban network. Unfortunately, it is often difficult to assess the role of the railroads for regional development as the regions are too large and unstable.

6.2 Railways and uneven urban growth

The development of the railways played a vital role in the national integration of the modern Balkan states. It had also an important influence on the current state of the economic geography of the region. However, the constructions started relatively late compared to Western and Central Europe and the majority of the main lines could not be completed until the beginning of the 20th century. Moreover, before WW-II the potential of the existing lines was not fully exploited. The movement of passengers and goods was well below the capacity of the national rail networks, while the costs of the constructions were a heavy burden for the weak Balkan states. The accounts show that most of the Balkan railways usually operated on a loss. However it should be acknowledged that the financial results were not the key motivation behind the construction as the railway development was seen as an important long term tool for social, cultural and economic

⁵² For more information on the different approaches on defining “urban” and “rural” in historical studies see Florian Ploeckl, *Towns (and Villages); Definitions and Implications in a Historical Setting*, Economics Series Working Papers number 536.

integration and was therefore subsidized by the state.⁵³ Although new lines have been constructed during the second half of the century, the primary improvement of that period was the electrification of the existing ones. Moreover due to the development of other means of transportation, the principal position of the railroads gradually decreased. The railway traffic additionally lost importance during the socioeconomic changes in the 1990s. This was a direct result of the structure transformation of the ex-totalitarian economies through the growth in private automobile ownership, which effectively reduced the passengers on railway transport.⁵⁴ In the particular case of Greece the water (sea) transport has historically been among the most important means of transport, thus the railway network, even in the continental part of the Southern Balkan state, is still visibly less dense than in the rest of the peninsula.

Measuring the full extent of the social, political and economic impact of the construction of the railway network is a complex task. The data and maps presented in this study, together with the published literature, permit only relatively basic observations concerning the effects of railways on regional and urban development. The railways should have facilitated the integration of the Balkans as a region; however, that was rarely the case. Initially, during the 19th century the building of the railroads was meant to serve the interests of states mainly situated outside the Balkans. Financing mostly depended on loans provided by foreign banks; hence the constructions were often part of the political and economic strategies of the Great Powers.⁵⁵ Austro-Hungary was particularly involved as it was the closest major power and had great aspirations in the peninsula. Later, during the 20th century the building of railway lines was rarely synchronized and each nation followed its own national program. Overall, due to a lack of cooperation or common planning; the development of the railroad network had only a moderate effect on the integration of the region. Still it played an important role in the increase and reduction of the economic disparities within the states. The railway access effectively raised the prospective for economic development of a given area or settlement. As Austro-Hungary controlled large parts of the area prior to WW-I, generally these territories benefited from a more advanced railway network. After the disintegration of the Dual monarchy, the economic and infrastructural disparities were

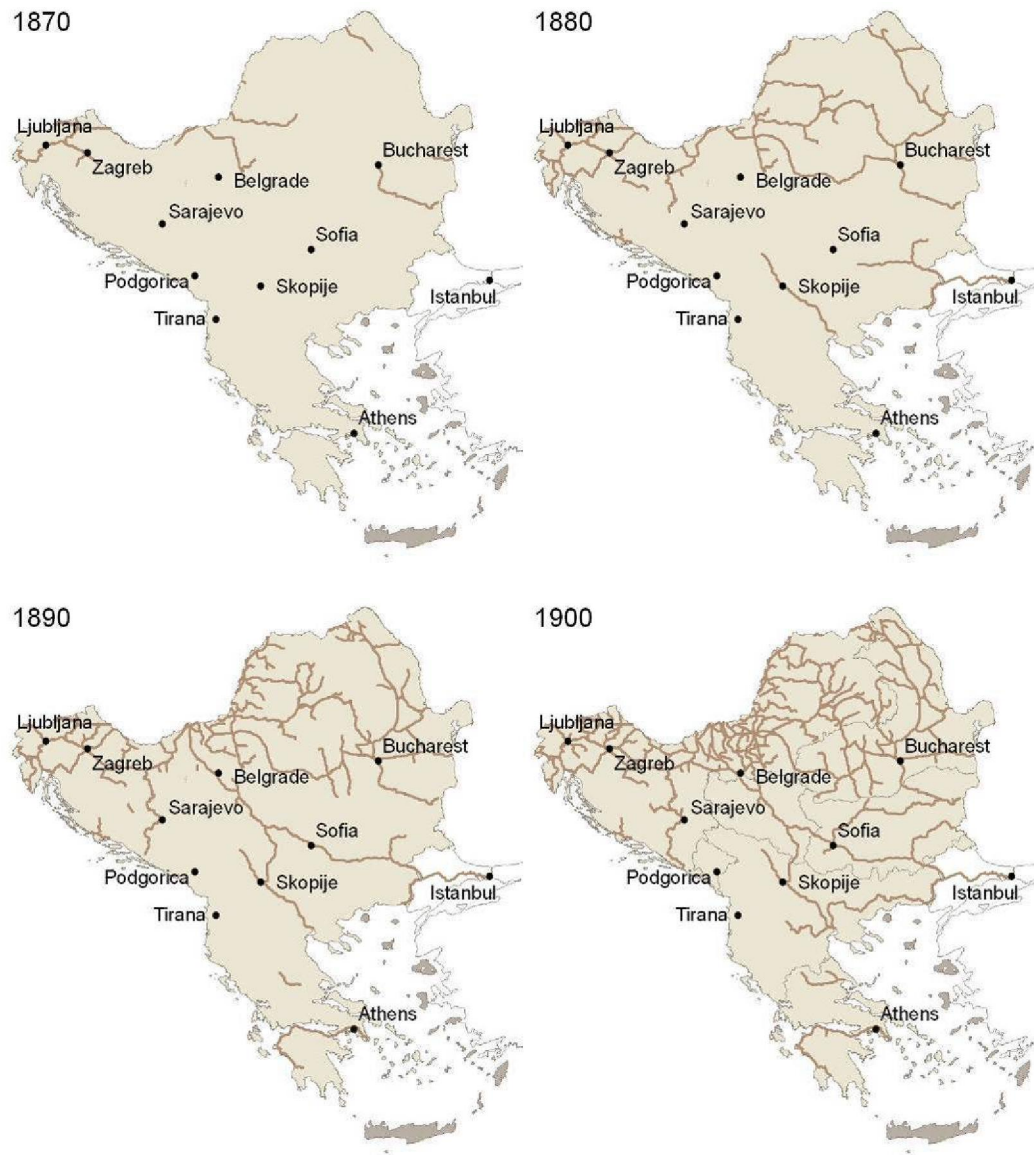
⁵³ Г. Данаилов, *Нашите железници*, София, 1902, с. 30-33.

⁵⁴ L. Thompson, *Railways in Eastern Europe*, OECD Round Table 120, Cambridge (U.K.), 2001, p. 10.

⁵⁵ E. Nikova, *Roads Connecting, Roads dividing: Infrastructure in South East Europe*, Etudes balkaniques 2007, 1, p. 4.

gradually reduced and overall all states reached comparable levels of railway coverage towards the end of the century. The exceptions are Greece, Albania and Montenegro - mainly due to the mountainous landscape of the last two.

Figure 53 Expansion of the railway network in the Balkans (1870-2000)



1910



1920



1930



1950



1970



2000



0 200 400 600 800 Kilometers

Source: own elaboration

It seems that during the initial stages of railway construction access to railroads was a principal determinant for the development of settlements, and the distribution of railway lines played a fundamental role in shaping the urban hierarchy of the modern-day Balkans. In 1900, all cities with a population of at least 50,000 were connected to the railway network with the exception of two Greek ports. A decade later, in 1910, all modern-day major cities in Bulgaria and Romania and the majority of the cities in the rest of the Balkans enjoyed railway access, (see figure 54). These results confirm the classic perception that the arrival of the rail service in the Balkans preceded economic development.⁵⁶ Another obvious observation is that normally the railroad infrastructure was built around the capital cities, which further strengthened their primacy within the respective states. Furthermore, the slow growth of cities positioned near borders can be partially explained by the relatively underdeveloped connections with neighboring states.

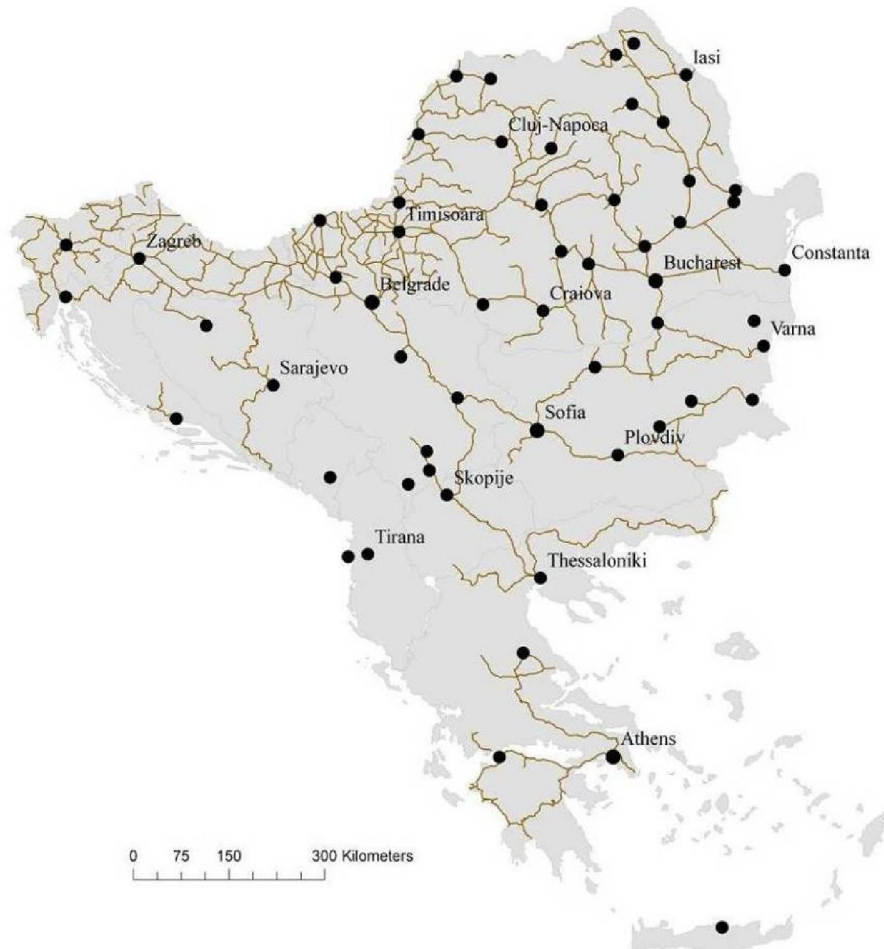
During the initial stages, the transport construction augmented spatial inequality. Later when the primate cities or leading regions already had a superior transport and communication infrastructure, investments in the rest of the country had a positive effect on the inequality reduction.⁵⁷ Notably at the beginning of the century, the regions with better railway connections were also the most urbanized. Later, the reduction of the urban disparities went in parallel with the reduction of inequality in railway access. In both indicators, the southern parts of the Balkans grew faster after 1920 and gradually caught up with the North-Northwest.

The geographical terrain and the presence of massive mountain chains in the peninsula were other major factors behind the decision making over the construction route. For this reason, relatively developed towns got connected late, which hampered their economic perspectives. The terrain was also a major factor for the population distribution in the Balkans; however there are visible cases of uneven population growth that were caused by non-geographical factors.

⁵⁶ See M. C. Kaser and E. A. Radice, *The Economic History of Eastern Europe 1919-1975*, vol. I: *Economic Structure and Performance between the Two War*, Clarendon Press, Oxford, 1985; M. Palairat, *The Balkan Economies 1800-1914: Evolution without Development* (New York: Cambridge UP, 1997); Lefteris Papayiannakis, *The Greek Railways (1882-1910) [Oi Ellenikoi Sidirodromoi]*, Athens, 1982.

⁵⁷ Diego Puga, *Urbanisation patterns: European vs. less developed countries*, Centre for Economic Performance, London School of Economics, Discussion Paper No. 305, September 1996.

Figure 54 the cities with at least 100,000 inhabitants in 2000 and the railway network in 1910



Source: Own elaboration based on census data.

6.3 Population increase

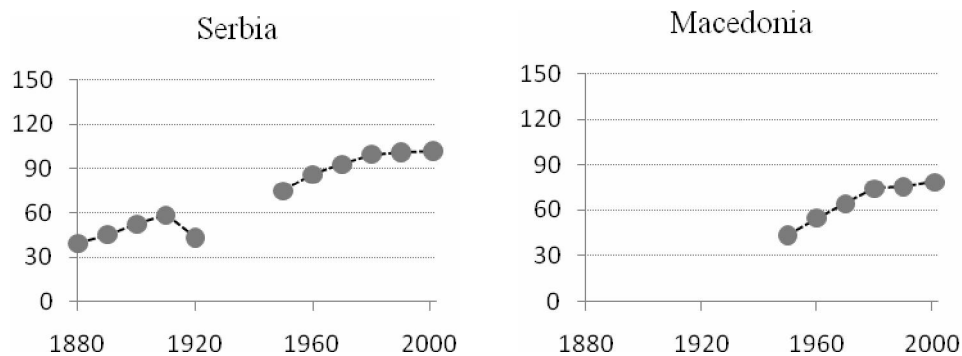
During the 20th century the population of the Balkans doubled. In most of the states the demographic transition, which started during the second half of the 19th century, initiated an unprecedented population increase. Throughout the first seven decades of the next century, the steady growth was only interrupted by the two World Wars that caused heavy demographic and economic losses. Nonetheless, in both occasions once the wars ended, the population recuperated rapidly. The highest growth was recorded in the decades immediately after WW-II. It appears that in the 1970s and 1980s the transition was completed. As a result, the growth rates decelerated in the 1980s and stagnated after 1989, due to combination of factors such as lower fertility rates, an

ageing population and especially emigration.⁵⁸ In Croatia, Romania and Bulgaria the population even decreased. The notable exceptions were Kosovo and Albania, where, as a result of the late demographic transition experienced by the “Albanian states”, the population growth followed a distinct pattern and it actually peaked during the last decades of the century.

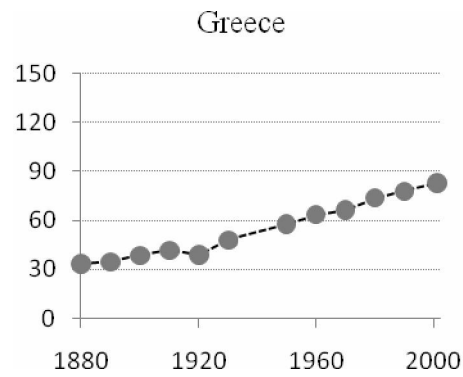
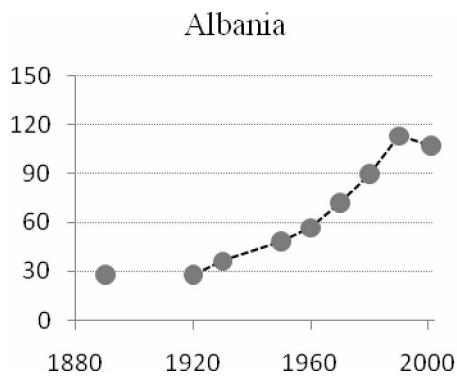
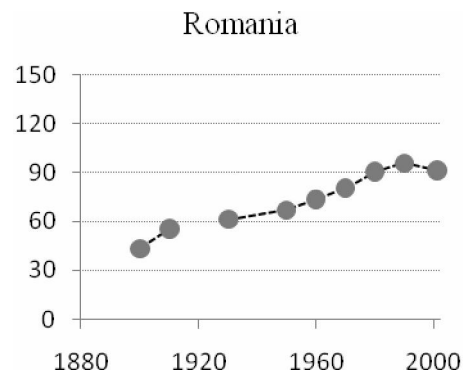
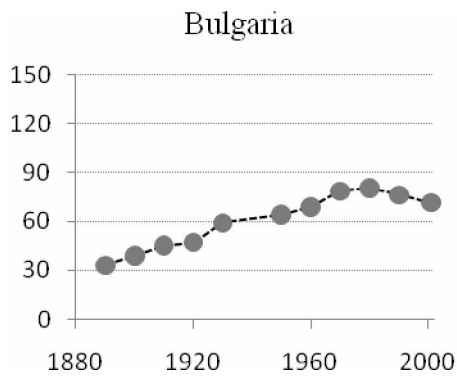
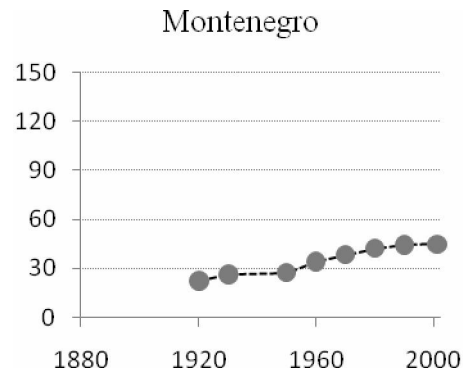
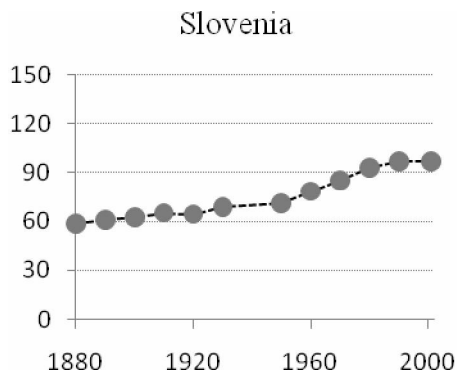
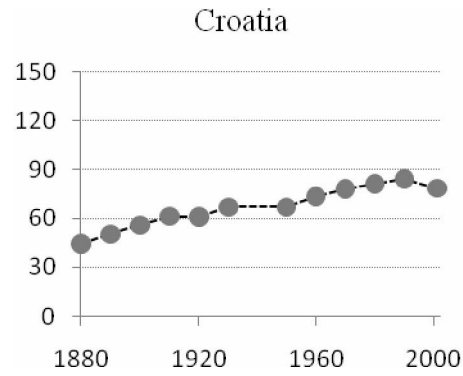
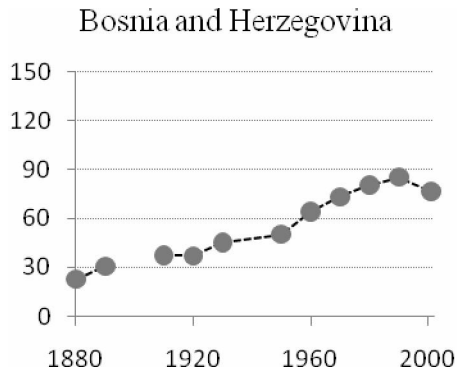
The pace of growth varied between the states. In Croatia and Slovenia, which previously formed part of Austro-Hungary, the population increased rather moderately. While, the “Albanian countries” (Kosovo and Albania) and Greece grew with higher than the average rates. Hence, while at the beginning of the 20th century the most densely populated states were Slovenia, Croatia and Serbia, towards its end these were Albania and Kosovo, followed by Serbia, Slovenia and Romania. (See *figure 55*) Meanwhile Bulgaria and Montenegro currently stand among the least populated states in Europe.

More transparent are the differences between regions. While the national data is available for all eleven states included in the study, the information at regional level is more inconsistent and occasionally for some of the states it is impossible to find data at regional NUTS 3 type level. For example, at the beginning of the 20th century the data covers only Romania, Bulgaria, Croatia, Greece and Serbia.

Figure 55 Evolution of the national density rates in the Balkan states 1880-2000



⁵⁸ Urbanization is also often blamed for the decrease of fertility rates and deceleration of the population growth.



Source: Own calculations based on census data.

In 1900, the Balkans was considerably less populated than Central or Western Europe and the local economies were predominantly rural, which explains the relatively equal dispersion of the population.⁵⁹ There were only a few areas with a higher population concentration, notably the northern regions of modern Croatia, which at that point were part of Austro-Hungary. Other areas with higher than average density rates, were the regions of the capitals of Romania and Serbia (See *figure 56*). Both states had been autonomous since the first half of the 19th century and their leading cities were in a more advanced stage of development. By comparison, Sofia in Bulgaria had been declared a national political center only two decades earlier and although it increased considerably, the population of the city was not significant enough to raise statistically the density rates of the entire Sofia region.

The data for the interwar period covers all Balkan states, although the information for Slovenia and Albania is only at national level. During the three decades after 1900 the total population of the peninsula continued to increase considerably, despite the demographic and economic losses suffered during the wars (1912-1921).⁶⁰ One of the consequences of the wars was the exchange of population between the Balkan states. Particularly, Bulgaria and Greece had to deal with a considerable influx of refugees. Good part of them settled in the capitals, respectively Sofia and Athens (particularly in Piraeus).⁶¹

The economies remained predominantly rural; so the regional disparities also remained low. Only a few areas in Northern and Central Romania, Northern Croatia, around Belgrade in Yugoslavia, some of the islands of Greece and especially Attica, enjoyed considerably higher density rates. Overall, the northern parts of the peninsula such as Croatia, the Northern half of present day Serbia, and Romania were more populated than Bulgaria, most of Southern Serbia, Greece, Albania and Macedonia (see *figure 56*).

After the devastating 1940s which included WW-II, a civil war in Greece, and communist persecutions in Bulgaria, Yugoslavia and Romania, the population continued to increase over the entire the peninsula and during the next four decades more regions with high population density

⁵⁹ See John Vernon Henderson, “*Urbanization in Developing Countries*”, World Bank Research Observer, XVII (2002), p. 89–112.

⁶⁰ During the 1910s the Balkan states participated in several wars: The Balkan Wars 1912-1913, WW-I 1914-1918 and the Greco-Turkish war 1919-1922.

⁶¹ Renée Hirschon, *Crossing the Aegean: an appraisal of the 1923 compulsory population exchange between Greece and Turkey*, Berghahn Books, 2003, p. 85.

appeared on the map. The most notable among them are the central parts of Romania and the north of modern Serbia. After the 1960s, the communist governments in Eastern Europe adopted a new policies aimed at more balanced regional development.⁶² The introduced measures included investments in less developed regions and regulations over internal migrations. Particularly difficult was the obtainment of a residence permit for the capital cities. As a result, in the 1970s and 1980s the differences between the regions in the communist states remained stable. Meanwhile, in the only none-communist country Greece, the periphery, especially the islands, were losing population. The population concentrated in and around the two mainland centers; Thessaloniki and especially Athens (See *figure 56*).

Generally, the population dynamics during the Cold War period depended on the natural growth of population as the communist governments restricted the migrations. However, there were exceptions like Yugoslavia where hundreds of thousands of laborers sought better wages in the western economies during the 1960s and 1970s.⁶³ Meanwhile, the demographic potential of Bulgaria was weakened by the moderate, but regular outflow of ethnic Turks.⁶⁴

After the abandonment of the totalitarian model of government and due to the economic difficulties in the 1990s the governments were no longer able to maintain the economic incentives and subsidies that preserved a balanced regional development. Moreover, the restrictions over the emigration of the population that existed during the previous 45 years were removed and a large number of people migrated in search of better economic opportunities. These changes induced a visible increase in regional disparities within all studied states. Many of the peripheral regions suffered depopulation, as laborers left the state or migrated to the main economic centers, especially the capitals. The decrease in the population was particularly devastating in the provinces of Bulgaria, while in Serbia and Romania many regions outside the respective capital remained densely populated. Hence, at the start of 21st century the regional differences in the

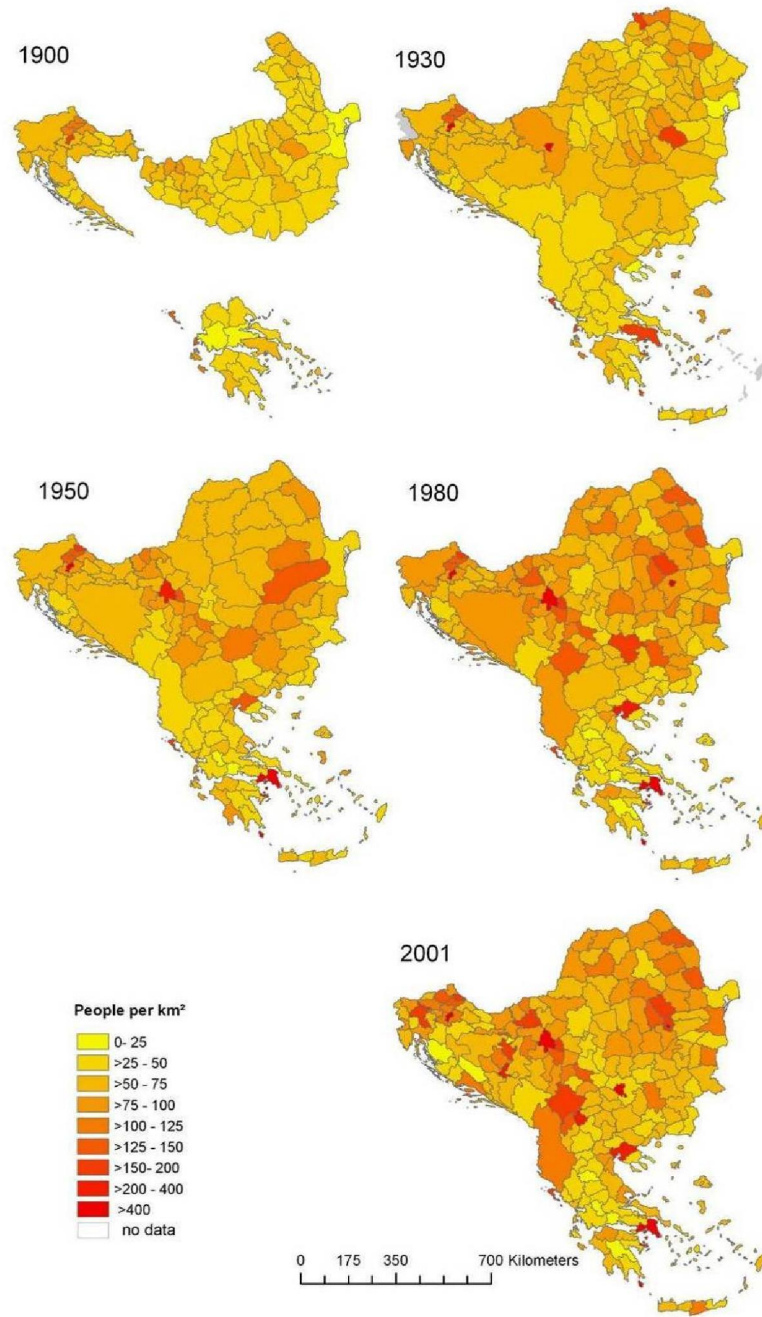
⁶² See Gyorgy Enyedi, *Urbanisation in East Central Europe: Social Processes and Societal Responses in the State Socialist Systems*, *Urban Studies* 29, 1992, 6, p.869-880.

⁶³ Joesph Velikonja, "Emigration", in: *Jugoslawien Südosteuropa-Handbuch. Band I. [Subtitle]: Handbook on South Eastern Europe. Volume 1. Yugoslavia*, Klaus-Detlev Grothusen (ed.), Vandenhoeck & Ruprecht, 1975.

⁶⁴ Omer Turan, "Turkish Migrations from Bulgaria" in *Forced Ethnic Migrations on the Balkans: Consequences and Rebuilding of Societies* (Conference Proceedings), edited by Katerina Popova and Marko Hajdinjak, (Sofia: IMIR), 2006.

population distribution in Greece and Bulgaria are higher than in Romania and Serbia. And while this trend of concentration in Greece was visible from the middle of the century, in Bulgaria it was deepened by the demographic problems of the last two decades of the century.

Figure 56 Evolution of the population density in the Balkans at regional level 1900-2000



Source: Own elaboration based on census data.

Overall, during the 20th century, the population of the Balkans remained equally dispersed between the states. The political and economic borders together with the different languages, the undeveloped infrastructure and the lack of cooperation between the Balkan nations restricted the integration of the peninsula. The trends in the spatial distribution of the population depended mainly on national idiosyncratic factors and few cross-border trends of concentration have been revealed. The migration flows were mainly internal and directed mostly towards the regions of the respective national capitals. In spite of the frequent changes in the political models of governance, the Balkan states remained essentially centralized, which further contributed to the increase of economic and demographic primacy of the national capitals.

Location might have provided the initial advantage for some of the capital cities in their establishment as national centers, but the administrative powers and the building of the national infrastructure around the political centers fostered their development. Naturally, the economic and demographic potency transmitted to the areas around the leading cities, at least in the statistical results. As a result, at the beginning of 21st century, in all Balkan states the region with the highest density is the region around the respective capital cities and was not entirely valid at the beginning of the previous century. As seen in *figure 56* the regions highest population concentration are the areas around Athens and Thessaloniki in Greece, Sofia in Bulgaria, Bucharest in Romania, Belgrade in Serbia, Zagreb in Croatia, Ljubljana in Slovenia and Sarajevo in Bosnia and Herzegovina. All the cities, apart from Thessaloniki, are capitals of their respective states.

If the Balkans was less fragmented (balkanized) politically or more integrated economically, the regions with high population concentration would probably have been fewer and the regional disparities in the population distribution would have been higher.

6.4 Urbanization rates

The second variable used in the current study is the level of urbanization at national and regional level. In the absence of better economic indicators, urbanization growth could serve as an important marker of economic modernization as the increase in size of the urban population

permits us to trace “the evolution of a society during its structural transformation from an agrarian to an industrial-service economy”.⁶⁵

The mass migration from rural areas to the cities was one of the most profound transformations in the Balkan societies during the 20th century. Although the peninsula still remains among the least urbanized regions in Europe, the urban population increased ten times during the century, while the total population only doubled. The number and the size of the cities augmented significantly in all Balkan states, although some states like Albania and Slovenia, for different reasons, remain less urbanized (see figure 57).⁶⁶

6.4.1 The beginning of the century

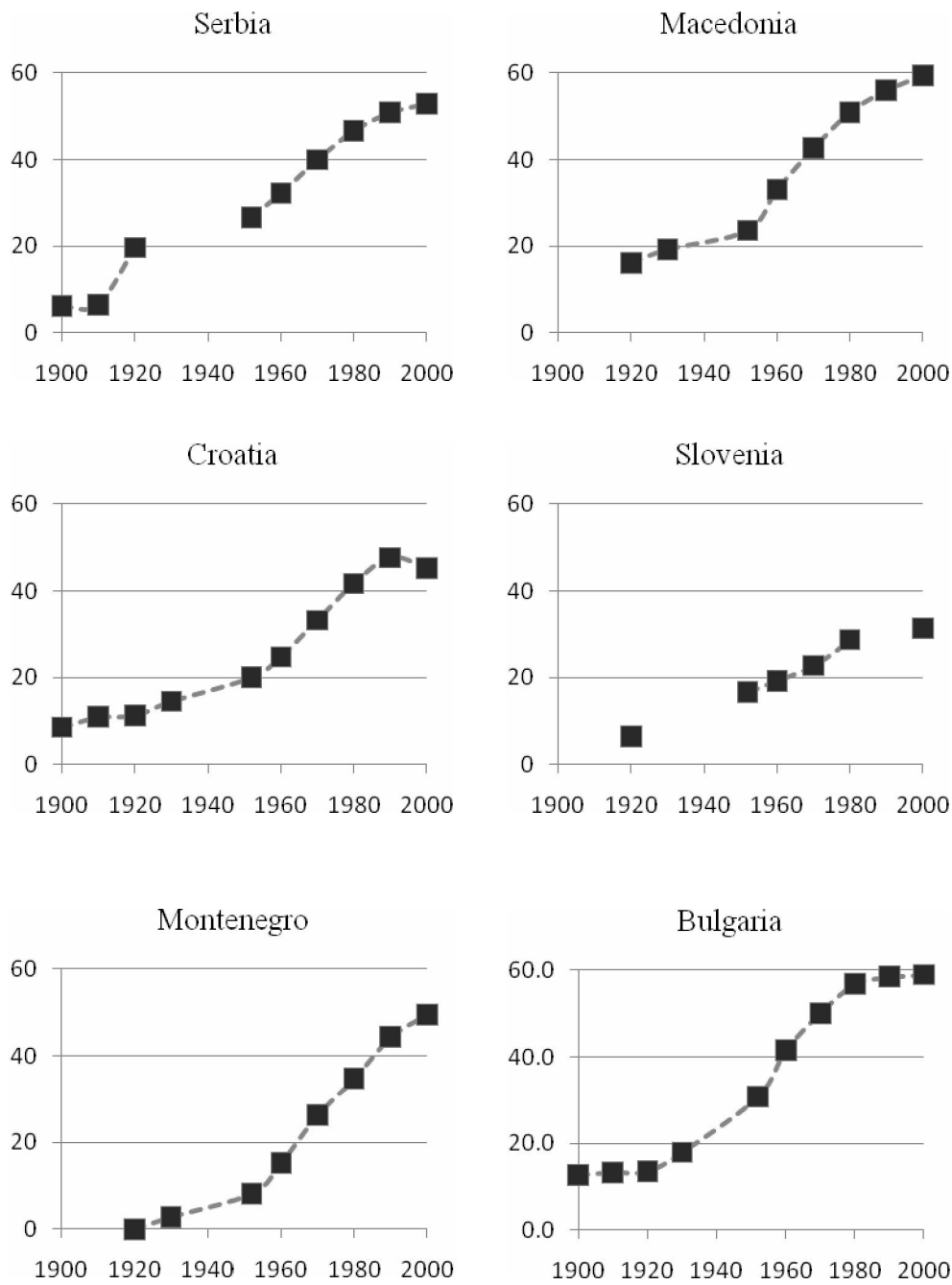
Urbanization growth passed through several stages. In 1900 less than 15% of the population was concentrated in settlements with at least 10,000 inhabitants. Moreover, at that point some of the present day states, such as Montenegro, had no such towns. During the first decades of the century the urban share increased extremely slowly. Although the cities were growing, the rural population augmented with comparable pace, thus the overall proportion remained rather unchanged - varying between 10 and 15% among the states. At the start of the century all economies were predominantly rural and the available industrial capacities were normally located in the national capitals, which effectively made these regions the most urbanized zones in their respective states.⁶⁷ Still, even these regions had a higher rural than urban population. With the sole exception of Ilfov – the region of the Romanian capital Bucharest, no regions in Albania, Bulgaria, Croatia, Serbia or Romania had more citizens living in the urban than in the rural areas (see figure 57).

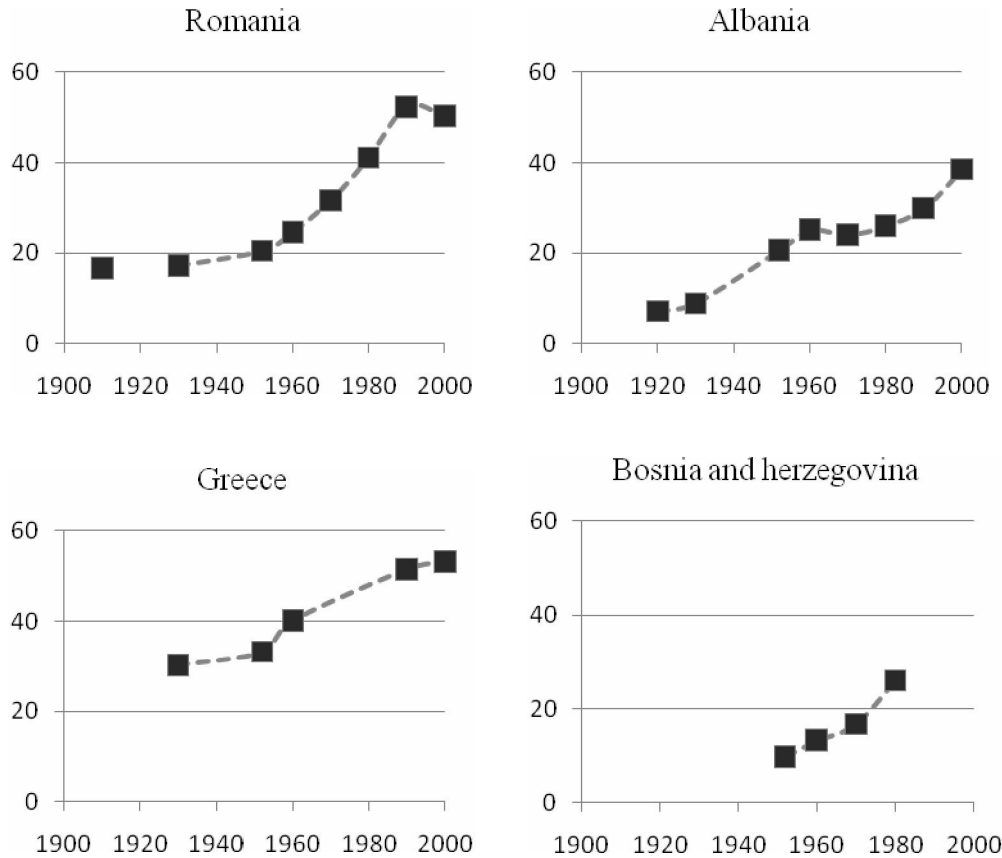
⁶⁵ Rogers, Andrei and Jeffrey Williamson. *Migration, Urbanization, and Third World Development: An Overview*, Economic Development and Cultural Change, Vol. 30, No. 3, Third World Migration and Urbanization: A Symposium 1982, p. 463-482.

See also: Joseph Berliner, “Internal Migration: A Comparative Disciplinary View”, in Alan Brown and Egon Neuberger (eds.), *Internal Migration: A Comparative Perspective* (New York, 1977), p. 443-461; Henderson, J. Vernon (2003). “The Urbanization Process and Economic Growth: The So-What Question,” *Journal of Economic Growth* 8, 47-71.

⁶⁷ See John R. Lampe, *Varieties of Unsuccessful Industrialization: The Balkan States before 1914*, *The Journal of Economic History* 35, 1975, 1, p. 56-85.

Figure 57 Evolution of the urbanization levels of the Balkan states: 1900-2000





Source: Own calculations based on census data.

6.4.2 The interwar period

The interwar Balkan economies were more dynamic. The post war social problems, the Great Depression, political instability and the establishment of authoritarian regimes in all of the Balkan states, fostered a rather negative impression of the period. However, the societies were transforming and the economies were modernizing. The increase in the population caused improvements, as the extensive growth was no longer sustainable.⁶⁸ Agriculture intensified, which permitted moderate expansion in the industrial development. The industrial capacities remained concentrated in the capital cities.⁶⁹ Athens, Sofia, Belgrade and especially Bucharest emerged as

⁶⁸ John R. Lampe and Marvin Jackson, *Balkan Economic History, 1550-1950: From Imperial Borderlands to Developing Nations*. Bloomington: Indiana University Press, 1982, p. 331.

⁶⁹ John R. Lampe, *The Bulgarian economy in the twentieth century*, St. Martin's press, 1986, p. 69; Khristo Marinov, "Географското разпределение на промишлеността в България между двете световни войни"

important industrial centers. The rate of urbanization growth started to accelerate, although still moderately. Even so, the transition to an urban society could only be completed after WW-II.

6.4.3 Decades of transformation: 1945-1989

The political and economic changes after WW-II triggered a substantial increase in the urban population. The implementation of a Soviet economic model based on central planning and heavy emphasis on industrial and urban development, and the nationalization of the land in most of communist states, initiated mass migrations to urban areas. Initially urbanization was mainly fuelled by migration, while towards the end of the century cities were predominantly self-reliant in terms of their growth.⁷⁰ The highest rates of increase were recorded during the period 1950-1980 and although throughout the following two decades the size of the urban population continued to increase; the demographic potential of the rural areas was already consumed.⁷¹ The natural increase of the cities was not sufficient to maintain the pace of growth recorded during the previous decades. Subsequently, since the end of the 1970s, in most of the studied states, the growth of the urban population has decelerated every decade.

The urbanization spurt after the war initially caused the increase in regional disparities, as the growth was mainly concentrated in the regions with already high levels of urbanization. After the 1960s as already noted, the governments of the socialist states introduced measures against the rise of regional imbalances and in the 1970s and 1980s the urban rates of the less urbanized regions increased at a higher pace, which subsequently moderately reduced the regional disparities. Although, the regions of the state capitals remained the ones with highest urbanization levels, several other areas with high urban levels formed after the 1950s. These included the former Austro-Hungarian territories around Cluj-Napoca and Timisoara in Romania, the Vojvodina region in Northern Serbia and central Bulgaria featuring the territories between Gabrovo and Plovdiv. In Bulgaria and Romania the peripheral regions urbanized visibly more

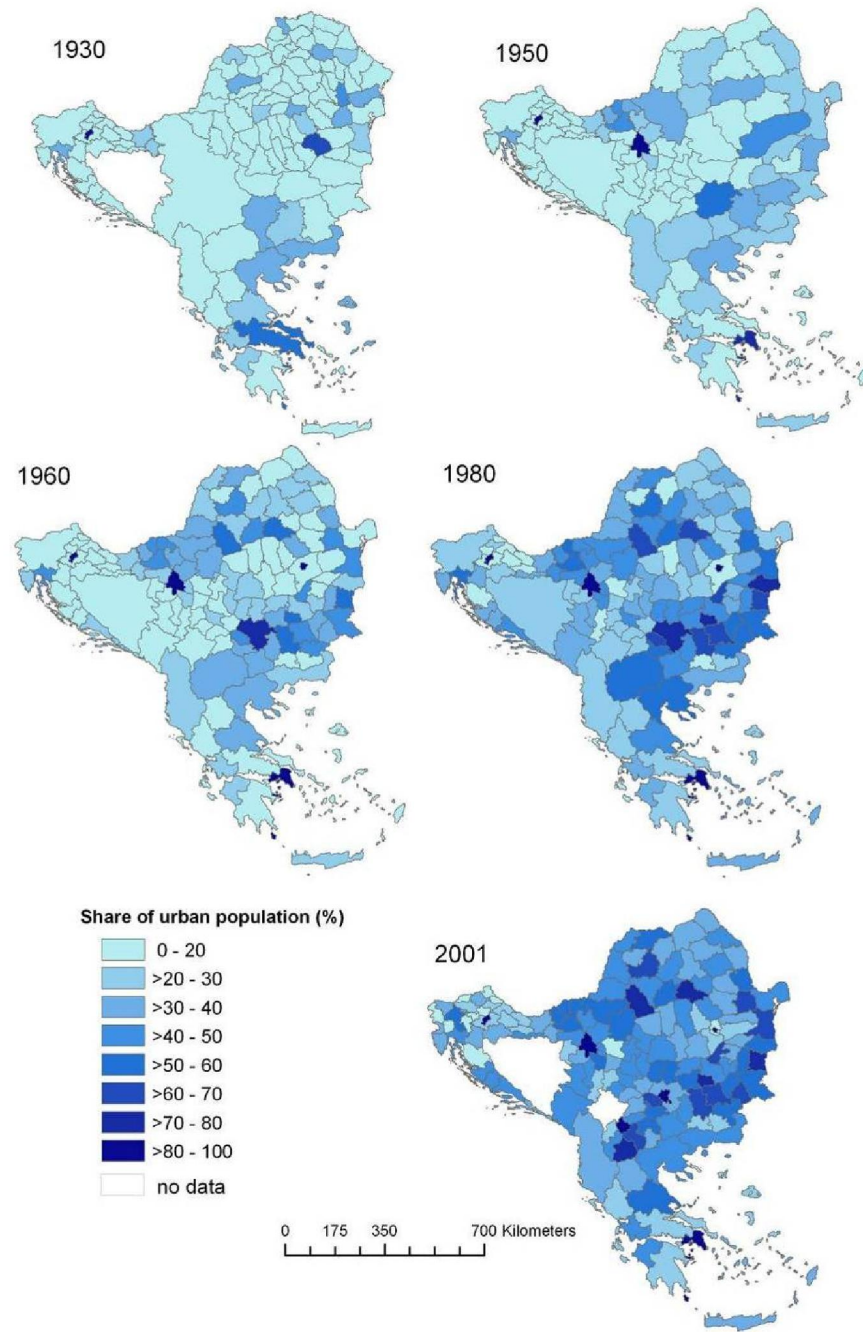
(the geographical distribution of industry in Bulgaria between the two world wars), works of V.I.I Karl Marx, I (1965), p. 7-14; John R. Lampe and Marvin Jackson, *Balkan Economic History*, 1982.

⁷⁰ Christo Ganev, *The Urban Process and the Appearance of Agglomerations in Bulgaria*, Socio-Economic Planning Science. 23, ½, 1989, p. 18-20.

⁷¹ Vezenkov, Alexander, *Урбанизацията и демографският преход* (The urbanization and the demographic transition), с. 215.

slowly. Meanwhile, in “capitalist” Greece, the inequality between Athens, Thessaloniki and the rest of the state increased consistently.

Figure 58 Regional urbanization levels in the Balkans



Source: Own elaboration based on census data.

6.4.4 Years of transition: 1989-2002

After 1990, due to economic difficulties and the emigration, some Balkan states such as Romania or Croatia experienced a reduction in the size of their urban populations. However, in the rest, the urban increase continued. Until the early 1990s the contrast between the regions remained stable as a result of central planning and the measures applied against uneven regional growth. However, the economic problems of the post-communist period and the abandonment of the regional development policies initiated a new increase of the regional urbanization disparities. As already noted, the removal of restrictions over internal and external migration unleashed a potential that had been accumulated during decades and many abandoned their place of residence in order to search for better economic and social possibilities. This affected the spatial concentration of the population and caused the reversal of the trend of convergent development that had characterized the previous decades.

Generally, all states went through the stages described rather simultaneously. They also shared similarities in regional trends, as usual; the most urbanized regions were the areas around the capitals and the main commercial ports, while the urbanization levels of the peripheral regions normally remained below the national average. As previously noted, the instability of the regional borders and the occasional lack of NUTS 3 type regional data constrains the historical analyses. In this context we can use an additional perspective on the same problem and focus on the development of the urban network and cities.

6.5 The urban network of the Balkans during the 20th century

In less than 100 years the urban network of the Balkans underwent a profound transformation. At the start of the century only around three million people lived in approximately 100 settlements with at least 10,000 residents. In the entire peninsula only Thessaloniki, Bucharest and Athens had more than 100,000 citizens. Towards its end, the urban population had multiplied ten times and in the year 2000 over 30 million lived in more than 400 cities. Four of these cities had more than a million residents.⁷² The trends in the spatial concentration of the population and the movements in the hierarchy of the Balkan cities were strongly related to the political and economic changes and the construction of railroads.

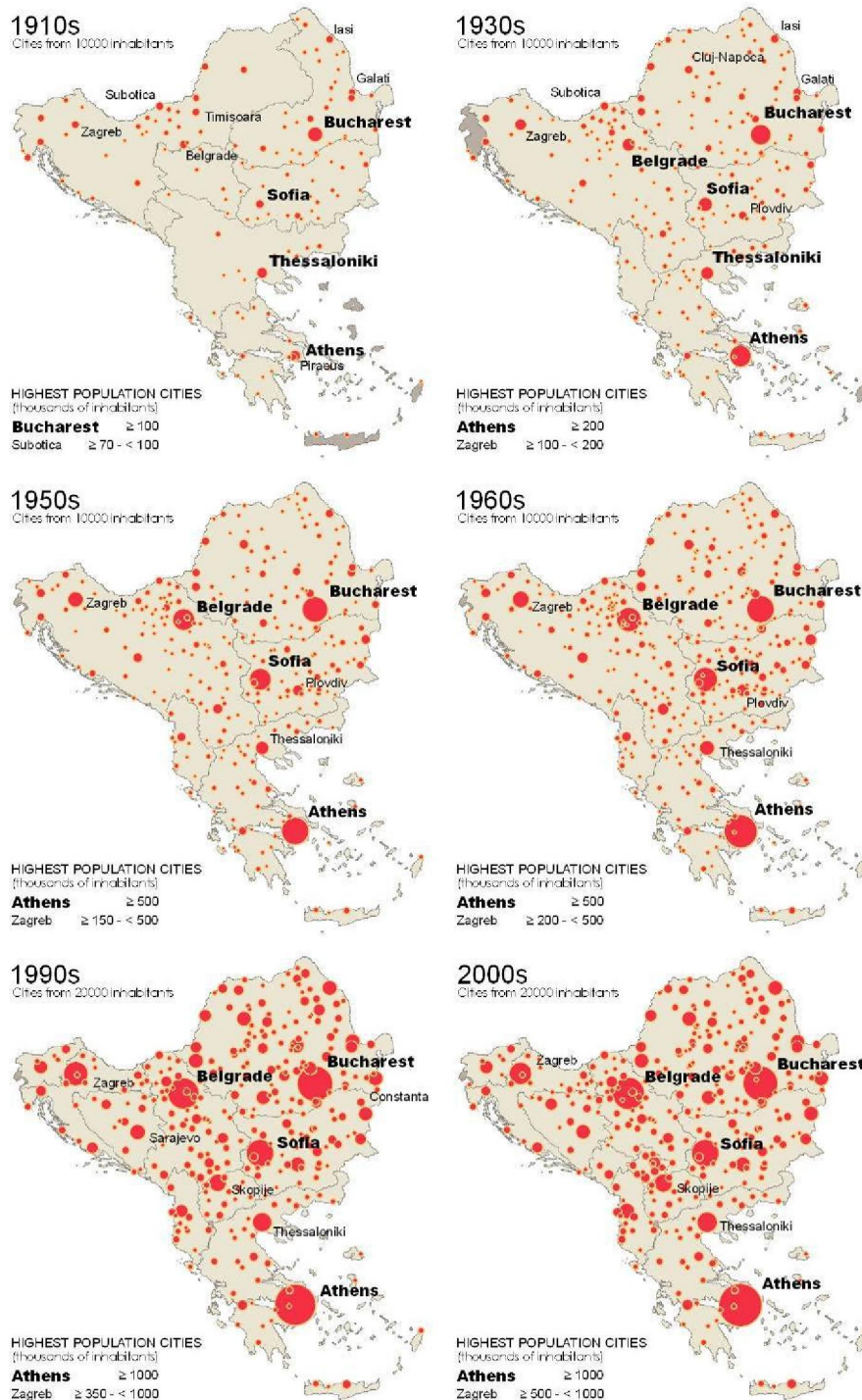
⁷² The capitals of the four largest states: Athens, Bucharest, Belgrade and Sofia.

6.5.1 Factors behind the uneven growth of the cities

The main determinants for the uneven urbanization growth in the Balkans were the differences in the natural endowments, the location, particularly the distance from national borders, and the transport accessibility in the form of railroads or water roads, and above all administrative and political importance. All of these factors are volatile. Even the potential of something apparently constant – such as location and accessibility - could have been rapidly transformed with the development of infrastructure. The modification of one of these factors could alter the overall importance of a given city. Such modifications were frequent in the Balkans during the 19th and 20th centuries. The establishment of new states and the change of the borders altered the location potential of a number of settlements. Several major cities were cut from their previous economic ties by the new borders and subsequently suffered decline or slower growth. The examples include Subotica in Serbia, Pula and Rovinj in Croatia and Oradea in Romania. Vice versa, the new political borders favored the development of others. The fragmentation of the region boosted the political importance of several major modern urban centers like Athens, Sofia, Tirana, and Skopje. Before their establishment as capitals in the new independent states, these cities had lesser importance or in the best case were *primus inter pares* compared with other cities in their current states.⁷³ Furthermore, among the fastest growing towns during the first three decades of the century were Bourgas, Varna and Constanta – the most important modern Black Sea ports in the Balkans. While the three coastal towns were part of the Ottoman Empire, they were overshadowed by the great city of Istanbul. After Bulgaria and Romania became independent, did they develop their own harbors and as a result, during the first half of the century, the three cities transformed into major urban centers. The growth was promoted by investments in the port facilities and the rapid connection to the railway network. Constanta was even connected to Danube by an expensive canal in 1984.

⁷³ Athens in 1834, Sofia in 1879, Tirana in 1920 were declared as the capitals of their recently created states, while Skopje established after 1913 as the main city in controlled by the Serbs part of Macedonia and became in 1944 the capital of the newly established Democratic Federal Macedonia (later Socialist republic of Macedonia).

Figure 59 Evolution of the urban network in the Balkans. The growth of the cities: 1910-2000



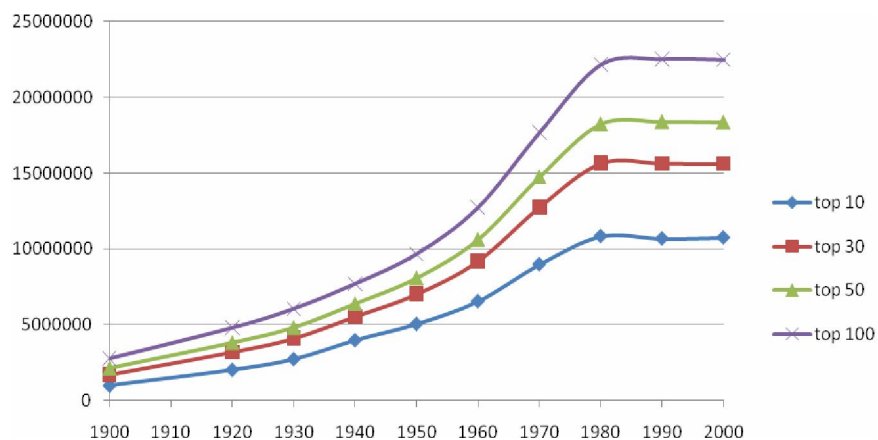
Source: Own elaboration based on census data.

Once the political borders settled, the urban network adjusted gradually to the new territorial and political realities. The period of adjustments lasted no more than a few decades after which the studied states had similar experiences in the development of their urban network, with the most common pattern shared by all - the gradual increase of the primacy of the national capitals – boosted by administrative advantages and the development of infrastructure. Overall, the railway access was a major advantage during the early stages of urban growth and early investments in transport infrastructure had significant effects on the modern economic geography of the states.

6.5.2 The largest cities in the Balkans and modification in their hierarchy

In order to explore the dynamics of the urban network of the Balkans, the largest cities are organized into four groups according to their standing in the urban hierarchy of the peninsula. There were around 100 settlements in 1900 that had at least 10,000 residents, thus the largest sample may include a maximum of 100 towns. The other samples include the 10, 30 and 50 largest cities. In 1900, the smallest settlement of the sample of 50 had 17,384 residents, respectively the smallest in the sample of 30 had 24,700 and in the sample of 10, it had 56,330 inhabitants. During the following decades the minimum population required to be part of the four samples increased gradually and in the 2000s reached 66,000 for the 100, 105,865 for the 50, 173,900 for the 30 and 320,880 for the 10 largest cities.

Figure 60 the evolution of the combined population of the largest cities in the Balkans (1900-2000)

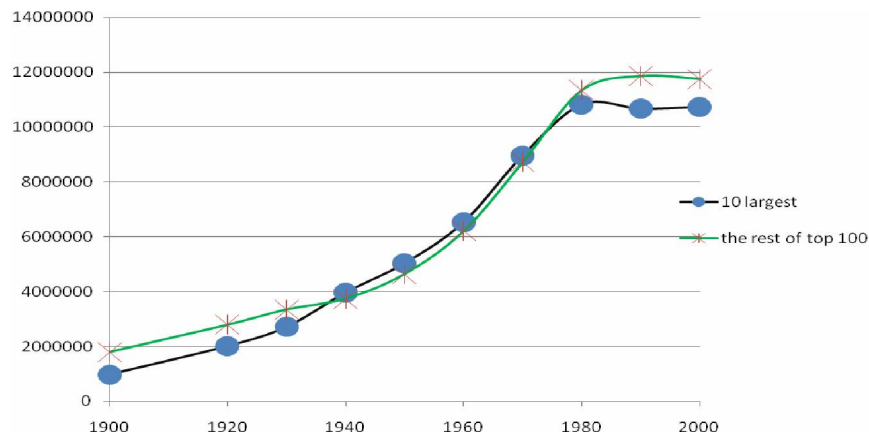


Source: Own calculations based on census data.

The evolution of the combined population of the four groups during the 20th century is almost identical. It included a gradual increase until the 1950s followed by considerable growth until the 1980s, and stabilization and stagnation during the last two decades of the century. The political and economic changes of the 1990s visibly affected the growth of all groups negatively.

In 1900, the combined population of the ten largest cities was less than the combined population of the following 90. However, after the end of WW-II the positions changed and until the 1980s the ten largest cities had a larger combined population. Since then the trend has reversed again (See figure 61). The data confirms the notion that during the initial stages of the urban increase, the growth was concentrated in the largest urban centers - mostly the capitals and later it spread to the smaller cities.

Figure 61. The growth of the combined population of the ten largest cities compared with the combined population of the next 90 cities



Source: Own calculations based on census data.

Between 1900 and 2000, forty cities in the sample of the 100 largest were replaced by new emerging urban centers. Most of the changes occurred between 1900 and the 1950s and the cities that left the sample are mainly positioned on the periphery of their respective states. This again confirms the idea that the main spatial changes actually preceded the urbanization boom and were result of the post-imperial economic adjustments. Notably among the cities that left the sample are found several important 19th century Bulgarian ports on the Danube, but none of the Romanian ports on the opposite bank of the river. Clearly the transport on the Danube was not favored in

Bulgaria.⁷⁴ Actually, not a single Romanian town left the sample. The cities that did are located in Bulgaria, Greece, Serbia and Croatia. The new cities in the sample are situated mainly in Central and North Western Romania, the Southern parts of present day Serbia, Kosovo, Albania, and Macedonia. None of the new cities is Greek, Croatian or Slovenian.

The main adjustments in the hierarchy of the leading urban centers also occurred during the first half of the century. Only four of the modern Balkan capitals were among the eight largest cities in 1900, while four of them were not even within the biggest 20. A century later, apart from Podgorica (Montenegro), all the capitals are within the top 20 and in fact, seven of the eight largest cities in the Balkans are national capitals. Already in the 1930s the six largest cities were Bucharest, Athens, Belgrade, Sofia, Thessaloniki and Zagreb and they maintained their positions throughout the process of urbanization and industrialization. The most populous since the 1930s had always been Bucharest and Athens, with Sofia and Belgrade behind them. Overall, during 20th century the importance of the national capitals gradually increased. In the beginning of the 21st century the cities with the highest primacy within their respective state are Belgrade and Athens. While the primacy of Athens has been increasing during the entire 20th century, in the case of Belgrade it reached unprecedented levels after of the dissolution of Yugoslavia. The Yugoslavian capital had the size and potential to be the capital of a large and populous state, however its “domain” was considerably reduced in the 1990s. Again the political events played a major role and the experience of Belgrade is similar to the Hungarian capital Budapest after WW-I.⁷⁵

The movements were more dynamic in the lower levers of the sample with 100 cities. Despite of the strong urbanization growth after 1940s; there are towns that had at least 10000 inhabitants in 1950 but actually have lost population since then. Apart from Knish in Bulgaria, all of the cities with negative growth are situated in Serbia or Greece. In the case of Serbia, these towns are situated mainly in the Northern Province Vojvodina, which was part of Austro-Hungary until 1918 and the majority of the large towns in Serbia during the interwar period were situated there. Notably all former Austro-Hungarian cities in Yugoslavia underwent slow growth during the

⁷⁴ A Kostov, “Trade and Navigation on the lower Danube: Romania and Bulgaria 1880-1912,” in Andreas Kunz and John Armstrong (eds.), *Inland Navigation and Economic Development in Nineteenth-Century Europe*, Mainz, 1995, p. 105-119.

⁷⁵ David Turnock, *The Making of Eastern Europe: From the Earliest Times to 1815*, Routledge, 1988, p. 193.

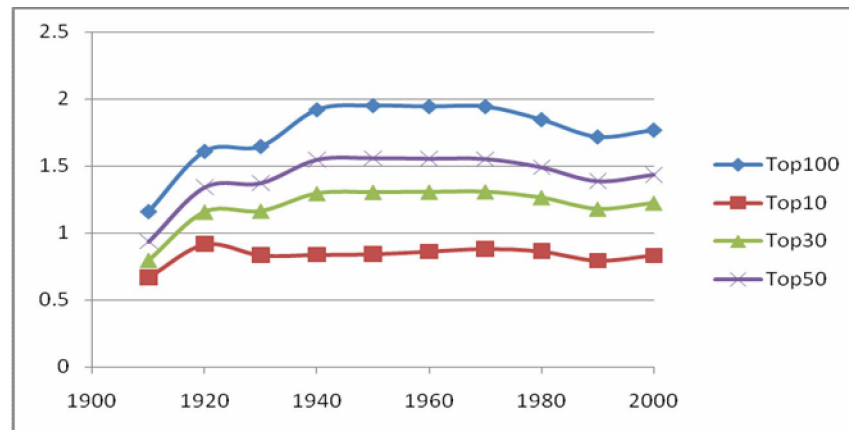
second half the century and not a single city in Croatia, Slovenia or Vojvodina experienced the triple multiplication of their population after the 1950s. The fastest growing cities in this period are mostly found in Romania, mainly in the North, and the area in the Southwestern Balkans consisting of Montenegro, the South of present day Serbia, Kosovo and Albania. The towns that lost populations during the last three decades of the 20th century are situated mainly in Northwestern Bulgaria and the North of modern Serbia and to a lesser extent in northern parts of Croatia, Slovenia and the periphery of Greece. The highest growth in the same period occurred in the cities in Southern Serbia and Kosovo.

Overall, in Bulgaria, Croatia, Vojvodina, Greece, and Slovenia the urbanization spurt affected mainly the already developed cities, while in the rest of Serbia and Romania there were movements in the national urban hierarchy with the emergence of new urban centers and the decline of established ones.

6.5.3 The evolution of urban disparities

The disparities in the samples of the 100, 50 and 30 largest cities increased gradually during the first half of the century as urbanization growth was concentrated in the capitals and the largest cities. Hence, there are few changes in the disparities in the group of the ten largest cities. With the start of urbanization growth after WW-II, the level of inequality in all groups stabilized. It remained unchanged until the 1970s, when the growth became convergent and during the following two decades urban disparities were reduced. However, after 1989 the ex communist states experienced an unprecedented concentration of the population. This is owed more to the decline of the smaller cities than to the growth of the larger ones. The increase in urban disparities could be indirectly attributed to the severe economic crisis and the abandonment of the regulatory policies. Citizens were permitted to move freely throughout the state or to leave the country, and the governments were unable to continue their previous policy of balanced regional development. As an overall result, there is a new rise in urban disparities in the Balkans.

Figure 62 Evolution of the population disparities between the largest cities of the Balkans (coefficient of variation)



Source: Own calculations based on census data.

While the communist states passed through similar stages throughout urbanization, the only non communist state covered in the study, Greece, underwent a gradual concentration of the population in the large urban centers; mainly Athens but also Thessaloniki

6.5.4 The experience of the Balkans compared

Current research does not cover the period of the initial formation of the Balkan urban system. It was a gradual process that took centuries.⁷⁶ Similar studies on the evolution of the national urban systems of France, Japan and Spain, also focus primarily on the periods of the main increase in the urban population, (Eaton and Eckstein, 1997)⁷⁷ and (Lanaspa, Pueyo and Sanz 2003).⁷⁸ However, the studies of Japan, France and Spain explore the changes in settled areas with relatively stable frontiers, while none of the Balkan states had the same frontiers in 1900 as in 2000. Only several decades prior to the acceleration of urbanization growth, the political borders of the Balkans changed significantly, thus altering the geostrategic position of many of the Balkan cities. The political and economic fragmentation of the two Empires (Austro-Hungary and Ottoman Empire) and the reshaping of the frontiers of the existing states caused adjustments in the

⁷⁶See N. Todorov, *The Balkan city 1400-1900*, Seattle&London: University of Washington Press, 1983.

⁷⁷J. Eaton and Z. Eckstein, "Cities and growth: theory and evidence from France and Japan." *Regional Science and Urban Economics* 27(1997): 443– 474.

⁷⁸ Luis Lanaspa, Fernando Pueyo and Fernando Sanz, *Evolution of the Spanish Urban Structure during the Twentieth Century*, *Urban Studies* 40, No. 3 (2003): 567-580.

urban network. Moreover, simultaneously the growth of the cities was influenced by the expansion of the railroad network. Hence, the results reveal that the main fluctuations in the hierarchy of the Balkan cities, the rapid progress or decline of certain urban centers occurred mostly between the establishment of the modern national frontiers and the urbanization spurt after WW-II. Another difference with the experience of Japan, France and Spain was the pace of the transformation; the urbanization spurt in the peninsula was more radical and rapid than in Western and Central Europe as the increase from 15% to 50% took less than five decades (1940s-1990s). Nevertheless, the evolution of the Balkan urban network during the period of substantial growth (1950-1990) resembles the French and Japanese experiences where urbanization growth had little effect on the distribution of the population in different urban areas. Nor did it promote the creation of new urban centers. The results also confirm the conclusions of Eaton and Eckstein that “once an area is settled, expansion of existing cities dominates the creation of new cities and the major cities are likely to maintain their position for the foreseeable future”.

6.6 Conclusion

The main ambition of the current work was to explore the patterns of population growth and distribution in the Balkans, and to evaluate the impact of the construction of the railway network and the frequent political and territorial changes during the 20th century, over the formation of the modern economic geography of the Balkan states.

The first such change was the political fragmentation of the region after disintegration of the Austro-Hungarian and Ottoman Empires. It initiated significant transformations in the spatial composition of the smaller national economies, as they had to adapt to the altered territorial and political realities. Most of the adjustments were completed during the first decades after the foundation of the new states and included the strengthening of the new national economic centers and the construction and reorganization of the transport infrastructure.

The next geopolitical event with considerable impact on the socioeconomic development of the Balkans was the end of the WW-II. The implementation of the Soviet economic model in all but one of the studied states resulted in a profound reorganization of the social, economic and political life and lead to rapid urbanization and industrialization. However, the urbanization did not alter the regional and spatial distribution of the population in the same way as the political changes of the late 19th and early 20th centuries.

The third transformation was caused by the end of the Cold War and the collapse of the Soviet economic political and economic model. The transition from a centrally planned to a market oriented economy caused a visible increase in regional disparities and stagnation in the population growth in the majority of the Balkan states. The exceptions are Albania, Kosovo, Macedonia and Greece. The latter was the only none communist state in the Balkans and as such did not undergo a political and economic transition of such scale. However, the data from the beginning of 21st century shows that, despite of the increased regional and urban disparities, there was no big shift in the spatial composition of the states after 1990s.

Overall, the hypothesis linking the political events and radical changes in economic geography has only been partially confirmed. The economic geography and the spatial distribution of the population were only altered by the territorial changes of the peninsula at the beginning of the century. The subsequent political transformations in the 1940s and 1990s affected deeply the economic development and with that the levels of spatial and regional inequality in the Balkan states, however they did not provoke significant adjustments in the hierarchy of the regions or major cities.

In conclusion, the experience of the Balkans revealed that changes in the political borders during the preindustrial period can influence significantly the spatial distribution of the population, while territorial transformations in already urbanized economies have a lesser effect. Furthermore, small early advantages in the form of political and administrative importance or railway access have a lasting effect on the economic geography, as urbanization growth mainly affects the already developed cities and regions

Chapter VI. Structural Change and Economic Growth in Southeast

Europe: Bulgaria, 1888–2001[†]

Martin Ivanov

Kaloyan Stanev

7.1 Introduction

The notion that separation of trades and occupations proceeds with economic development dates back to Adam Smith's path-breaking analysis of wealth of nations.⁷⁹ But it was only recently when the importance of professional occupation data has been fully recognized by economic historians. The better quality and reliability of occupational statistics is often cited as a reason for the growing attention that this field of history enjoys in recent years.⁸⁰ While most other statistical time-series were gathered "on the ground" by non-professional agents (local administration, religious communities, regional branches of state institutions or business associations) the data on professional occupation was mainly collected as a result of a centralized effort by purposefully set up agencies with special expertise in the field. Carrying out censuses roughly once a decade national statistical offices followed uniform procedures that were broadly coherent. This standardization allows scholars today to build a consistent and reliable picture of the occupational structure and its changes through time.

It is already a common wisdom in the literature to match the census data on occupational structure of a society with various other sources of information – sectoral surveys, output data, national accounts etc. So far these exercises were mainly applied to developed countries of the "industrial core" (the U.K., Italy, Belgium, Sweden, Japan etc.). There is a wide array of "peripheral" countries, however, where anything but the census information is virtually non-

[†] Partial funding for this paper was provided by the Spanish Ministry of Education (SEJ2007-64812), the Regional Governments of Catalonia (AGAUR). Additional support to both authors was provided by the European Science Foundation under Eurocores – Inventing Europe grant FP-005 "Water, Road & Rail: The Development of European Waterways, Road and Rail Infrastructures: A Geographical Information System for the History of European Integration (1825-2005)."

⁷⁹ Smith, *Wealth of Nations*, vol.1, pp.15–16.

⁸⁰ This idea is strongly advocated, among others, by Daniele and Malanima, 'Labour Supply in Italy', p. 3.

existent or, at best, is muddled by incompleteness and suspected inaccuracies. In effect, national accounting techniques are basically inapplicable for vast areas of the Second and the Third World. Facing this obstacle even Maddison was unsuccessful in his gigantic effort to reconstruct the GDP of most underdeveloped countries before World War II. His first estimates for Latin America are from 1900s but the situation with other “peripheral” regions is far worse. In Southeast Europe, for example, consistent GDP time-series starts only in 1930s, while in East Asia, in Middle East, and in Africa – not before 1950s. Given these data limitations statistical gaps seem unlikely to be overcome in the near future. Whenever, despite these data limitations, attempts were made they had to substitute direct GDP estimates with proxy measures of economic activity.⁸¹

The Southeast Europe (SEE) seems to be a typical example of a region with inadequate and low quality statistics. Problems stem from various directions. Bold researchers of the past SEE economic development have to cope with the missing data first. Entire sectors were completely abandoned by statistical surveys, thus crippling any attempt to reconstruct their growth performance. Industry and crafts are one such area where information is incomplete, to say the least. Other sectors that were victims of similar statistical myopia traditionally were the services, the construction, and the inland trade.

Secondly, even when data is available there are yet other problems that are often insurmountable by researchers. Traditionally, institutions in SEE are believed to be weak and ineffective. The result in this case is a statistics of suspicious or at least unclear quality. Indeed, it is hard to tell now how accurate the figures that were produced 100 or 130 years ago are. However, there are serious reasons to doubt the statistical capacity of the agencies that were entrusted with the process of data-collection. This problem could be expected to decrease with time. In reality, however, the situation actually deteriorated in the post-World War II period. With the imposition of the communist regimes the insufficient statistical capacity was replaced by ideologically motivated incentive for mis-reporting. Within the context of the Cold War statistical data became a politically sensitive commodity that was often “redressed” and “corrected” before publishing. The well-known methodological and conceptual differences between the System of National Accounting (SNA) and the Material Product Accounting (a socialist version of SNA), further complicate the situation.

⁸¹ Compare Good and Ma’s attempt at reconstructing GDP of Southeast Europe. Good and Ma, ‘Economic Growth’.

Restrained by these deficiencies scholars had to resort to alternative techniques for GDP approximation. And, indeed, most attempts so far have resorted either to proxy equations – the most preferred being the number of letters exchanged as well as the levels of infant mortality, education, and urbanization – or alternatively, had to be based on *a priori* assumptions about “minimum per capita growth rates”.⁸² Guesstimates of such proxy techniques are commonly perceived as second best results and are only used pending the availability of better quality aggregates. Given the data limitations in most countries of the South-eastern “periphery” chances to break this vicious circle (missing or poor sources producing low quality GDP estimates) appear to be slim.

The Smithsonian idea about the correlation between the structural change and the modernization may, however, provide us with an opportunity to indirectly measure the economic performance of SEE. Indeed, such a notion is hardly innovative and it has already been successfully applied for several developed counties from West Europe and East Asia.⁸³

This essay will proceed as following. The aim of its first section will be to test the relationship between the shifts in professional structure and the economic growth for a “peripheral” economy with relatively good statistical coverage and long annual GDP time-series. If the correlation holds for Bulgaria then there will be a good reason to believe that it could be applicable for other countries in Southeast Europe. By combining conventional statistical sources with occupational data the second section of this essay will map the main features of the structural change that was experienced by Bulgaria from 1880s to the year 2000 both at national and at regional level.

7.2 Economic Growth and Structural Change

Based on Bulgarian experience this section will attempt to study in more length the correlation between the economic development and the structural shifts in occupation. In addition, it will try to speculate on how applicable this methodology for growth approximation is for the rest of Southeast Europe.

⁸² Bairoch, ‘Europe’s Gross National Product’; Good and Ma, ‘Economic Growth’; Maddison, *Historical Statistics*.

⁸³ Daniele and Malanima, ‘Labour Supply in Italy’; Buyst, ‘Changes’; Saito and Settu, ‘Unveiling Rural By-Employment’.

7.2.1 Census Data Reliability

Bulgarian statistics that was produced before World War II is generally perceived in the literature to be among the more elaborate in the region. Bulgaria was one of the first ten countries in the world with a national income estimate, thus overtaking “core” countries like Belgium, Canada etc. Furthermore, all of its neighbours were slower in the introduction of national accounting. Greece, for example, made its first estimate in 1921, Yugoslavia – not before 1927, Turkey in 1935, while Romania and Albania – only in 1948.⁸⁴ Meanwhile, Bulgarian statistic was fast in implementing many of the novelties in the field. In the late 1920s General Directorate of Statistics pioneered with a representative survey of population and agricultural holdings. The methodology continued to be used in the later censuses as a way to verify and correct the collected information.⁸⁵ As early as 1900 several *Powers* machines were procured for mechanical processing of the statistical cards.⁸⁶ The rich and versatile Bulgarian data was often used to substitute the missing information for other countries from the area.⁸⁷

This relative statistical advantage is important for our correlation test. It, however, should not obscure the dubious nature of published information in the decades before 1900s. At first, statistical capacity of Bulgarian state was all but satisfactory. According to contemporaries first censuses were taken “in such a manner of negligent and careless” that the results were “hardly useful”. If the chief of Statistics is to be trusted “there is no single page without typos and mistakes”. To this added the serious breach of confidentiality. The returns of the first enumeration were soon sold *en mass* to Sofia merchants who used them as wrapping for different goods.⁸⁸ Furthermore, due to the low literacy levels in the country, until the first quarter of the 20th century data card were actually filled-in by census agents and not by the respondents.⁸⁹ To avoid filling-in mistakes differently coloured cards were introduced in 1900. Machine processing of data also helped to limit data inaccuracy. Each census was preceded by verification of house numbers lists, address and population registers. Representative surveys supplemented general censuses since the

⁸⁴ Studenski, *Income of Nations*, v. 1, p. 156-7; Shterionov, ‘Bulgaria’s Census Questionnaires’, p. 120.

⁸⁵ Anderson, *Representative Method*.

⁸⁶ Dimitrov, ‘Automatic Counting Machine’.

⁸⁷ Tomasevic, *J. Peasants, Politics, and Economic Change*.

⁸⁸ Sarafov, M. *Population*, p. 4, 24.

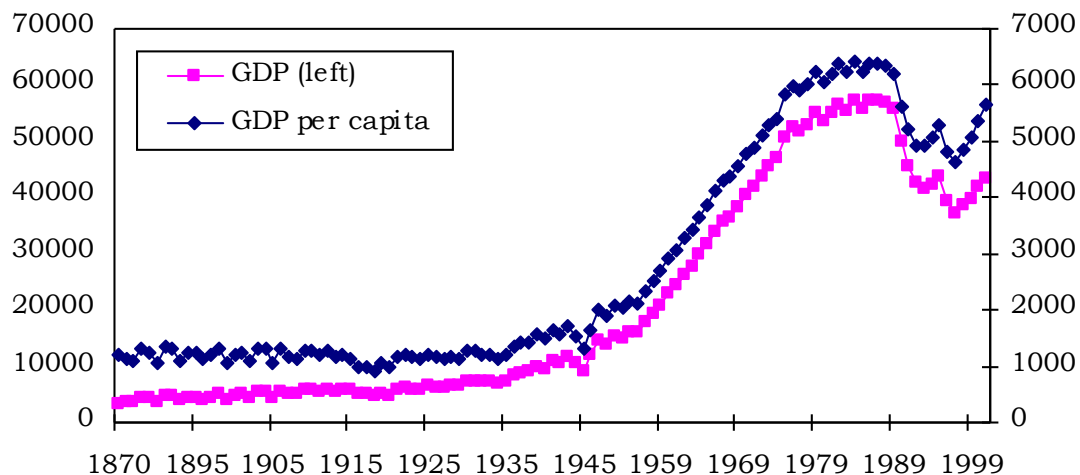
⁸⁹ Sterionov, ‘Bulgaria’s Census Questionnaires’, p. 116; Kiranov, ‘Development’, p. 25.

late 1920s and were used to improve the final results.⁹⁰ All these efforts paid, according to experts, as most of the censuses were “comparable in quality with the surveys conducted at that time in Western Europe”.⁹¹

7.2.2 GDP Growth and Structural Change

Drawing from the rich Bulgarian statistics recently Ivanov and Ivanov and Tooze produced a new set of GDP estimates.⁹² The revised national accounting time-series included calculations for 1870, 1880 and 1887–1945. For the post-World War II era Ivanov relied on the work of Thad Alton and his colleagues, which was recalculated in 1990 international dollars by Angus Maddison.⁹³ The result of these combined efforts is a centenary panorama of Bulgarian economy since 1870s.

Figure 63. Bulgarian Real GDP and GDP Per Capita, 1870–2001 in 1990 international dollars



Source: See the text.

In what follows the GDP data will be matched with the information on professional occupation, which was obtained from fourteen Bulgarian censuses taken from 1880s to the present. The GDP per capita growth will be compared with the share of non-agricultural

⁹⁰ *125 Years of Statistics*, p. 26–27, 36–37; Sterionov, ‘Bulgaria’s Census Questionnaires’, p. 117–125.

⁹¹ Sterionov, S. ‘Bulgaria’s Census Questionnaires’, p. 120.

⁹² Ivanov, *Bulgarian GDP*; Ivanov and Tooze, ‘Convergence or Decline’.

⁹³ Alton, et al. *Economic Growth*; Alton, et al. *Economic Growth*; Maddison, *Historical Statistics*.

employment in total labour force. If Adam Smith's notion is true then both aggregates are expected to express a high degree of correlation.

To classify employees in various professions the PST system developed by E. A. Wrigley was used as a starting point.⁹⁴ The only difference is that mining and quarrying here are included into secondary and not in the primary sector.

Using the data from figure 64 we are able to say that 15 to 20 percentage share of non-agricultural sectors roughly corresponds to an income of 1000–1300 international dollars. This gives an average of 3,50 to 4,50 dollars a day or just above the poverty line. During 1950s and 1960s Bulgaria experienced a swift structural change that led to 40–50 percent share of industry and services. The role of agriculture shrank from 80 to under 50 percent, which tripled the daily income of population to 9–11 dollars. Next stage was achieved in 1970s and 1980s when employment in secondary and tertiary sector rose to 80-85 percent. This brought a new rise in income, doubling the standard of living to 18–20 dollars a day.

Probably the most important conclusion that could be drawn by *figure 64* is the strong correlation of 98.54 percent shared by both economic and occupational time-series. Obviously, as far as Bulgaria is concerned Adam Smith's proposition held and economic modernization was accompanied by significant shift in employment from agricultural to non-agricultural activities.

⁹⁴ www.geog.cam.ac.uk/research/projects/occupations/categorisation/pst.pdf. We would like to thank Leigh Shaw-Taylor for providing us an extended version of the PST System.

Figure 64. GDP Growth and Structural Change

	<i>Real GDP Per Capita, 1990 international dollars</i>	<i>Share of Secondary and Tertiary Sector, percent</i>
1888	1327	14,51
1893	1322	16,29
1900	1197	17,30
1910	1291	18,14
1920	999	17,73
1926	1151	18,25
1934	1118	17,75
1946	1295	22,80
1956	2128	39,48
1965	3850	59,22
1975	5831	80,30
1985	6226	87,32
1993	4933	85,66
2001	5644	89,75

Source: See the text.

7.2.3 Southeast Europe

Indeed, a proper econometric test of the correlation between structural change and economic growth would need more than just one country observation. Data on professional occupation in Southeast Europe is there but it would require a colossal work to be collected and standardized. The changes in population were relatively well documented in the area with some censuses dating back to the first half of the 19th century. However, it should be reminded that for most of the countries, Bulgaria and Greece excluded, consistent GDP time-series start as late as mid 1920s. Available information on occupational structure may allow scholars to back-cast national accounts with 30–50 years in some cases.

7.3 Growth Pattern of Bulgarian Economy

The aim of this section will be to dissect and analyze the growth pattern of Bulgarian economy in connection with the experienced structural shift in employment. Special attention will be paid to the female participation in the economy and to the variations on regional level.

7.3.1 Population, Labour Force and Activity Rate

Bulgaria's exceptionally dramatic demographic transition in the century following independence clearly dominated its economic and social history. It is yet unclear whether the demographic explosion started in the mid-nineteenth or in the eighteenth century. During 1880s, however, first censuses organized by the new Bulgarian nation state already documented the results of this accelerated population growth. The process continued in the first two decades of the 20th century, reaching its peak in the early 1920s at just over 20 ‰ per annum.⁹⁵

This demographic explosion was due both to an increase in fertility from 33.7 births per thousand in 1881 to a maximum of 45.1 in 1914, amongst the highest rates ever recorded in Europe West of Russia, and, from the early 1890s onwards, to a sustained decline in mortality. The most likely reasons for the collapsing mortality rates were the low-cost public health programmes and the rising levels of literacy.⁹⁶

Over the ultimate causes of the increase in fertility, however, there remains a large measure of uncertainty. One popular theory linked the sudden rise in the birth rate to the breakdown in the traditional form of extended patriarchal households (*zadruga*), supposedly dominant throughout the Balkans.⁹⁷ In fact *zadruga* households were only found on the Western fringe of Bulgaria. The disintegration of this particular "Balkan" family structure cannot therefore have been the primary determinant of demographic change.⁹⁸ On the other hand, it is undeniable that some change in patterns of marriage and fertility must have occurred in the post-liberation period, to explain the sudden increase in the birth rate. A more plausible interpretation surely is that Bulgaria's population grew so rapidly because social constraints on marriage and fertility were loosened as

⁹⁵ Jackson, 'Comparing'.

⁹⁶ By 1910s infant mortality in Bulgaria dropped to 149 per 1000 as compared with 163 in Germany, 188 in Austria and 222 in Romania. Mitchell, *Europe*, p. 123–4.

⁹⁷ Sklar, 'Role of Marriage', p. 231–47.

⁹⁸ Botev, 'Nuptiality', p. 107–26.

hundreds of thousands of new hectares were opened up by fleeing after 1878 Turkish families whose land was taken and settled by Bulgarians.

If there was an era in which Bulgaria was genuinely in danger of tipping over the Malthusian cliff, with population growth outrunning the capacity of the economy to sustain it, it was during the 1920s. In the generation after World War I, land to labor ratios fell and farm sizes continually diminished. But this was a transitional situation. As economic conditions changed, so did demographic behavior. By the mid 1930s the rate of population growth in Bulgaria had halved and continued to fall precipitately into the post-World War II era.⁹⁹ Since the 1980s the total population started to decrease, while the first mass emigration wave in the country's modern history (various sources puts the figure between 1.3 and 1.7 million emigrants from 1989 to 2009) reduced the number of Bulgarians by almost 12 percent.

These dramatic changes (demographic explosion followed by a collapse) had an obvious effect on the labour force. At first, from 1880s to 1980s, the active population almost tripled, while the national territory increased by only 13 percent. The last two decades in review witnessed a dramatic shift in this tendency bringing significant reduction in levels of employment. Between mid-1980s and 2000 the workforce shrank by 45 percent from 4.7 to 2.6 m. people.

Bulgaria followed the European tendency of relative decline in labour force. The activity rate (columns 4 and 5 of figure 65) collapsed from its initial high levels which some (eg. Danailov) even suspect to be underreported.¹⁰⁰ Measured as a ratio between all employed and the working-age population (15 to 64 years) participation rate dropped from 93 to 48 percent. Less refined measures (column 4) only confirm the negative trend in labour force participation rate. Calculations manifest that forces of cultural and economic origin drove this significant reduction. Annual change of activity rate (L/P) was -0.26 percent when the yearly fall in L/P_{15-64} was -0.41 percent. During the initial period when Bulgarian economy was dominated by agriculture it relied heavily on labour contribution by people under and/or over the working-age.

⁹⁹ Botev, 'Particularities of Transition'.

¹⁰⁰ Danailov, *Studies on Demography*, p. 64.

Figure 65. Total and Active Population of Bulgaria

	<i>P</i> <i>(Total</i> <i>Population)</i>	<i>P (15-64)</i> <i>Working-</i> <i>age</i> <i>Population</i>	<i>L</i> <i>(Active</i> <i>Population)</i>	<i>Activity Rate</i> <i>L/P</i>	<i>L/P</i> <i>(15-</i> <i>64)</i>
	<i>(1)</i>	<i>(2)</i>	<i>(3)</i>	<i>(4)</i>	<i>(5)</i>
1888	3154375	1644601	1464047	0,46	0,89
1893	3310713	1738832	1575741	0,48	0,91
1900	3744283	2042753	1857500	0,50	0,91
1910	4337513	2384225	2224403	0,51	0,93
1920	4846971	2814610	2604758	0,54	0,93
1926	5478741	3268466	3014448	0,55	0,92
1934	6077939	3600827	3337123	0,55	0,93
1946	7029349	4660807	4092608	0,58	0,88
1956	7613709	5040410	4150181	0,55	0,82
1965	8230800	5558473	4235753	0,51	0,76
1975	8731400	5828665	4446926	0,51	0,76
1985	8949900	5997190	4685638	0,52	0,78
1993	8484800	5647618	3285903	0,39	0,58
2001	7891100	5382802	2590086	0,33	0,48

Source: Own calculations based on census data.

Unfortunately, it is impossible to separate the boys and girls under 15 years of age for the first three censuses as they are lump together in a larger age group (0-19 years). The remaining remunerations, however, are far more detailed, allowing us to separate all Bulgarians under and over the working age. Not surprisingly, in the beginning of the 20th century people under 15 and over 60 years constituted about a quarter of all employed (the high percentage for 1900–1920 is of course also due to the mentioned data deficiency). With the acceleration of industrialization process in 1950s and 1960s those too young and too old to work became increasingly integrated in alternative non-labour networks like the educational or the pension systems.

Figure 66. Age Structure of Labour Force, 1900–2000

	<i>0-15</i>	<i>0-19</i>	<i>20-39</i>	<i>40-59</i>	<i>60+</i>	<i>0-15;60+</i>	<i>Col. 6 share of total population, %</i>
	<i>(1)</i>	<i>(2)</i>	<i>(3)</i>	<i>(4)</i>	<i>(5)</i>	<i>(6)</i>	<i>(7)</i>
1900	...	379798	812585	513492	219895	*599693	*31,14
1910	...	389883	1058500	570390	221067	*610950	*27,28
1920	...	477172	1229510	677219	243100	*720272	*27,42
1926	20782	543294	1349395	801678	245680	266462	9,00
1934	132027	430112	1330143	748899	212209	344236	12,06
1956	46666	301936	2011640	1458005	378625	425291	10,13
1965	11967	242842	2161557	1629082	234317	246284	5,75
1975	10190	188808	2212730	1898461	147765	157955	3,54
1985	3580	150020	2337498	1948905	249717	253297	5,40
1992	1178	62299	1644676	1500966	78714	79892	2,43
2001	380	46382	1226105	1241234	84303	84683	3,26

Source: Own calculations based on census data.

Note:

* For 1900–1920 due to data incompleteness all employees under age of 15 had to be combined with the 15-19 years age group in columns 6 and 7.

7.3.2 Work Intensity

Relatively high levels of labour participation in Bulgaria before World War II would probably dwindle somewhat if two other factors are also taken into consideration. The hidden unemployment may have well diluted the picture. Contemporary estimates put “overpopulation” somewhere between 650 000 and a million adult males, which was approximately 1/3 of all employed in the primary sector.¹⁰¹ Moreover, the agricultural labour was quite unevenly distributed throughout the year. Nearly 48 percent are believed to be underutilized on annual basis. At winter time only a third of the available workforce was actually employed compared with almost 100 percent during summer. Random sample of 25 peasant account books from late

¹⁰¹ Totev, *Comparative Study*, p. 49.

1930s and early 1940s give an average of 199 full “male working days” (13–14 hours each) per annum.

Intensity of work was not very high either. According to a contemporary expert:

*Bulgarians start to work at a very early age. [...] Few, however, know what and why are they working. [...] In addition, large part of the active and the semi-active population enjoys long vacations when they are to be found in taverns, pubs or on the streets. [...] In result, the active population in Bulgaria is large in numbers but small in quality and intensity of the performed work.*¹⁰²

In the years of communist rule unemployment disagreed with the official policy of full-employment. Indeed, manpower fluctuations that were criticized so often in Politburo documents should have led to a certain number of jobless people. Unfortunately, it is now impossible to tell how long these periods of idleness between two employments were and what was the share in the total labour force of such “people on a move”.

The other important factor that should not be left unmentioned is the number of working hours that were actually spent in the economy. Certainly, working time diminished over the 113 years in review. Luck of statistics, however, disables us to be more precise on the average length of the working-day in agriculture prior World War II. If the data published by Christina Mocheva is to be trusted in mid-1930s for the primary sector it should have been between 13 and 14 hours long.¹⁰³ This gives 2800 working-hours or 44 percent less than the total daylight hours in the year (5000). The situation in industry was not much different. Contemporaries report of 13 to 15 hours working day regardless of the sex or the age of the worker.¹⁰⁴ Eight-hour working day legislation was first introduced in 1905 for children under 16 but the 1909 survey of industry documented an average length of 11 hours. Obviously, this 8-hours rule was often abused and it was not before 1919 when the 8-hour legislation was extended (at least officially) to all industrial workers.

In the post-World War II period these infringements were officially made impossible. In reality, however, people of different age (including primary and secondary school pupils) were

¹⁰² Obreshkov, *Working Population*, p. 531.

¹⁰³ Mocheva, *Peasant Household*, p. 83.

¹⁰⁴ Tsontchev, *Attempt*; Daskalov, *Bulgarian Society*, v. 2, pp. 282–283, 285.

frequently called to brigades helping the agriculture or to Lenin's subotniks (Sundays).¹⁰⁵ Since, 1970s when the 5-day working week was introduced, the number of labour days per person shrank from 275 in 1955 to just 215 in 1988.¹⁰⁶

7.3.3 Gender Variations ¹⁰⁷

Female labour force followed similar trend of decline in activity rate. To a large extent this was a result of the administrative decision to include, as early as 1880s, all working-age women in the active population group (which was not the case in Serbia at that time for example).¹⁰⁸ The practice survived for several decades for the primary sector but was abandoned in 1900 for the secondary and tertiary.

This change in the classification procedures led to a serious inconsistency in female labour component before and after 1900. If the official returns are to be used for 1888 and 1893 then *L/P(15-64)* ratio reaches excessively high levels of over 100 percent. Initially, we decided to correct that discrepancy by finding a way to reduce the seemingly inflated female figures in the primary sector (sex ratio of 99.97 percent). All experimented alternatives – borrowing from the Serbian census taken in 1900; using the peasants' budgets from 1930s or the extrapolations that use the male series to estimate female workforce, did not produce any meaningful result.

In the course of the trial and error process, however, it became more and more obvious that it was the secondary and tertiary sector's inconsistency that actually needed to be tackled. What at first seemed like an excessively high female activity rate in agriculture now appeared to be a reasonable, although probably somewhat inflated, image of the actual situation. The reported 95 to 100 percent *L/P(15-64)* ratio for women in the primary sector broadly complied with all contemporary accounts (cf. for example the above quotation by Obreshkov). That was indeed the situation during ploughing and harvest time when all available family labour was mobilized. Not surprisingly, contemporary Bulgarian literature and art is full of mothers giving birth on the field. During the less intensive periods of the year, of course, women were mainly occupied with housework, taking care of the children or the livestock. As already mentioned, however, different work intensity in various seasons was not typical only for female but indeed for male farmers as

¹⁰⁵ Both *brigades* and *subotniks* were forms of compulsory not paid labour.

¹⁰⁶ *Statistical Yearbooks*, various years.

¹⁰⁷ Special thanks here should go to Osamu Saito for his invaluable comments and suggestions of this section.

¹⁰⁸ Mishaikov, *Population of Bulgaria*, p. 88.

well. To our regret, available statistics makes it impossible to take by-employment into account, thus crippling any attempt for more precise sectoral break-downs of labour.

The noticed inconsistency in secondary and tertiary sector female workforce (before and after 1900) still needed to be addressed. During the trial and error process it was detected that in early remunerations the employed population was not calculated by subtracting family members from the working-age group. In respect of professional occupation census procedure envisaged four different classification subdivisions:

- self-employed,
- assistants and clerks,
- workers, and
- dependant family members of the first 3 groups.

The high share of non-working age population in the total labour force (25 to 30 percent) indicated in table 4 made it impossible to arrive at better estimates by deducting dependents (# 4) from all Bulgarians aged 0 to 14 and over 65. At closer inspection, however, what we observed was that male/female ratios in sub-groups # 2, 3 and 4 varied significantly before and after 1900. What this meant was that at the turn of the 20th century the General Directorate of Statistics changed census procedure by reclassifying a certain number females from assistants and workers (# 2 and 3) into family members (# 4). Thus, to make the pre- and the post-1900 secondary and tertiary sector data consistent all we needed was to determine the 1900 sex ratio for sub-groups # 2 and 3 in the secondary and tertiary sector and then apply it to 1888 and 1893 censuses. In that way we were able to calculate the “excessive” female assistants and workers in the earlier remunerations and arrive at far better results for active population and the labour force participation rate. These recalculated figures for L in 1888 and 1893 appear in the figure 66.

Comparing figures 65 and 67, it is clear that in broad terms the national population and its female component followed a similar downward trend in activity rate (above 99 percent correlation). This is not, however, to say that there were not any gender specific differences. Sex variations in the magnitude of reduction in L/P and L/P (15-64) ratios are quite telling in themselves. Male labour force participation rate went down from over 100 to slightly above 50 percent. As for females it shrank from 83 to 43 percent. These lower activity rates for women could (at least partly) be explained by the unavailable data on by-employment. If household work

is also taken into consideration (at least until early 1960s) the share of services will certainly increase boosting also up the female participation rate.

Figure 67. Female Component of Total and Active Population

	<i>P</i> <i>(Total</i>	<i>P (15-64)</i> <i>Working-age</i>	<i>L</i> <i>(Active</i>	<i>Activity Rate</i>	
	<i>Population)</i>	<i>Population</i>	<i>Population)</i>	<i>L/P</i>	<i>L/P (15-64)</i>
	<i>(1)</i>	<i>(2)</i>	<i>(3)</i>	<i>(4)</i>	<i>(5)</i>
1888	1548986	813876	643543	0,42	0,79
1893	1620087	853357	694950	0,43	0,81
1900	1834725	1001258	773182	0,42	0,77
1910	2130828	1175681	948360	0,45	0,81
1920	2426187	1436566	1140185	0,47	0,79
1926	2735716	1651829	1376813	0,50	0,83
1934	3024046	1809815	1510329	0,50	0,83
1946	3512575	2336750	1834348	0,52	0,78
1956	3814353	2515527	1743849	0,46	0,69
1965	4113699	2765776	1877801	0,46	0,68
1975	4369951	2907698	2081687	0,48	0,72
1985	4515347	3009247	2234646	0,49	0,74
1993	4316695	2852106	1574718	0,36	0,55
2001	4066436	2707813	1224405	0,30	0,45

Source: Own calculations based on census data.

Lower *L/P* and *L/P(15-64)* ratios for women, indeed, witness for the existing gender discrimination in many professions. Around 1900 employing female civil servants in several state agencies like the Postal Office or the National Bank was strictly limited if not officially forbidden.¹⁰⁹ In a circular letter from 1909, for example, the Bank's board of management insisted that "even though we could not completely refuse women to join our institution we should at least

¹⁰⁹ *Female Labour.*

introduce some restrictive criteria for accepting them at work here”.¹¹⁰ In industry, however, female labour was welcomed as relatively cheap and less interested in trade-unionism.¹¹¹

7.3.4 Sectoral Shifts

In many ways Bulgaria was, until late 1960s, the epitome of the peasant nation. From at least 1870s it managed to combine very rapid population growth with virtually no off-setting processes of urbanization, emigration or industrialization. Up to World War II Bulgaria remained with more than 80 percent of its population still on the land, a percentage essentially unchanged since before autonomy in the 1870s. From 1888 to 1934 the share of the primary sector was reduced by mere 3 percent. The shares of the secondary and the tertiary sector decreased painfully slowly until WW-I. Furthermore, during the Balkan wars Bulgaria annexed rural zones inflating the overall weight of the primary sector again. The Great Depression further reduced the secondary sector by 10 percent (from 9 to just 8 percent of total employment).

Whatever skepticism must clearly be harboured towards the statistics produced by the communist regime there is no doubt that under Soviet tutelage Bulgaria modernized at a rate faster than the one achieved in the first seven decades of its existence as an independent nation. From 1950s to 1970s the country experienced unprecedented shift from primary to secondary and tertiary sector employment. The majority of the population left their peasant roots behind and moved into urban settlements. What figure 68 shockingly reveals, however, is the politically embarrassing size of secondary sector. Despite the ideologically-driven campaign, generously sponsored with low-interest credits from Moscow, Bulgaria never achieved the communist dream of full industrialization. Industrial share in labour force was disturbingly low and never exceeded 37 percent. Meanwhile, tertiary sector occupation quadrupled from about 12 in 1946 to almost 50 percent in 1985.

The transition to market economy proved hard for Bulgarian industry as large part of previously guaranteed markets were lost with the disintegration of Comecon. This brought a gradual reduction in the share of the primary sector. In the decades after 1989 its share fell from 38 percent in 1985 down to 22 percent in the beginning of the 21st century. The labour out flux from industry was accommodated in the tertiary sector further inflating its relative size and

¹¹⁰ *Bulgarian National Bank*, v. 2, p. 289.

¹¹¹ Daskalov, R. *Bulgarian Society*, v. 2, pp. 282, 284–285.

importance in the national economy. In 2001 more than 2/3 of the active Bulgarians were employed in the services, while the primary sector had been reduced to just over 10 percent.

Figure 68. Share of Active Population per Sector, (in percent)

	<i>A. Profession-based</i>			<i>B. Factory's Sector-based</i>		
	<i>Primary</i>	<i>Secondary</i>	<i>Tertiary</i>	<i>Primary</i>	<i>Secondary</i>	<i>Tertiary</i>
1888	85,49	6,92	7,59			
1893	83,71	6,98	9,31			
1900	82,70	7,51	9,79			
1910	81,85	8,11	10,04			
1920	82,27	8,07	9,66			
1926	81,75	9,24	9,01			
1934	82,26	8,23	9,51			
1946	77,20	10,52	12,28			
1956	60,53	17,12	22,35			
1965	40,49	28,54	30,97	44,43	33,71	21,86
1975	19,70	34,91	45,39	23,59	42,94	33,47
1985	12,68	37,91	49,41	16,47	46,62	36,91
1993	13,78	29,90	56,32			
2001	10,09	22,52	67,39			

Source: Own calculations based on census data.

7.4 Regional Disparities

The Modern Bulgarian state has always been a highly centralized and in a search for the “optimal structure” the governments often experimented with the internal territorial organization. Regular changes of national borders (1885, 1913, 1918, and 1940), further affected the regions in the periphery. The apparent lack of historical continuity in the territorial administrative structure checked the emergence of historical regions, which would have certainly developed in case of stable boundaries. Moreover, as the borders of the regions varied considerably between enumerations it is statistically difficult to explore the regional trends in a long run.

To tackle these problems we selected only benchmark years (1934 and 1992) with relatively compatible regional structure. The years are chosen in order to present the structural transition of the Bulgarian economy from primary to tertiary sector employment. The first year (1934) shows the situation before the actual increase in secondary and tertiary activities, while the latter (1992) represents the end of the transition. In addition, we recalculated the 1965 occupational data for the administrative subdivisions of 1992, although at that historical moment they did not exist. This enabled us to inspect in more details all major stages of the industrialization/tertiarization.

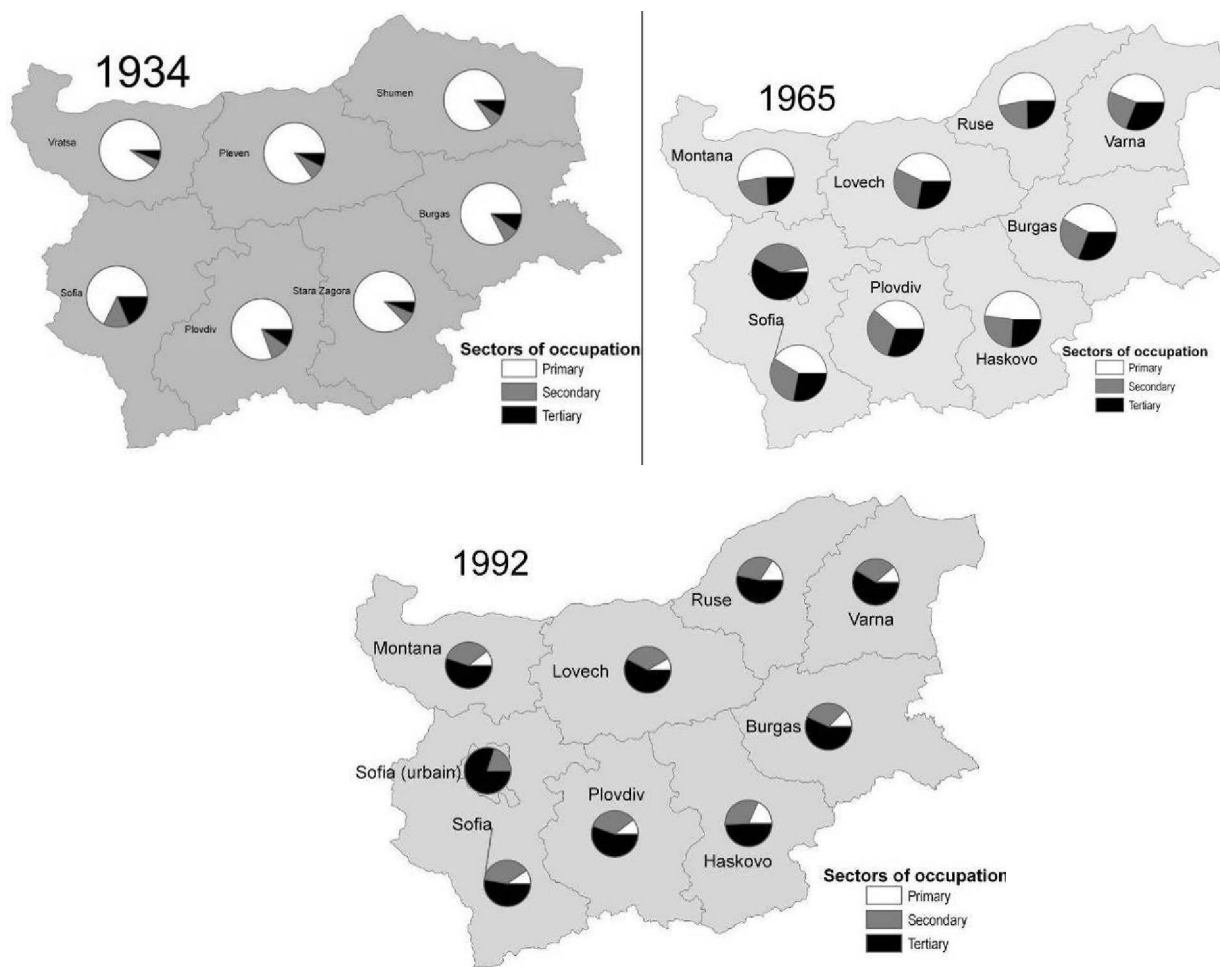
The data of 1934 reveals an economy dominated by the primary sector. The single region with sizable shares of secondary and tertiary sector employment was Sofia. Nevertheless, even here almost 2/3 of the active population was occupied in agriculture. In the decades following the World War II, Soviet-type forced industrialization induced major shifts in the professional structure. Although in 1965 the primary was still the most populous sector of occupation its share shrank considerably compared to the levels of 1934 and was already less than the combined secondary and tertiary sectors. The general picture, however, was not significantly changed with only Sofia standing out with approximately 40 percent share of industry and 50+ percent in services. Nevertheless, changes in occupational structure were well on the way. After several decades of state-led industrialization by 1965 in all but two regions (Montana in the North-West and Ruse in the North East) the combined share of secondary and tertiary sector was larger than primary.

The first enumeration in the post-communist period was taken in 1992 less than three years after the fall of the Berlin wall. Despite that, it witnessed the dramatic change that Bulgarian society after 1989. The total number of the active population fell down for the first time in 120 years. This was a result of aging of population, mass emigration, and the growing unemployment rates. The already witnessed transition from primary to tertiary occupation could be observed on regional level as well. By 1992 apart from Haskovo region in the South the services became the leading sector in all regions that includes almost 80 percent of the total employment in the city of Sofia and an average of 57 percent for the country.

To sum up, the data in figures 69 and 70 enable us to draw the spatial model of Bulgarian P to T transition. The capital of Sofia led the process as early as 1930s being the first region to shift labour force out of the primary sector. The other provinces almost homogeneously lost their

agricultural profile in 1960s and 1970s, and jointly migrated to services in 1990s. This simultaneous transition from P to T should probably be contributed to the balanced regional development policy perused by the communist regime. Small regional variations probably stem from Sofia's spill-over effect on the neighboring provinces. All the regions with higher industrialization and tertiarization rates in 1965 and 1992 were situated in close proximity to the capital city. Plovdiv have been economically always a dynamic area, however all other regions (Lovetch, Sofia region, Vidin) had little industry or services in 1930s.

Figure 69 Sectors of Occupations at regional level (1934-1992)



Source: Own elaboration based on census data.

Figure 70 The decrease of the primary sector at regional level (1934-1992)



Source: Own elaboration based on census data.

7.5 Conclusion

The objective of this essay was to analyze the structural change experienced by Bulgaria from late 19th to the late 20th century. Economic modernization was indeed common process for most of Europe and Bulgaria was hardly a unique case. In the Western fringes of the continent, however, industrialization started much earlier and censuses were unable to mirror the initial phases of the process. As a latecomer the structural change in Bulgaria was compressed into several decades and was relatively well documented in the national census survey. Despite certain shortcomings of the data, which have already been discussed here, we are in possession of a relatively reliable and consistent time-series on occupational statistics that start in 1880s and run to the present. Furthermore, recent contributions by Ivanov and Ivanov and Tooze provided GDP estimates for roughly the same period, thus enabling us to match national accounts data with information on professional occupational. As expected both time-series correlated remarkably well, which gave us ground to speculate on the possibility to use occupational census data as a proxy for economic growth of Southeast Europe. The experiment, based on Bulgaria's idiosyncratic experience, is indeed insufficient prove on whether occupational statistics could be used as a reliable GDP substitute. We would certainly need additional observations from the region to be able to present something more than simply an educated guess. Rich census information on professional structure of SEE countries (table 2), however, raises some well-founded hopes that it is possible to circumvent the missing or scanty national accounting data and to present a more detailed picture of economic modernization of Southeast European "periphery".

Conclusion

During the 19th and 20th centuries, the Balkan states underwent several radical political transformations that altered profoundly their socioeconomic development. The hypothesis of the current study is that these changes also affected the economic geography and the spatial distribution of the population in the region, and therefore the modern history of the Balkans provides a valuable opportunity to study the main determinants for the uneven regional growth. Hence, the main themes of the study are the patterns in the population growth and distribution during 19th and 20th centuries, and the influence of the political events and the construction of the railway network over the formation of the economic geography of the Balkan states.

The correlations between political events and regional development are explored via historical statistical information gathered from the available national census publications. This is possible as the majority of the states in the Balkans have been taking regular censuses since the second half of the 19th century. Furthermore, as modernization latecomers, the structural change in the economies of the Balkan states was compressed into several decades during the 20th century, making it relatively well documented. However, for the most of its part the available data is heterogeneous and lacks continuity at regional level. The main methodological difficulties are caused by the frequent changes in the national and administrative borders and the differences in classifications between countries. Moreover, statistics on industrial production and wages at regional level needed for the establishment of regional GDP series are impossible to find for the most of the studied states. As a result, to overcome the statistical shortcomings, the analysis focuses mainly on basic socioeconomic indicators as population density rates and urbanization levels and stable entities such as the population of the cities. The final result is a database with internationally comparable historical and geographical information covering the entire Balkan Peninsula, which therefore permits, for the first time, the establishment of an integrated vision over the spatial development of the states in the peninsula.

In that respect it is important to stress that in the case of Bulgaria the series of occupational statistics and the urbanization levels produced in the current study correlate remarkably well to the time series with the national GDP figures provided by Ivanov and Tooze (2007). Furthermore, as expected the urbanization and occupational statistics also correlate at regional

level. This gives an argument to speculate on the possibility to use occupational or urbanization census data as proxies for economic growth or as indicators of modernization in the Balkans, where GDP regional data is missing. However, simply the particular experience of Bulgaria is an insufficient proof. We would certainly need additional observations with more detailed economic data from the region to be able to present something more than an educated guess.

The data reveals that the lack of political and economic integration during the 20th century confined the spatial transformations to the framework of the national borders. The only visible trend that extended beyond them was the moderate reduction of the differences in the access to railways, in population density and urbanization levels, between the Northern –inland parts of the peninsula, formerly part of Austro-Hungary, and the South- mostly part of the former Ottoman Empire. The literal “Balkanization” of the region and the existence of numerous independent states promoted the relatively equal distribution of the urban population and permitted the expansion of a number of large urban centers with similar size- the national capitals. This only serves to confirm the rather obvious fact that the principal determinant for the current distribution of the population in the region is the political borders and as such it also justifies the methodological decision to explore the regional development of the Balkans mainly through national case studies instead of focusing on the particular indicators.

The analysis at national level permitted important observations over the mechanism of formation of the economic geography in states under construction or in transition. The three national studies over the development of Bulgaria, Romania and Yugoslavia revealed remarkable similarities in the spatial formation of their modern economies. The sequence is practically repeated, however the exact timing of the transformations vary as it depends on the particular year of the creation or the big territorial change in the respective state. Although, the thesis only explored the shifts in the occupational structure of Bulgaria, we may suppose it also followed similar patterns in the other former communist states.

Overall, the starting hypothesis is only partially confirmed. Each of the observed geopolitical events triggered important socioeconomic transformations in the national economies; however, the results actually reveal that only the changes in the political borders during the preindustrial period had the expected pattern - breaking impact over the economic geography of the Balkans.

The gradual political fragmentation of the region during the second half of 19th and the beginning of 20th century, triggered significant transformations in the spatial composition of the smaller national economies, as they needed to adapt to the altered territorial and political realities. The main adjustments included: the strengthening of the national political centers, the relative decline of some of the peripheral cities and regions, and the development of commercial ports. A major factor in the process of economic integration of the fragmented economies was the construction of the national railway network. The first railroad lines were built prior to independence of the majority of the Balkan states, to serve the imperial interests of Austro-Hungary and the Ottoman Empire which controlled politically the region. However, with the dissolution of the two Empires, the motives for the railway constructions also changed as they had to serve narrower national interests. Still, the new states were pressured to complete the main international roads that passed through their territories. Thus, the basic national railway network usually consisted of the international routes passing through the respective state and the lines connecting the capital with the major port cities. As a result, the railway constructions in the independent Balkan states, favored the growth of the national capital cities as they became the main national transport hubs. The majority of the economic and infrastructural adjustments were completed during the first decades after the foundation of the new states and most importantly - before the urbanization and the industrialization.

The next geopolitical event with profound impact on the Balkans was the Cold War. The implementation of the Soviet economic model in all of the studied states except Greece caused a profound reorganization of the social, economic and political life and led to rapid urbanization and industrialization. The urbanization growth initially increased the regional disparities; however it did not provoke a noteworthy change in the regional distribution of population, nor in the urban network, in the same way as the political and territorial changes of late 19th and early 20th centuries. The last, so far, big political transformation in the region, triggered by the end of the Cold War and the collapse of the Soviet economic model did not do that, too. The transition from a centrally planned to a market oriented economy resulted in a visible increase of the regional and spatial disparities. Moreover, with the exceptions of Albania, Kosovo, Macedonia and Greece¹¹², the population growth stagnated in the majority of the Balkan states. Even so, the data from the beginning of 21st century shows that up to this point, there is no big shift in the

¹¹² Greece is the only none communist state in the Balkans –which did not undergo a radical economic reform

spatial composition of the states. Yet it might be too early to detect such a change. In general, the political or economic events during the second half of the 20th century had lesser influence on the urban network or the economic geography of the Balkans; there was little movement in the regional hierarchy, apart from the development of some the coastal areas, mainly due to the expansion of the industry and tourism. Meanwhile, during the second half of the century and especially after 1990 the importance of railway access over spatial development was reduced with the development of other means of transport.

It should be stressed that the breakup of Yugoslavia in the 1990s may be compared with the disintegrations of Austro-Hungary or the Ottoman Empire and as such some changes could be expected in the urban network or the regional composition of the successor states. However, that would probably not be the case. The Yugoslav successor states enjoyed wide autonomy since the end of the WW-II, which was further strengthened by the reforms in 1974, and as such their independence in the early 1990s was a natural conclusion of the gradual political disintegration of Yugoslavia. While, the countries that emerged from Austro-Hungary or the Ottoman Empire had political antecedents only in the Middle Ages. Moreover, Greece, Romania, Serbia, Bulgaria all became independent before being actually industrialized or urbanized. As noted the modifications in the spatial distribution of their population were triggered mainly by the territorial changes and the construction of the railways during the preindustrial period. The successor states of Yugoslavia, Slovenia, Croatia, Macedonia, Bosnia and Herzegovina received their independence as already modernized states. Thus any significant transformations in their economic geography will be rather unexpected. In addition, during the 2000s Slovenia, Romania and Bulgaria became part of the European Union, while the rest of the former Yugoslavian states are expected to join in the near future. The removal of economic barriers between the Balkans states and improvements in the infrastructure could be expected to initiate another shift in the economic and regional development of the regions. However, for the reasons presented above, that would be surprising, although it might be expected that spatial disparities could be reduced, and the regions situated near the borders could benefit from the removal of economic borders and the improvements in the infrastructure.

Overall, the experience of the Balkans illustrates how, in newly established pre-industrial states or in those in the process of formation, political institutions can play a major role in determining the trends of the spatial inequality. By and large, in the underdeveloped and

predominantly centralized Balkan states, private initiative has played lesser role and political borders and the institutional framework have been the main determinants for the uneven regional growth. The governments were able to influence significantly the regional development; by making relatively small investments in transport infrastructure which had significant effects in long run due to the self-enforcing nature of increasing returns. The small initial advantages during the preindustrial period, in the form of political and administrative importance or railway access, had a lasting effect over the economic geography. The position of many of the capitals within the national urban networks was “Primus inter pares”, and they transformed into the leading economical centers due to the political and administrative powers received after creation of the respective state. Similarly, the growth of the commercial ports was affected by the territorial changes and the transport investments made usually also by the state. Later economic and political transformations had lesser effect on the economic geography of the Balkan nations as the principal benefiteres of the economic growth were the already developed cities and regions.

In conclusion, the economic development of the Balkans during the second half of the 20th century was determined by the decisions taken by the “Allies ” towards the end of WWII, when all Balkan states, except Greece, were put in the Soviet sphere of influence. Furthermore, the origins of the current economic geography of the peninsula could be traced back to the beginning of the century and the disintegration of Austro-Hungary and Ottoman Empire. The international treaties dictated again by the Great Powers signed in Berlin (1878), London (1913) and Paris (1919), drew the modern national borders of the Balkans and with that determined the modern economic composition of the region. This is only possible because of the chronic economic and political weakness of the states in the region which makes every aspect of their development exposed and vulnerable to outside influences.

Durante los siglos XIX y XX, los Estados de los Balcanes se sometieron a varias transformaciones políticas radicales que alteraron profundamente su desarrollo socioeconómico. La hipótesis del estudio es que estos cambios también afectaron a la geografía económica y la distribución espacial de la población en la región. Por ello, historia moderna de los Estados de los Balcanes es una oportunidad valiosa para estudiar los principales determinantes de los desequilibrios en el crecimiento regional. En este sentido, los temas principales de este estudio son las repercusiones regionales de los cambios políticos, la construcción de la red ferroviaria y la evolución de la geografía económica de los Estados de los Balcanes, así como las tendencias en el crecimiento y distribución de la población durante los siglos XIX y XX.

La relación entre los cambios políticos y el desarrollo regional es explorada a través de la información histórica estadística obtenida de los censos nacionales. Esto ha sido posible porque la mayoría de los estados en los Balcanes han realizado regularmente los censos desde la segunda mitad del siglo XIX. Por lo tanto, una amplia gama de datos como la densidad de población, fecundidad, estado civil, la estructura por edades, la educación y la ocupación de la población activa pueden ser extraídos y organizados en series históricas. Además, como los estados han sido modernizados recientemente, el cambio estructural en las economías se concentró en pocas décadas durante el siglo XX, por lo que es relativamente bien documentado. Sin embargo para la mayoría de los casos, los datos disponibles son heterogéneos y carecen de continuidad a nivel regional. Las principales dificultades metodológicas son los cambios frecuentes en las fronteras nacionales y administrativas y las diferencias en las clasificaciones entre los países. Por otra parte, las estadísticas sobre la producción industrial y los salarios a nivel regional necesarios para el establecimiento de las series del PIB regional son casi imposibles de encontrar para la mayoría de los estados estudiados. Por lo tanto, para superar las deficiencias estadísticas, el análisis se centra en unos indicadores socioeconómicos básicos como las tasas de densidad de población y niveles de urbanización e indicadores estables como la población de las ciudades. El resultado final es una base de datos con información histórica y geográfica comparable a nivel internacional, que abarca toda la península de los Balcanes y por lo tanto permite, por primera vez, el establecimiento de una visión integral a largo plazo del desarrollo geográfico de la economía de los Estados de la península.

Es importante destacar que, en el caso de Bulgaria, la serie de datos de ocupación y los niveles de urbanización producidos en el presente estudio se correlacionan muy bien con los

datos del PIB nacional proporcionados por Ivanov y Tooze (2007). Por otra parte, las estadísticas de la urbanización y el sector de ocupación también se correlacionan a nivel regional. Dado que en los Balcanes los datos del PIB regional no existen, estas observaciones pueden servir como un argumento para especular sobre la posibilidad de utilizar los datos laborales o los índices de urbanización como indicadores del crecimiento económico o al menos como indicadores de la modernización. Sin embargo, el caso particular de Bulgaria no es suficiente para poder afirmar que las estadísticas de ocupación o de urbanización puedan ser utilizadas como un indicador fiable del crecimiento económico. Sin duda habría que incluir datos económicos más detallados de la región para poder presentar algo más que una conjetura.

Después de la recopilación y tratamiento de los datos, se reveló que la falta de integración política y económica durante el siglo XX limitó las transformaciones económicas espaciales dentro del marco de las fronteras nacionales. La única tendencia visible que se extiende más allá de las fronteras políticas fue la reducción moderada de las diferencias en el acceso a los ferrocarriles, la densidad de población y los niveles de urbanización entre el Norte del península, que antiguamente formaba parte del Imperio Austro-Hungría, y el Sur que en su mayoría formaba parte del antiguo Imperio Otomano. La literal "balcanización" de la región y la existencia de numerosos estados independientes promovieron la distribución relativamente equitativa de la población urbana y permitieron la expansión de una serie de grandes centros urbanos de tamaño similares que eran las capitales nacionales. Esto sólo servirá para confirmar el hecho no tan sorprendente de que las principales determinantes de la distribución actual de la población en la región son las fronteras políticas y, como tal, justifica la decisión metodológica de explorar el desarrollo regional de los Balcanes, principalmente a través de estudios de casos nacionales en lugar de centrarse en los indicadores particulares. El análisis a nivel nacional permite observar el mecanismo de formación de la geografía económica en los estados en construcción o en transición. Los tres estudios nacionales sobre el desarrollo de Bulgaria, Rumania y Yugoslavia revelaron notables similitudes en la formación espacial de sus economías. El orden de las transformaciones es muy similar, sin embargo, el momento exacto de los eventos particulares varía en cada país. La tesis explora solo los cambios en la estructura ocupacional de Bulgaria, pero podemos suponer que también se siguió un patrón similar en los otros estados ex-comunistas.

La hipótesis planteada inicialmente se confirmó parcialmente. Cada uno de los acontecimientos

geopolíticos provocó importantes transformaciones socioeconómicas en las economías nacionales. Sin embargo, los resultados revelan que sólo los cambios en las fronteras políticas durante el período pre-industrial tenían las consecuencias esperadas sobre la geografía económica de los Balcanes.

Inicialmente la fragmentación política de la región durante la segunda mitad del siglo XIX y principios del siglo XX, provocó transformaciones significativas en la composición espacial de las economías nacionales más pequeños, ya que tuvieron que adaptarse a las nuevas realidades territoriales y políticas. Estos ajustes incluyen el fortalecimiento de los centros políticos nacionales, la disminución relativa de algunas de las ciudades y regiones periféricas, y el desarrollo de los puertos comerciales. Uno factor importante en el proceso de integración económica de las nuevas economías fragmentadas fue la construcción y reorganización de la red ferroviaria nacional. Las primeras líneas de ferrocarril se construyeron antes de la independencia de la mayoría de los estados de los Balcanes, mayoritariamente para servir a los intereses imperiales de Austria-Hungría y el Imperio Otomano que controlaban políticamente la región. Sin embargo, con la disolución de los dos imperios las motivaciones detrás de las construcciones ferroviarias cambiaron, ya que tenían que servir los intereses de las nuevas naciones. Sin embargo, inicialmente los nuevos estados fueron presionados para completar las principales carreteras internacionales que pasaron por sus territorios. Las redes básicas de ferrocarriles nacionales por lo general consistían en las rutas internacionales que transitaban por el estado respectivo y las líneas que conectan la capital con las ciudades portuarias más importantes. Como resultado, las construcciones ferroviarias en los estados independientes balcánicos favorecieron fuertemente el crecimiento de la ciudad capital del país, ya que por lo general se convirtió en el principal centro de transporte nacional. La mayoría de los ajustes económicos y de infraestructura se realizaron durante las primeras décadas después de la fundación de los nuevos estados y lo más importante: antes de la urbanización y la industrialización.

El siguiente evento geopolítico que provocó grandes cambios socioeconómicos sobre los Balcanes fue la Guerra Fría y en particular la aplicación del modelo económico soviético en todos los estados excepto Grecia. Esto causó una reorganización total de la estructura socioeconómica, caracterizada por una rápida urbanización e industrialización. El crecimiento de las tasas de urbanización aumentó las diferencias regionales, sin embargo esto no ha supuesto un cambio notable en la distribución regional de la población ni en la red urbana, tal y como lo

habían provocado los cambios políticos y territoriales de final de siglo XIX y comienzos del siglo XX.

Tampoco lo hizo la última gran transformación política en la región hasta ahora, provocada por el fin de la Guerra Fría y el colapso del modelo económico soviético. La transición de una economía planificada a una economía orientada al mercado causó un aumento visible de las disparidades regionales. Por otra parte, con la excepción de Albania, Kosovo, Macedonia y Grecia, el crecimiento de la población se estancó en la mayoría de los Estados de los Balcanes. Aun así, los datos del inicio de los del siglo XXI no demuestran un gran cambio en la composición geográfica de las economías de los estados. Sin embargo, podría ser demasiado pronto para detectar el dicho cambio. En general, los acontecimientos políticos o económicos durante la segunda mitad del siglo XX tenían menos influencia sobre la composición urbana o regional de los Estados de los Balcanes. Hubo poco movimiento en la jerarquía regional, salvo el desarrollo de algunas zonas de la costa, principalmente debido a la expansión de la industria y el turismo. Mientras tanto, durante la segunda mitad del siglo y, sobre todo después de 1990 la importancia del acceso ferroviario sobre el desarrollo territorial se redujo con el desarrollo de otros medios de transporte.

En esta línea de pensamiento, hay que considerar que la desintegración de Yugoslavia en la década de los 1990s es comparable con el desmembramiento de Austria-Hungría o el Imperio Otomano y como tal, se puede esperar algunos cambios en la red urbana o en la composición regional de los estados sucesores. Sin embargo, es probable que esto no ocurra. Los estados sucesores de Yugoslavia gozaban de una autonomía amplia desde el final de la Segunda Guerra Mundial, que era fortalecida por las reformas de 1974. Por lo tanto su independencia en la década de 1990s fue la conclusión natural de la gradual desintegración política de Yugoslavia. Mientras tanto, los países que surgieron de Austria-Hungría o el Imperio Otomano tenían antecedentes políticos sólo en la Edad Media. Por otra parte, Grecia, Rumania, Serbia, Bulgaria se independizaron antes de ser realmente industrializados o urbanizados. Como ya se indicó las modificaciones en la distribución de la población han sido provocadas principalmente por los cambios territoriales y la construcción de los ferrocarriles durante el período preindustrial. Mientras que Eslovenia, Croacia, Macedonia, Bosnia y Herzegovina se independizaron como estados ya modernizados. Por lo tanto cualquier transformación significativa en su geografía económica será inesperada.

Además, durante la década que se inicia en 2000, Eslovenia, Rumania y Bulgaria se convirtieron en parte de la Unión Europea, mientras que los otros estados de la antigua Yugoslavia esperan incorporarse en un futuro próximo. La eliminación de las barreras económicas entre los Estados de los Balcanes y las mejoras en la infraestructura podría provocar otro cambio en el desarrollo económico y regional de los Balcanes. Sin embargo, por las razones expuestas anteriormente es poco probable; aunque se podría esperar una reducción de los desequilibrios regionales y desarrollo de las regiones situadas cerca de las fronteras debido a la eliminación de fronteras económicas y las mejoras en la infraestructura.

En general, la experiencia de los Balcanes ilustra cómo, en los estados de reciente creación o en proceso de formación con una economía preindustrial, las instituciones políticas juegan un papel importante en la determinación del desarrollo y las tendencias de la desigualdad regional. En general, en los estados balcánicos subdesarrollados y mayoritariamente centralizados, la iniciativa privada ha jugado un papel secundario. Las fronteras políticas y el marco institucional han sido los principales determinantes sobre las desigualdades en el crecimiento regional. Esta conclusión se ve confirmada por los datos sobre los sectores de ocupación de Bulgaria.

Los gobiernos fueron capaces de influir de manera significativa en el desarrollo regional, mediante inversiones relativamente pequeñas en la infraestructura del transporte que tuvieron importantes efectos a largo plazo debido al efecto de los rendimientos crecientes.

Las pequeñas ventajas iniciales durante el período pre-industrial, en la forma de importancia política y administrativa o acceso ferroviario, pueden tener efectos duraderos sobre la geografía económica. Dentro de las redes urbanas nacionales, muchas capitales urbanas fueron "Primus inter pares", y se transformaron en los principales centros económicos debido a los poderes políticos y administrativos recibidos después de la creación de su Estado respectivo. Del mismo modo, el crecimiento de los puertos se vio afectado por los cambios territoriales y las inversiones en el transporte realizados mayoritariamente también por el estado. Más tarde, las transformaciones económicas y políticas tuvieron menor efecto sobre la geografía económica de las naciones balcánicas porque los beneficiarios del crecimiento económico fueron principalmente las ciudades y las regiones ya desarrolladas.

En conclusión, el desarrollo económico de los Balcanes durante la segunda mitad del siglo 20 fue determinado por las decisiones adoptadas por las grandes potencias hacia el final de la Segunda Guerra Mundial, cuando todos los Estados de los Balcanes, con excepción de Grecia,

fueron puestos en la esfera de influencia soviética. Por otra parte, los orígenes de la composición geográfica de la economía actual de la península podrían encontrarse a principios del siglo XX con la desintegración de Austria-Hungría y el Imperio Otomano. Los tratados internacionales, dictados también por las Grandes Potencias, firmados en Berlín (1878), Londres (1913) y París (1919) trazaron las modernas fronteras nacionales de los Balcanes y con ello determinaron la composición económica moderna de la región.

La crónica debilidad económica y política de los Estados de la región hace que todos los aspectos de su desarrollo sean fácilmente expuestos y vulnerables a una influencia externa.

Sources and Bibliography

9.1 Sources

9.1.1 Bulgaria

Сан-Стефанский прелиминарный мирный договор,: *Сборник договоров России с другими государствами. 1856-1917*. М., Гос.изд-во полит.литературы, 1952., “San Stefano preliminary peace treaty”, in “International treaties of Russia”, 1952.

Bulgarian National Bank. Collection of Documents, v. 2, p. 289. (in Bulgarian).
Statistical Yearbook, various years. (In Bulgarian).

1881 *Resultats generaux du recensement de la population -janvier 1881*, Sofia, 1884.

1884 *Resultati ot prebroiavane na naselenieto na Iztochna Rumelia na 1.01.1885*, (Population census of Eastern Rumelia)- 1885, Plovdiv 1885.

1888 *Obshti rezultati ot prebroiavane na naselenieto v kniazhestvo Bulgaria na 1.01.1888* (General results of population census in the principality of Bulgaria, January 1, 1888), Sofia, 1890.

1893 *Obshti rezultati ot prebroiavane na naselenieto v kniazhestvo Bulgaria na 1.01.1893* (General results of population census in the principality of Bulgaria, January 1, 1893), Sofia, 1897.

1900 Bulgaria. Glavna Direktsiia na Statistkata, *Rezultati ot prebroiavane na naselenieto v kniazhestvo Bulgaria na 31.XII.1900* [Results of population census in the principality of Bulgaria, December 31, 1900]. Vols. I-XII. Sofia, 1902-1904. 12 regional vols.

1900 Bulgaria. Glavna Direktsiia na Statistkata., *Obshti rezultati ot prebroiavane na naselenieto v kniazhestvo Bulgaria na 31.X 11.1900* [General results of

- population census in the principality of Bulgaria, December 31, 1900*], Sofia, 1905 and 1906, 2 general vols.
- 1905 Bulgaria. Glavna Direktsiia na Statistkata, *Rezultati ot prebroioivane na naselenieto v tsarstvo Bulgaria na 31.XII.1905* [Results of population census in the kingdom of Bulgaria, December 31, 1905]. Sofia, 1911 and 1912. 2 general vols.
- 1910 Bulgaria. Glavna Direktsiia na Statistkata, *Rezultati ot prebroiavane na naselenieto na 31.XII.1910. Po obshtini i naseleni mesta* [Results of population census, December 31, 1910. By communes and localities Vols. I-XII. Sofia, 1913-23. 12 regional vols.
- 1910 Bulgaria. Glavna Direktsiia na Statistkata, *Obshti rezultati ot prebroiavane na naselenieto v tsarstvo Bulgaria na 31.XII. 1910* [General results of population census in the kingdom of Bulgaria, December 3, 1910]. Sofia, 1923. 3 general vols.
- 1920 Bulgaria. Glavna Direktsiia na Statistkata, *Obshti rezultati ot prebroiavane na naselenieto v tsarstvo Bulgaria na 31.XII.1920* [General results of population census in the kingdom of Bulgaria, December 31, 1920]. Vols. I-IV. Sofia, 1926-28. 4 general vols.
- 1920 Bulgaria. Glavna Direktsiia na Statistkata, *Rezultati ot prebroiavane na naselenieto v tsarstvo Bulgaria na 31.XII,1920 po obshtini naseleni mesta* [Results of population census in the kingdom of Bulgaria, December 31, 1920, by communes and localities]. Vols. I-XV. Sofia, 1928-29. 15 regional vols.
- 1926 Bulgaria. Glavna Direktsiia na Statistkata, *Obshti rezultati ot prebroiavane na naselenieto v tsarstvo Bulgaria na 31.XII. 1926* [General results of population census in the kingdom of Bulgaria, December 31, 1926]. Vols. I-IV. Sofia, 1931-33. 4 general vols.
- 1934 Bulgaria. Glavna Direktsiia na Statistkata, *Predvaritelni rezultati ot prebroiavane na naselenieto v tsarstvo Bulgaria na 31.XII, 1934. Broi na naselenieto po naseleni mesta.* [Preliminary results of population census in the

- kingdom of Bulgaria, December 31, 1934. Population size by localities].* Sofia, 1935.
- 1934 Bulgaria. Glavna Direktsiia na Statistkata, *Prebroiavane na naselenieto na 31.XII.1934. Obshti rezultati [Census of population, December 31, 1934. General results].* Vols. I-IV. Sofia, 1937-40. 4 general vols, and one special vol. for the city of Sofia published in 1936.
- 1946 Bulgaria. Glavna Direktsiia na Statistkata, *Prebroiavane na naselenieto na 31.XII. 1946. Obshti rezultati. Naselenie po vuzrast, semeino polozhenie i viara [Census of population, December 31, 1946. General results. Population by age, marital status and religion].* Sofia, 1949.
- 1956 Bulgaria. Tsentralno Statisticheskoto Upravlenie, *Predvaritelni rezultati ot prebroiavane po naselenieto rta 1.XII.1956. Broi na naselenieto po naseleni mestc [Preliminary results of population census, December 1, 1956. Population size by localities].* Sofia, 1957.
- 1956 Bulgaria. Tsentralno Statisticheskoto Upravlenie, *Prebroidvane na naselenieto na 1.XII.1956. Obshti rezultati [Census of population, December 1, 1956. General results].* Sofia, 1959. 4 vols.
- 1965 Bulgaria. Tsentralno Statisticheskoto Upravlenie, *Rezultati ot prebroiavane na naselenieto na 1965 [Results of population census, December 1, 1965],* Sofia, 1968. 2 vols. (5 parts).
- 1985 *Преброяване на населението и жилищният фонд в НР България към 4.12.1985 г. -методология и общи резултати, С., 1988. (Population and Housing Census in Bulgaria, December 14, 1985),* Sofia 1988.
- 1992 *Преброяване на населението и жилищният фонд към 4.12.1992 г. Резултати от преброяването, Т.1, С., 1994. (Population and Housing Census in Bulgaria, 1992),* Sofia 1994.
- 2001 *Преброяване на населението и жилищният фонд . (Population and Housing Census in Bulgaria, march 2001),* Sofia.

9.1.2 Greece

- 1870 *Statistique de la Grece population denombrement 1870*, Ministere de l'interieur, Athenes, 1872.
- 1907 *Resultats statistiques du recensement general de la population effectue le 27 octobre, 1907*, Service du recensement, Athenes ,1909.
- 1920 *Recensement de la population de la Grece ay 19 decembre 1920*, Statistique generale de la Grece ,Athenes, 1927.
- 1928 *Resultats statistiques du recensement de la population de la Grece du 15-16 mai1928*, Statistique generale de la Grece, Athens 1933.
- 1940, *Population de la Grece d'apres le recensement du 16 octobre 1940*, Statistique generale de la Grece, 1946.
- 1951 *Population de la Grece au recensement du 7 avril, 1955*, Statistique nationale de la Grece, Juli 1955.
- 1961 *Results of the population and housing census of 19 March 1961*, National Statistical Service of Greece, Athens 1962.
- 1971 *Resultats du recensement de la population et des habitations 14 of March 1971*, Office national de statistique de Grece 1974.
- 1981, *Resultats du recensement de la population et des habitations, avril 1981*, Volume 1, Office national de statistique de Grece.
- 1991 *Resultats du recensement de la population et des habitations effectue le 17 mars 1991*, Office national de statistique de grece, Athenes 1998.
- 2001 *Usual resident population of Greece population and housing census of March 18th, 2001*, National Statistical Service of Greece, 2004.

9.1.3 Romania

- 1899 Romania. Serviciul Statisticii Generale, *General population census of Romania, December 1899*, Bucharest, 1905.
- 1913 Romania. Direcțiunea Statisticii Generale, *General census of population, December 13, 1912*, Various titles of four volumes published by different publishers. Bucharest, 1914-1923.
- 1930 *The General Census of the Romanian Population of December 29, 1930*, Bucharest, 1938-40. Vols. I-XI.
- 1956 *The Census of February 21, 1956*, Bucharest, 1959-61, 4 vols.
- 1966 *The Census of the Population and Dwellings of March 15, 1966*, vol. I, Bucharest, 1969.
- 1977 *The Census of the Population and Dwellings of January 5, 1977*, Bucharest, 1980 Vol, I-II
- 1992 *Population and housing census, January 7, 1992, General results population, households, dwellings*, Bucharest 1994.
- 2002 *The Census of the Population and Dwellings*, Bucharest 2004, vol. I-IV.

9.1.4 Yugoslav states

- 1890 *Popis stanovništva u Kr Srbiji 31 Dec 1890, Peti deo. Opsti rezultati, popisa stanovništva.*, *Statistika Kraljevine Srbije I, Serbian population 1890*, Belgrade 1893
- 1895 *Popis stanovništva i domaće stoke u Kraljevini Srbiji 31. decembra 1895 godine, Serbia, Population livestock 1895*, Statisticko odeljenje ministarstva narodne privrede, by Izdanje Statističkog odeljenja Ministarstva narodne privrede, Belgrade 1897.

- 1900 Serbia. Uprava Drzavne Statistike, *Popis stanovnistva u Kraljevini Srbiji 31 decembra 1900 godine [Census of population in the Kingdom of Serbia, December 31, 1900]*. Statistika Kraljevine Srbije, Knjiga XXIII and XXIV. Belgrade, 1903-1905. 2 vols.
- 1905 Serbia. Uprava Drzavne Statistike, *Prehodni rezultati popisa stanovnistva i domace stoke u Kraljevini Srbiji 31 decembra 1905 godine [Provisional results of the census of population and livestock, December 31, 1905]*, Belgrade, 1906.
- 1910 Serbia. Uprava Drzavne Statistike, *Prehodni rezultati popisa stanovnistva i domace stoke u Kraljevini Srbiji 31 decembra 1910 godine [Provisional results of the census of population and livestock, December 31, 1910]*, Belgrade, 1911.
- 2001 Serbia, Републички завод за статистику, *Попис становништва, домаћинства и станова 2002*
- 1895 *Main results of the census of population in Bosnia and Herzegovina, April 22, 1895*, Sarajevo 1896.
- 1900 *Population census of the Kingdom of Croatia and Slavonia, December 31, 1900*, Zagreb, 1902 and 1914. 2 vols.
- 1910 *Results of population census in Bosnia and Herzegovina, October 10, 1910*. Sarajevo, 1912.
- 2005 *Bosnia and Herzegovina, demography, thematic bulletin 2, 2005*, Agency for Statistics of Bosnia and Herzegovina, , Sarajevo 2005.
- 2001 Croatia, *Popis stanovnistva kucanstava i stanova*, Zagreb 2002.
- 2002 *Census of population, households and housing, Slovenia, 31 march 2002*, <http://www.stat.si/doc/statinf/05-si-088-0301.pdf>, 06.10.2010.
- 2002 *Census of population, households and dwellings in the republic of Macedonia, 2002*, Book XII, Skopje 2005
- 1921 Yugoslavia, *Final results of the census of population of January 31, 1 1921*, Sarajevo, 1932.

- 1931 *Final results of the census of population of March 31, 1931*, Belgrade, 1937-40. Vols. MV. 4 vols.
- 1948 Yugoslavia., *Final results of the population census of March 15, 1948*, Vols. I-X. Belgrade, 1951-56. 10 vols.
- 1953 Yugoslavia, Savezni Zavod za Statistiku, *Popis stanovništva 1953 [Population census, 1953]*. Vols. I-XVI. Belgrade, 1958-62. 16 vols.
- 1961 Yugoslavia, *Savezni Zavod za Statistiku. Popis stanovništva 1961 [Population census, 1961]*. Belgrade, 1965-69. 12 Vols.
- 1971 *Popis stanovništva i stanova 1971 osnovni podaci po gradskim i mešovitim naseljima (Housing and population census 1971 : principal data on urban and mixed localities)*, Socijalistička Federativna Republika Jugoslavija, Savezni zavod za statistiku, Belgrade, 1978.
- 1981 *Popis stanovništva, domaćinstava i stanova u 1981. godini opštine u SFR Jugoslaviji: osnovni podaci o stanovništvu, domaćinstvima i stanovima*, Socijalistička Federativna Republika Jugoslavija, Savezni zavod za statistiku , Belgrade, 1987.
- 1991 *Popis stanovništva, domaćinstava, stanova i poljoprivrednih gazdinstava u 1991 godini: stanovništvo: domaćinstva, poljoprivredno stanovništvo i poljoprivredni fondovi domaćinstava : podaci po naseljima i opštinama*, Savezni zavod za statistiku, Belgrade, 1994.
- Statistical Office of the Republic of Slovenia, (2001). *Censuses in Slovenia 1948-1991 and Census 2002*,.

9.2 Bibliography

- Acemoglu D., Johnson S. and Robinson, J.A. (2002). Reversal of Fortune: Geography and Institutions in the Making of the Modern World Income Distribution, *Quarterly Journal of Economics* 117, no.4, 1231–94.
- Acemoglu, D., and Robinson J.A. (2006). *Economic Origins of Dictatorship and Democracy*, New York: Cambridge University Press.
- Ades, A.F. and Glaeser, E.L. (1995). Trade and Circuses: Explaining Urban Giants, *Quarterly Journal of Economics* 110, 195–227.
- Alton, T. (1975). et al. *Expenditure on Gross Domestic Product in East European Countries*, New York: International Financial Research,.
- Alton, T. (1989). et al. *Economic Growth in Eastern Europe 1975–1988*, New York: International Financial Research.
- Anderson, O. (1928). *On the Representative Method in Statistics*, Sofia: M. Staykov. (In Bulgarian).
- Andrew C. Janos, (2000). *East Central Europe in the Modern World: The Politics of the Borderlands From Pre- to Postcommunism*. Stanford, CA: Stanford University Press.
- Bairoch, P. (1976). Europe's Gross National Product: 1800–1975, *Journal of European Economic History*, 5, pp. 273–340.
- Bairoch, P, Batou, J and Chèvre, P. (1988). *La population des villes Européennes, 800-1850*, Librairie Droz, Genève.
- Balev, Ivan and Nikolina Yaneva, (2005). *125 години българска статистика 1880-2005 (125 years Bulgarian statistics)*, Нац. статист. институт, (София : Нора 2000). Sofia.
- Berliner, J. (1977). "Internal Migration: A Comparative Disciplinary View." In *Internal Migration: A Comparative Perspective*, edited by Alan Brown and Egon Neuberger, Pp. 443-61. New York: Academic Press.

- Bosker, Maarten and van Zanden, J.L. (2008). *From Baghdad to London: The Dynamics of Urban Growth in Europe and the Arab World, 800–1800*, CEPR Discussion Paper, 6833.
- Botev, N. (1989). Particularities of the Transition to a New Reproduction Behaviour in Bulgaria, *Naselenie*, 7 (4), pp. 88–101. (in Bulgarian).
- Botev, N. (1990). Nuptiality in the Course of the Demographic Transition: The Experience of the Balkan Countries, *Population Studies*, 44, 107–126.
- Bruhn, M. and Gallego, F. (2007). *Good, Bad, and Ugly Colonial Activities: Studying Development Across the Americas*,” MIT mimeo.
- Buyst, E. (2009). *Changes in the Occupational Structure of 19th-Century Belgium: Sources, Methods, and First Results*. Paper presented at INCHOS Workshop, Cambridge University.
- Cevat Tosun, Dallen J. Timothy and Yüksel Ztürk, (2003). Tourism Growth, National Development and Regional Inequality in Turkey, *Journal of Sustainable Tourism*, 11, no. 2.
- Crampton, R. J. (1997). *A Concise History of Bulgaria*, Cambridge University Press.
- Daniele, Vittorio and Paolo Malanima, Labour Supply in Italy 1861-2001 Structural Change and Regional Disparities, Paper presented at INCHOS Workshop, July 2009, Cambridge University.
- Danailov, G. (1902). *Нашите железници (Our Railways)*, Sofia, 1902.
- Danailov, G. (1930). *Studies on Demography of Bulgaria*. Sofia: P. Glushkov, (in Bulgarian).
- Female Labour in our Postal, Telegraph, and Telephone Office*. [Sofia]: Telegrafo-poshtenski sojuz, [1912]. (in Bulgarian).
- Daskalov, R. (2005). *Bulgarskoto obshestvo, 1878-1939. [The Bulgarian Society, 1878-1939] Vol. 1-2*. Sofia: Gutenberg.
- De Vries, J., European Urbanization, 1500-1800*, Cambridge: Harvard University Press, 1984.

- Dimitrov, St. (1915). Automatic Counting Machine in Service to the Statistics, *Spisanie na Bulgarskoto Ikonomichesko Drujestvo*, 19 (3–4), pp. 190–205. (in Bulgarian).
- Dobkins, L.H., Ioannides, Y. (2001). Spatial interactions among U.S. cities, *Regional Science and Urban Economics* 31, 701–731.
- Доросиев, ИВ. (1938). “Вложен капитал в държавните железници (Invested Capital in the national railways), -Във Юбилеен сборник 50 години Български железници” Sofia, 115-157.
- Dumais, Guy, Glenn Ellison, and Edward L. Glaeser. (2002). Geographic Concentration as a Dynamic Process, *Review of Economics and Statistics* 84, 193–204.
- Duranton, Gilles, and Henry G. Overman. (2005). Testing for Localisation Using Micro Geographic Data, *Review of Economic Studies* 72, 1077–1106.
- Eaton, J., Eckstein, Z. (1997). Cities and growth: theory and evidence from France and Japan. *Regional Science and Urban Economics* 27, 443–474.
- Enyedi, G. (1992). Urbanisation in East Central Europe: Social Processes and Societal Responses in the State Socialist Systems, *Urban Studies* 29, no. 6 869-880.
- European Commission, “Volume 10: Portrait of the regions – Bulgaria”, Luxembourg: Office for Official Publications of the European Communities, 2000
- Fallenbuchl, Z. (1977).”Internal migration and economic development under socialism: The case of Poland.” In: *Internal Migration, A Comparative Perspective*, edited by A. Brown and E. Neuberger, 305–327. San Diego, CA: Academic Press.
- Flora, F. et al. (eds.), *European Regions: The Territorial Structure of Europe, 1870-2000* (forthcoming).
- Forster, M., Jesuit, D. and Smeeding, T. (2005). “Regional Poverty and Income Inequality in Central and Eastern Europe: Evidence from the Luxembourg Income Study.” In *Spatial Inequality and Development*, edited by R. Kanbur and A.J. Venables, 311-337, Oxford: Oxford University Press.

- Gaber, N and Joveska, A. (2004). Macedonian census results – controversy or reality?, *South-East Europe Review*,. 99 – 110.
- Ganev Chr. (1989). The Urban Process and the Appearance of Agglomerations in Bulgaria, *Socio-Economic Planning Science*. 23, ½ .
- Glenny M. (1999). *The Balkans 1804-1999- Nationalism, war and the great powers*, (London: Grada).
- Good, David, and Tongushu Ma. (1999). The Economic Growth of Central and Eastern Europe, 1870–1989, *European Review of Economic History* 3, 103–38.
- Gounaris, B. C. (1993). *Steam over Macedonia. 1870–1912, Socio-economic Change and the Railway Factor*, Boulder, Colorado: East European Monographs.
- Goyer, D. S. and Draaijer, G. E. (1992). *The handbook of national population censuses: Europe*, Greenwood Press.
- Gregory, I. - Marti, J. - Tapiador, F.J. (2009). A GIS reconstruction of the population of Europe, 1870 to 2000, *Journal of the Royal Statistical Society A*, 174, Part A.
- Gregory, I. - Martí, J. (2010). The Railways, Urbanization, and Local Demography in England and Wales, 1825–1911 , *Social Science History* 34,2 (199-228).
- Grothusen, Klaus-Detlev. (1975). ed. *Handbook of South Eastern Europe. Vol. I. Yugoslavia*, Göttingen.
- Grothusen, Klaus-Detlev. (1990). ed. *Handbook of South Eastern Europe. Vol. VI. Bulgaria*, Göttingen.
- Hadzivukovic S. (1989). Population growth and economic development: a case study of Yugoslavia, *Journal of Population Economics*, 1989 Nov; 2(3):225-34.
- Henderson, V.J.(1974). The Sizes and Types of Cities, *American Economic Review* 64, 640–56.
- Henderson, V.J.(1988). *Urban Development: Theory, Fact and Illusion*. Oxford University Press.

- Henderson, V.J.(2002). Urbanization in Developing Countries. *World Bank Research Observer* 17(1), 89–112.
- Henderson, V.J (2003). The Urbanization Process and Economic Growth: The So-What Question, *Journal of Economic Growth* 8, 47-71.
- Henderson, V. and Becker R. (2000). Political Economy of City Sizes and Formation, *Journal of Urban Economics* 48, 453-484.
- Hertner, P. (2006). The Balkan Railways, International Capital and Banking from the End of the 19th Century until the Outbreak of the First World War, *Bulgarian national bank discussion papers* DP/53/2006 June 2006
- Hirschon, R. (2003). *Crossing the Aegean: an appraisal of the 1923 compulsory population exchange between Greece and Turkey*, Berghahn Books.
- Hitchins, K. (1992). “Romania”, *the American Historical Review*, Vol. 97, No. 4.
- Hitchins, K. (1994). *Romania: 1866-1947*, Oxford University Press.
- Holmes, T. J., and Stevens. J.J. (2004). “Spatial Distribution of Economic Activities in North America.” *In Handbook of Regional and Urban Economics, Volume 4*, edited by J. V. Henderson and J-F. Thisse, Amsterdam: North Holland.
- Høivik, T. (1974). The Development of Romania: A Cohort Study, *Journal of Peace Research*, Vol. 11, No. 4, pp. 281-296.
- Ivanov, M. and Tooze, A. (2007). Convergence or Decline on Europe's Southeastern Periphery? Agriculture, Population, and GNP in Bulgaria, 1892 1945, *The Journal of Economic History*. 67,672-703
- Ivanov, M. (2007).”The Miracle of Conception or How Bulgaria ‘Beget with Communism’”, *Sociological Problems*. 3-4, 303-337
- Ivanov, M. (forthcoming). *Bulgarian GDP 1870–2001: A Centenary Perspective*.
- Jackson, M. (1985). Comparing the Balkan Demographic Experience, 1860 to 1970, *Journal of European Economic History*, 14 (2), pp. 223–272.

- Jackson, M. (1991). The Rise and Decay of the Socialist Economy in Bulgaria, *The Journal of Economic Perspectives* 5, No. 4, 203-209.
- James C. D. and J Henderson, V.J. (2003). Evidence on the political economy of the urbanization process, *Journal of Urban Economics* 53, 98-125.
- Jelavich, B. (1983). *History of the Balkans*, Cambridge University Press.
- Kapur, S, and Kim, S. (2006). "British Colonial Institutions and Economic Development in India." *NBER Working Paper 12613*. National Bureau of Economic Research, Cambridge, MA.
- Karpat, K. H. (1972). The Transformation of the Ottoman State, 1789-1908, *International Journal of Middle East Studies* 3, No. 3, 259.
- Karpat, K. H. (1978). Ottoman Population Records and the Census of 1881/82-1893, *International Journal of Middle East Studies* 9, No. 3.
- Kaser M. C. and Radice, E. A. (1985). *The Economic History of Eastern Europe 1919-1975, vol. I: Economic Structure and Performance between the Two Wars*, Clarendon Press, Oxford.
- Kim, S. (1995). Expansion of markets and the geographic distribution of economic activities: the trends in U.S. regional manufacturing structure, 1860-1987, *Quarterly Journal of Economics* 110(4), 881-908.
- Kim, S. (1998). Economic integration and convergence: U.S. regions, 1840-1987, *Journal of Economic History* 58(3), 659-683.
- Kim, S. (1999). Regions, resources, and economic geography: sources of U.S. regional comparative advantage, 1880-1987, *Regional Science and Urban Economics* 29(1),1-32.
- Kim, S. and Margo, R.A. (2004), Historical perspectives on U.S. economic geography. In Henderson and Thisse (eds.), *Handbook of Regional and Urban Economics*, vol.4, Elsevier, Amsterdam, 2981-3019.
- Kiranov, P. (1969). Development of Bulgarian Statistics during the Bourgeois Period, *Statistika*, 15, 4, pp. 51-63. (in Bulgarian).

- Kosinski, L. A. (1971) Population Censuses in East-Central Europe in the Twentieth Century, *East European Quarterly* 5, No. 3.
- Kostov, A. (1995). "Trade and navigation on the lower Danube: Romania and Bulgaria 1880-1912." In *Inland Navigation and Economic Development in Nineteenth-Century Europe*, edited by Andreas Kunz and John Armstrong, 330. Mainz: Verlag Philipp Von Zabern.
- Krugman, P. (1991). Increasing returns and economic geography, *Journal of Political Economy* 99(3), 483-499.
- Krugman, P. (1992). *Geography and trade*, The MIT Press, Cambridge (MA).
- Krugman, P. (1993). "The hub effect: or, threeness in interregional trade." In *Theory, Policy and Dynamics in International Trade* edited by Wilfred J. Ethier, Elhanan Helpman, and J. Peter Neary, 29-37. Cambridge: Cambridge University Press.
- Krugman, P. and Livas Elizondo, R. (1996). Trade policy and the Third World metropolis, *Journal of Development Economics* 49(1), 137-150.
- Krugman, P. and Venables, A.J. (1995). Globalization and the inequality of nations, *Quarterly Journal of Economics* 110(4), 857-880.
- Kuznets, S. (1955). Economic growth and income inequality, *American Economic Review* 45(1), 1-28.
- Lampe, John R. (1986). *The Bulgarian economy in the twentieth century*, St. Martin's press.
- Lampe, John R. (1975). Varieties of Unsuccessful Industrialization: The Balkan States before 1914, *The Journal of Economic History* 35, No. 1.
- Lampe, John R. and Marvin Jackson. (1982). *Balkan Economic History, 1550-1950: From Imperial Borderlands to Developing Nations*. Bloomington: Indiana University Press.
- Lampe, John R. (2000). *Yugoslavia as history: twice there was a country*, Cambridge: Cambridge University Press.

- Lipton M. (1977). *Why poor people stay poor: urban bias in world development*. Cambridge, Massachusetts: Harvard University Press.
- Lanaspa, L., Pueyo, F. and Sanz, F. (2003). Evolution of the Spanish Urban Structure during the Twentieth Century, *Urban Studies* 40, No. 3, 567-580.
- Fay, M. and Opal, C. (2000). Urbanisation without Growth: A not-so uncommon phenomenon, *World Bank Working Paper* No. 2412, Washington DC: World Bank.
- Macartney, C.A. (1969). *The Habsburg Empire, 1790–1918*, New York, Macmillan.
- Maddison, A. (2003). *The World Economy: Historical Statistics*. Paris: OECD.
- Marinov, Kh. (1965). “Geografkoto razpredelenie na promishlenostta v Bulgaria mezdu dvete svetovni voini (The geographic distribution of industry in Bulgaria between the two World Wars).” *trudove na V.I.I Karl Marx*, vol.1, 7-14
- Martí, J. (2005). The administrative map of Europe. Continuity and change of the administrative boundaries (1850-2000), “*Geopolitics*”, 10, pp. 791-815.
- Maurel, F. and Sédillot, B. (1999). A Measure of Geographic Concentration in French Manufacturing Industries, *Regional Science and Urban Economics* 29, 575–604.
- Midelfart-Knarvik, H. G. Overman, S. J. Redding, and A. J. Venables. (2000), “*The Location of European Industry*. Report for the European Commission.
- Pichler-Milanović, N. (2005). The effects of policies and planning regulation on urban sprawl in Slovenia and Ljubljana urban region, URBS PANDENS, May 2005
- Milojevic, B. Z. (1925). The Kingdom of the Serbs, Croats, and Slovenes: Administrative Divisions in Relation to Natural Regions, *Geographical Review*, Vol. 15, No. 1, pp. 70-83.
- Mishaikov, D. (1920). *The Population of Bulgaria: A Study in Demography*. Sofia: Slovo, (in Bulgarian).
- Mishkova, D. (1994). Literacy and Nation-Building in Bulgaria, 1878-1912, *East European Quarterly*, 28, No. 1, 63.

- Mitchell, B. R. (2003). *International Historical Statistics: Europe 1750–2000*, Houndmills: Palgrave Mcmillan.
- Mocheva, H. (1938). *Peasant Agricultural Household in Bulgarian during 1935/1936: Budget, Situation and Labour Outlays*. Sofia: Durzhavna Pechatnitsa, (in Bulgarian).
- Moomaw, R and. Shatter, A. M (1996). Urbanization and Economic Development: A Bias toward Large Cities?, *Journal of Urban Economics* 40, No. 1, 13-37.
- Nelson, D. N. (1981). Vertical Integration and Political Control in Eastern Europe: the Polish and Romanian Cases, *Slavic Review*, Vol. 40, No. 2, pp. 210-227.
- Nikova, E. (2007). Roads Connecting, Roads: Infrastructure in South East Europe, *Bulgarian Academy of Sciences Etudes balkaniques* . no.1.
- Obreshkov, T. (1925). The Working Population of Bulgaria, *Arhiv za Stopanska i Socialna Politika*, 1, pp. 508–531. (in Bulgarian).
- Ofer, G. (1977). "Economizing on urbanization in socialist countries: historical necessity or socialist strategy." In *Internal Migration: A Comparative Perspective*, Edited by A. Brown and E. Newberger, 277 – 303. New York, Academic Press, New York.
- Palairat, M. (1997). *The Balkan Economies c. 1800-1914 Evolution without Development*, Cambridge University Press, Cambridge.
- Pammer, M. (1997). Proxy Data and Income Estimates: The Economic Lag of Central and Eastern Europe, *The Journal of Economic History*, Vol. LVII, 448-455.
- Papayiannakis, L. (1982). *The Greek Railways (1882-1910)* [Oi Ellenikoi Sidirodromoi], Athens.
- Paravantis J. A. and Prevedouros, P.D. (2001). Railroads in Greece: History, Characteristics, and Forecasts, *Journal of the Transportation Research Board*, VOL 1742, P 34-44.
- Ploeckl, Florian , Towns (and Villages); *Definitions and Implications in a Historical Setting*, Economics Series Working Papers number 53

- Pleština, D. (1992). *Regional Development in Communist Yugoslavia: Success, Failure, and Consequences*, Westview Press, Boulder, CO.
- Pollard, S. (1981). *Peaceful Conquest: The Industrialization of Europe 1760 - 1970*, Oxford, Oxford University Press.
- Puga, D. (1996). Urbanisation patterns: European vs. less developed countries, *Centre for Economic Performance*, London School of Economics, Discussion Paper No. 305, September.
- Pichler-Milanovič, N. (2002). Urban Planning Institute of the Republic of Slovenia URBS PANDENS case study of the city of Ljubljana and urban region (Prepared for the first ‘kick-off project meeting’ in Potsdam 21-23 March 2002)
- Renaud, G. (1981). *National Urbanization Policy in Developing Countries*. New York, NY:Oxford University Press.
- Roggemann, H. (1980). *Die Verfassung der SFR Jugoslawien*. Berlin: Berlin-Verlag.
- Rogers, A and Williamson, J. (1982). Migration, Urbanization, and Third World Development: An Overview, *Economic Development and Cultural Change*, Vol. 30, No.3, *Third World Migration and Urbanization: A Symposium*, 463-482.
- Rosen, K.T., and Resnick, M. (1980). The Size Distribution of Cities: An Examination of the Pareto Law and Primacy, *Journal of Urban Economics* 8, 165–86.
- Saito, Osamu and Tokihiko Settsu. (2009). Unveiling Rural By-Employment Patterns And its Implications for National Income Estimates in Early Phases of Japan’s Industrialisation, Paper presented at INCHOS Workshop, July 2009, Cambridge University.
- Samardzic M. (forthcoming) *Roads to Europe. Serbian politics and the railway issue (1878-1881)*.
- Sarafov, M. (1893). *The Population of the Principality of Bulgaria According the First Three Censuses*. Vol. 1. Sofia: Durzhavna Pечатnica, (in Bulgarian).
- Shaw, Stanford (1978). ”The Ottoman Census system and population.1831-1914.” *Int. J. Middle East Stud.* 9, 325.

- Станишев, Хр.(1948). *История на строежите и съобщенията в България от освобождението до края на 1939г (History of constructions and communications in Bulgaria after the liberation until the end of 1939)*. С,Компас.
- Shterionov, S. (2004). Bulgaria's Census Questionnaires after the Liberation from Ottoman Domination., *Population (Население)* 12, 114-129.
- Smith, A. (1976). *An Inquiry into the Nature and Causes of the Wealth of Nations*, ed. R.H. Studenski, Paul, *The Income of Nations. Part One: History*, New York: New York University Press, 1956. Campbell and A.S. Skinner. Oxford: Clarendon Press, 1976.
- Sklar, J. L. (1974). The Role of Marriage Behaviour in the Demographic Transition: The Case of Eastern Europe Around 1900, *Population Studies*, 28, pp. 231–247.
- Spengler, J. and Myers, G. (1977). "Migration and Socioeconomic Development: Today and Yesterday." In *Internal Migration: A Comparative Perspective*, edited by Alan Brown and Egon Neuberger, 11-35. New York: Academic Press.
- Tomasevic, J. (1955). *Peasants, Politics, and Economic Change in Yugoslavia*, Stanford University Press, Stanford.
- Thompson, L. (2001). *Railways in Eastern Europe*, OECD Round Table 120, Cambridge (U.K.).
- Todorov, N. (1983). *The Balkan city 1400-1900*, Seattle&London: University of Washington Press, 1983.
- Totev, At. (1940). *Comparative Study of the Bulgarian and the Yugoslavian Economies*, Knipegraf, Sofia. (in Bulgarian).
- Tsontchev, P. (1906). *An Attempt for Sanitary and Economic Survey of Textile Mills in Graborvo Region*, Sofia. (in Bulgarian).
- Turan, O. (2006), "Turkish Migrations from Bulgaria" in *Forced Ethnic Migrations on the Balkans: Consequences and Rebuilding of Societies* (Conference Proceedings), edited by Katerina Popova and Marko Hajdinjak, (Sofia: IMIR).

- Turnock, D. (1986). *The Romanian economy in the twentieth century*, St. Martin's Press, New York.
- Turnock, D. (1988) *The making of eastern Europe: from the earliest times to 1815*, Routledge, London.
- Turnock, D. (1989). *The human geography of Eastern Europe*. London: Routledge.
- Turnock, D. (2001). Railways and economic development in Romania before 1918, *Journal of Transport Geography*, Volume 9, Issue 2, 137-150.
- Turnock, D. (2006). *The Economy of East Central Europe, 1815-1989: Stages of Transformation in a Peripheral Region*, Routledge, UK.
- Venables, A. J. (1996), Equilibrium locations of vertically linked industries, *International Economic Review* 37, 341-359.
- Vezenkov, A. (2000). Систематизацията в Румъния при режима на Чаушеску, «Sistematizarea in Romania under the Ceausescu Régime» by *Historical future (Историческо бъдеще)*, issue: 12, 224-237.
- Williamson, J. (1965). Regional Inequality and the Process of National Development: A Description of the Patterns, *Economic Development and Cultural Change* 13, 3–84.
- Wolf, N. (2005). Path dependent border effects: the case of Poland's reunification (1918–1939), *Explorations in Economic History* XLII, 414-438.
- Wolf, N. and Schulze. M. (2009). On the Origins of Border Effects: Insights from the Habsburg Empire, *Journal of Economic Geography*, IX (2009), 117-136.
- Згурев, Г. Железопътното движение – Във Юбилеен сборник 50 години Български железници, С., 1938, 189-213

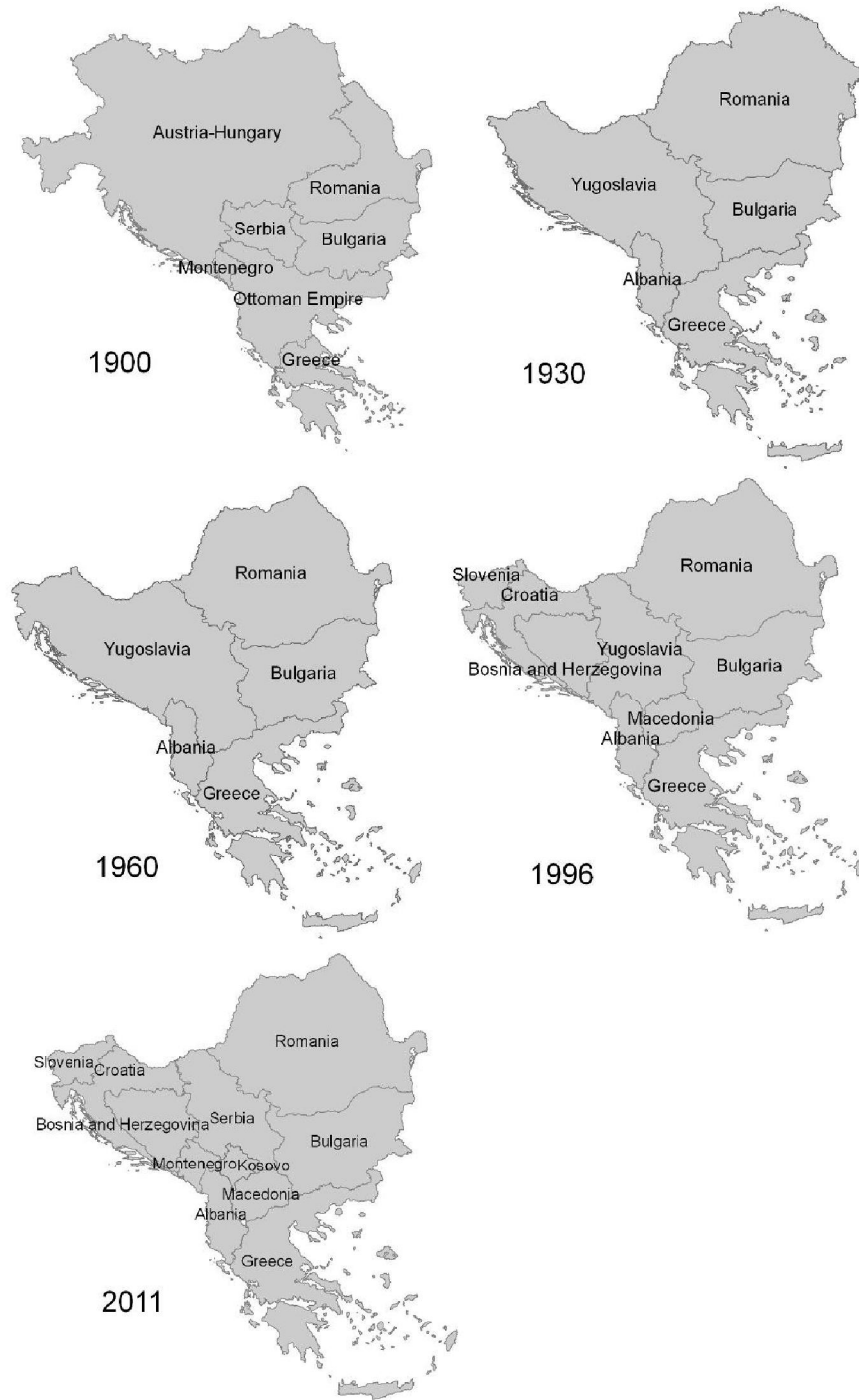
Annex

Figure 71 Main Balkan cities



Source: own elaboration

Figure 72 The Balkan states during 20th century



Source: Own elaboration

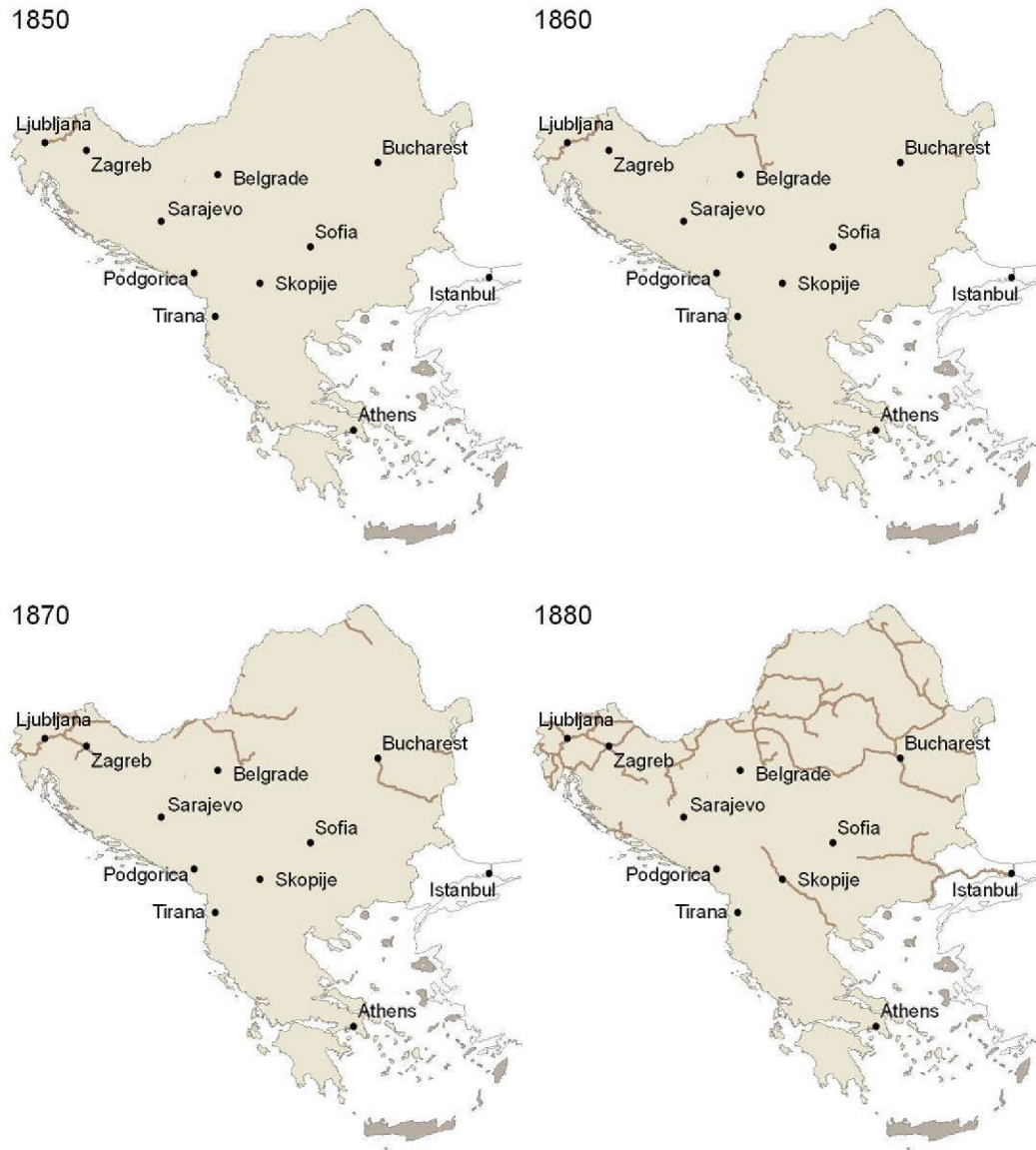
Figure 73. The Names of Bulgarian regions



Source: Own elaboration

10.1 Railways

Figure 74 Evolution of the railway network of the Balkans



1890



1900



1910



1920

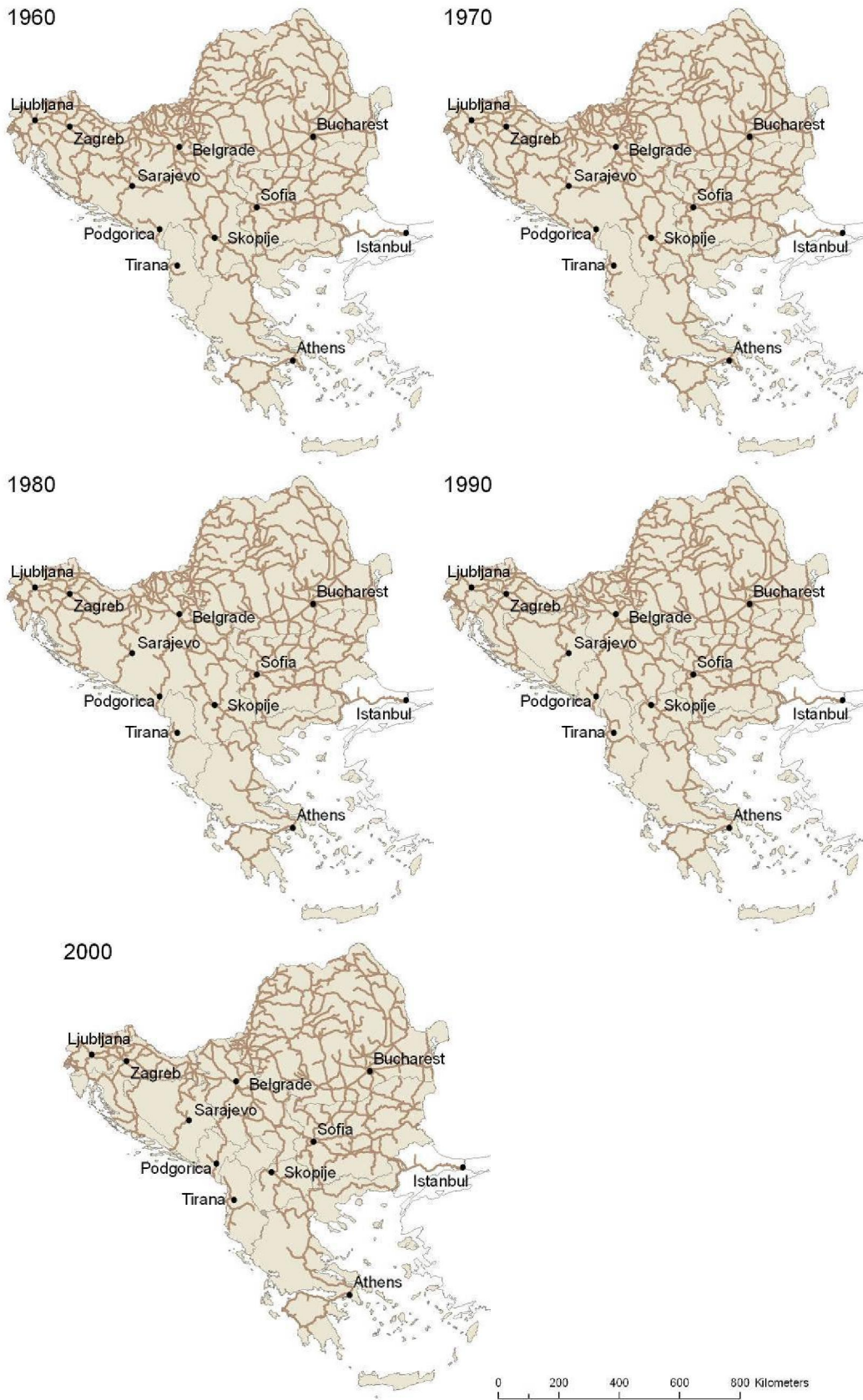


1930



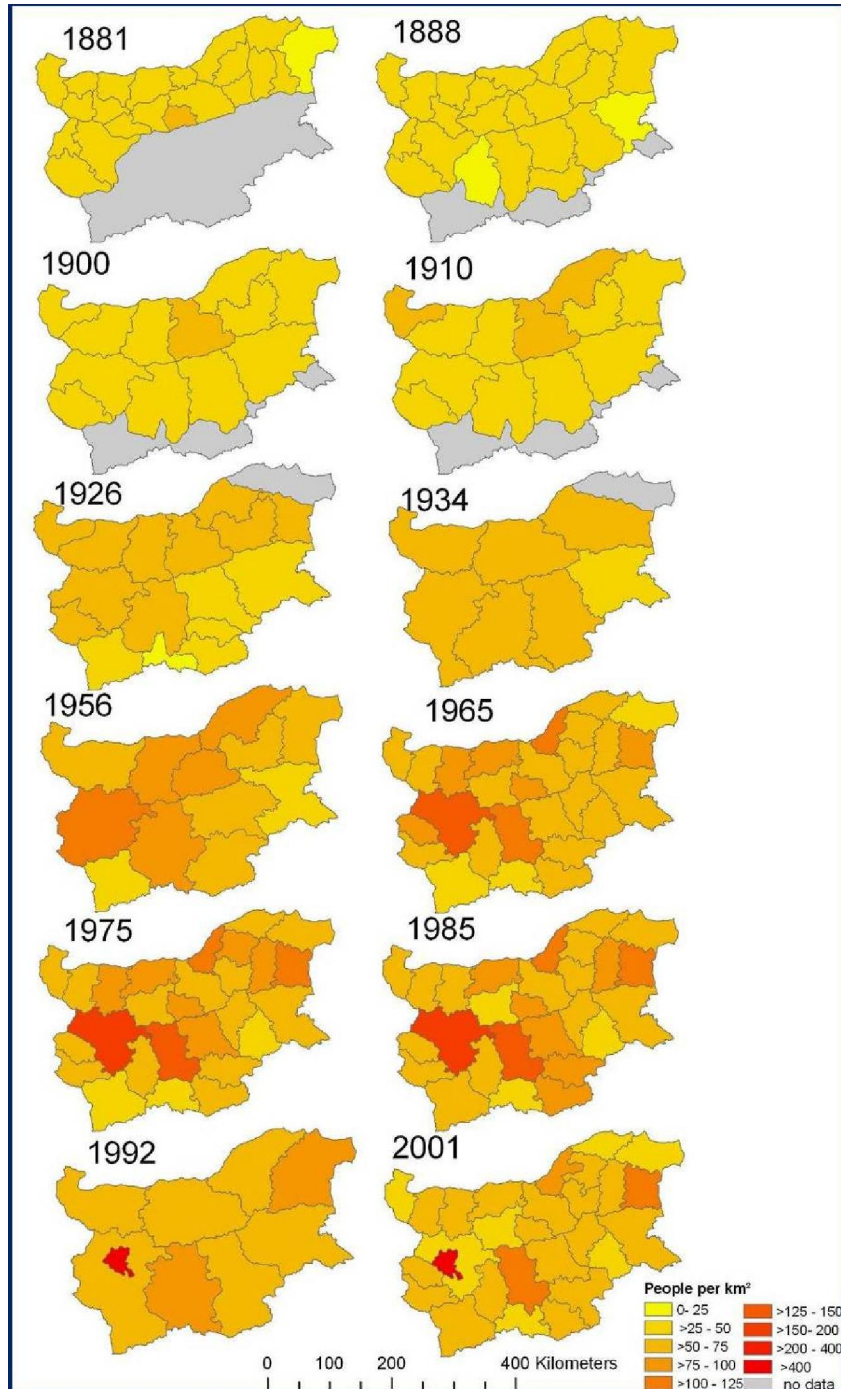
1950





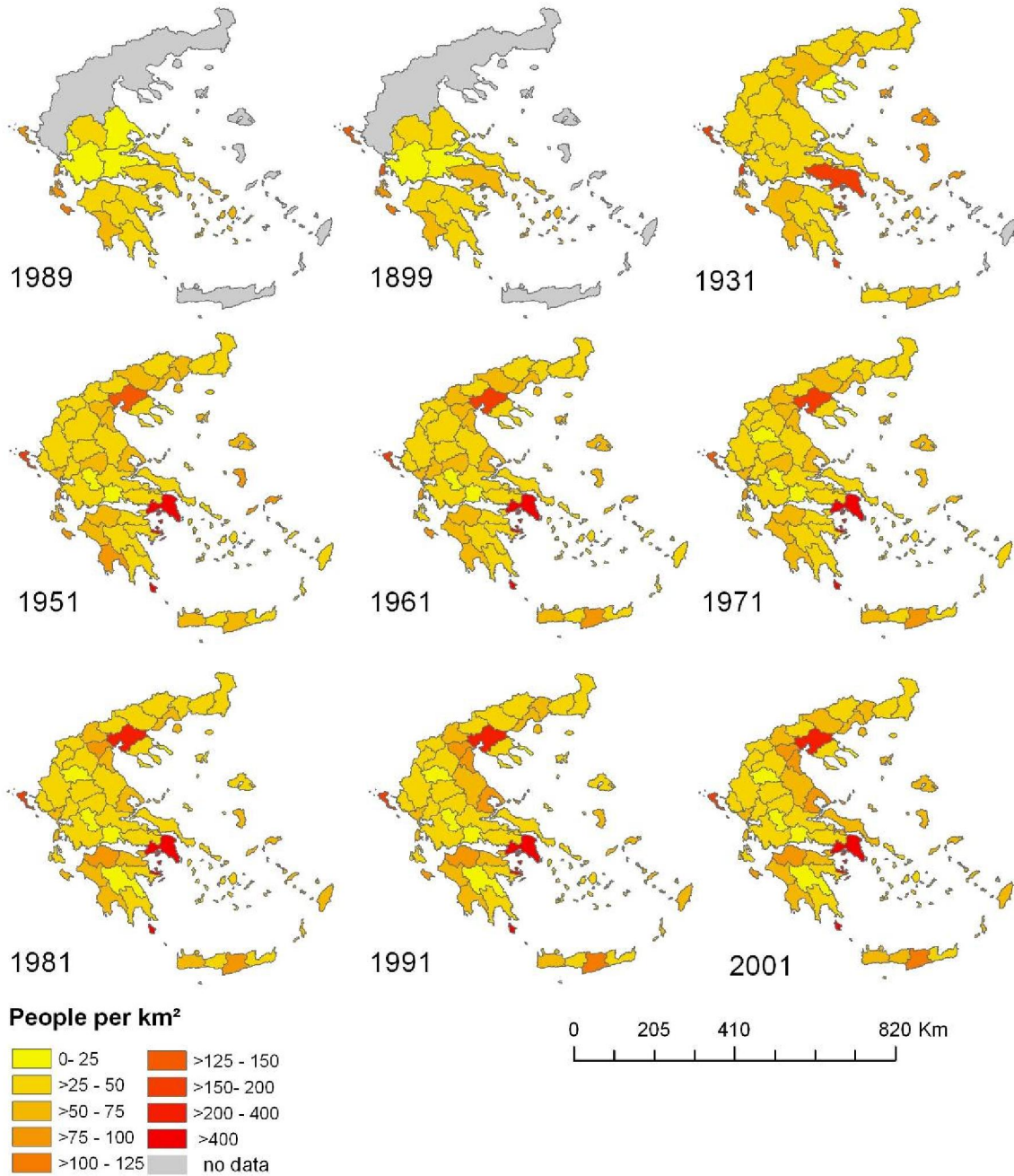
10.2 Density rates

Figure 75 Regional density rates Bulgaria 1881- 2001



Source: Own elaboration based on census data.

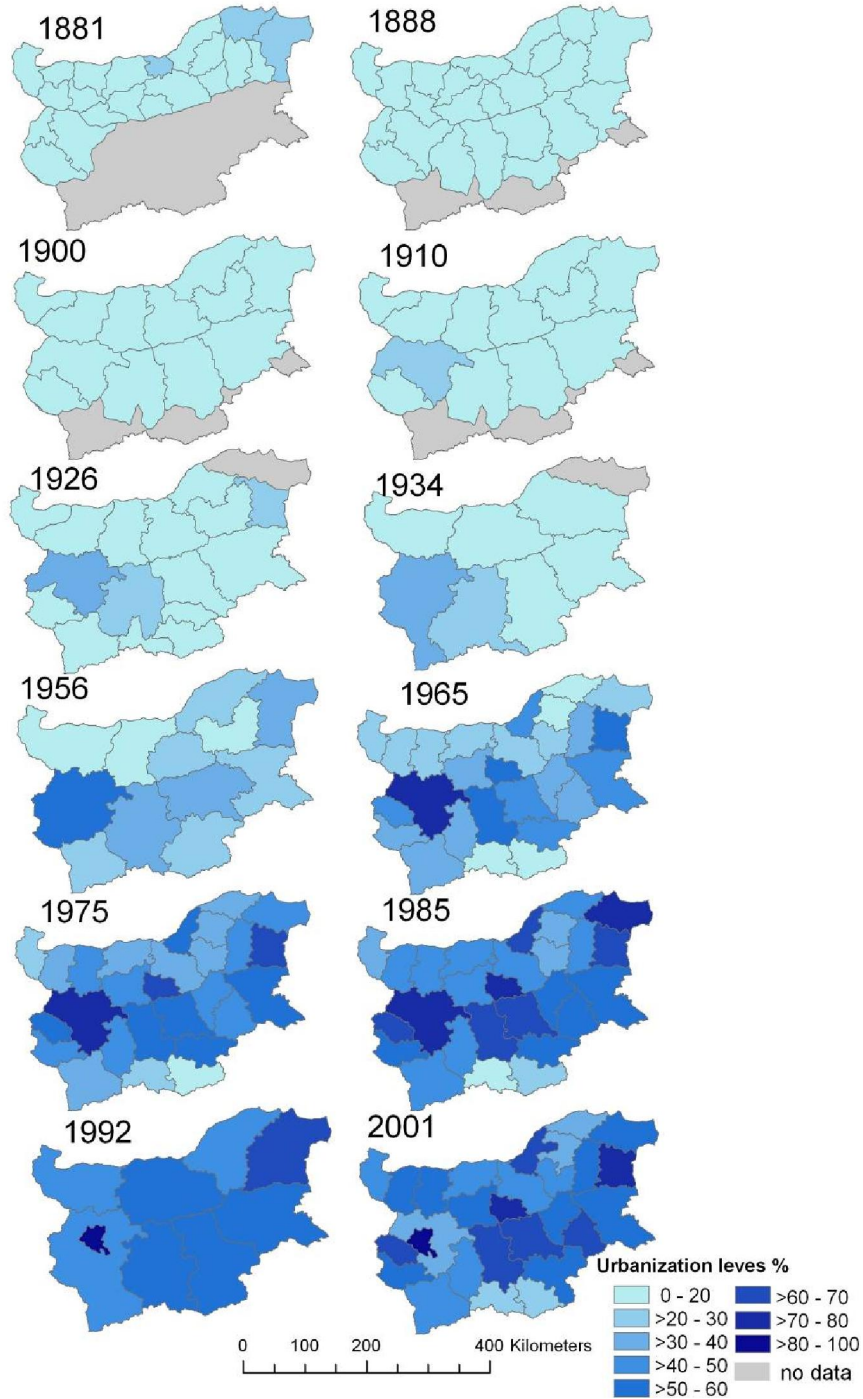
Figure 76 Greece: Regional density rates



Source: Own elaboration based on census data.

10.3 Urbanization

Figure 77 Regional urbanization levels Bulgaria 1881- 2001



Source: Own elaboration based on census data.

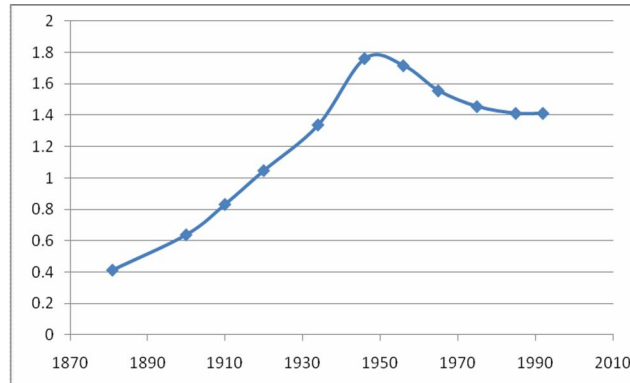
Figure 78 International comparison of the Urbanization rates 800-1800

Urbanisation ratio (total population in cities >=10000 inhabitants / total population)											
Country	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800
Scandinavia	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,5	1,7	3,6	4,6
Great Britain	0,0	0,8	3,6	3,4	2,9	3,2	2,7	2,1	5,9	11,3	23,1
Ireland	0,0	0,0	5,0	0,0	0,0	3,0	2,5	0,0	0,4	3,8	8,8
Low Countries	0,0	0,0	3,4	3,4	10,0	12,3	23,4	19,6	21,2	27,3	19,7
France	3,0	2,6	3,8	4,4	5,8	6,1	6,3	6,2	7,0	8,7	9,0
Germany	3,2	3,7	5,7	5,2	4,8	4,6	5,5	4,7	5,2	4,8	7,6
Austria/Switzerland	0,0	0,0	0,0	0,0	0,7	0,7	1,6	1,5	2,2	4,9	8,3
Italy	3,8	4,7	8,3	8,6	10,6	13,5	12,9	12,8	17,5	15,7	17,3
Iberia	5,8	8,2	13,1	10,4	8,9	8,8	9,9	10,1	12,3	10,6	14,4
Poland	0,0	0,0	0,0	0,0	0,4	0,6	2,2	3,3	4,6	3,1	3,1
Czech Rep.	0,0	0,0	0,8	0,7	0,5	1,7	3,8	3,1	2,2	2,0	1,8
Hungary/Slovakia	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,9	0,7	1,0	3,1
Yugoslavia/Albania	0,0	1,8	2,8	0,9	1,1	3,0	3,9	4,1	7,6	5,6	5,4
Bulgaria/Rumania	2,3	4,1	4,4	3,7	4,9	6,0	5,3	6,0	5,0	5,9	5,9
Greece	2,5	6,7	5,5	4,8	4,2	6,0	8,6	2,9	5,5	3,5	3,6
Turkey	7,4	8,2	7,9	10,1	7,9	4,5	5,8	7,4	10,1	12,2	9,2
Lebanon/Israel	6,3	11,5	15,0	15,8	12,9	14,6	10,3	10,0	6,9	7,5	7,5
Syria	8,0	9,8	11,2	12,4	13,5	12,3	13,7	12,6	11,0	12,8	12,8
Iraq	26,0	30,7	21,5	19,4	19,3	19,0	16,5	9,5	5,2	6,5	11,5
Egypt	5,1	7,2	7,2	9,6	9,9	11,5	13,0	11,3	4,4	4,1	5,3
North Africa	2,0	2,4	3,0	5,3	5,7	5,4	6,9	7,1	5,3	7,4	4,7
Latin-West	3,0	3,5	5,8	5,3	5,8	6,5	7,2	6,9	8,8	9,1	11,2
Balkan	1,0	2,7	2,9	1,9	2,1	2,9	3,1	3,2	3,8	3,5	4,5
ME-NA	8,1	9,2	8,1	9,8	9,2	7,9	9,0	8,8	7,2	9,0	7,6
Total	4,9	5,8	6,4	6,3	6,3	6,4	7,2	6,9	7,8	8,5	9,8

Source: Bosker, Maarten and Jan Luiten van Zanden. (2008), 40

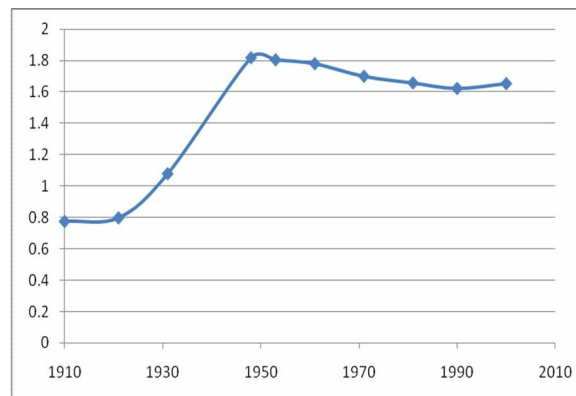
Coefficient of Variation (CV) of the disparities in the urban networks of the Balkan states

Figure 79 Bulgaria CV-20 largest cities 1881-2001



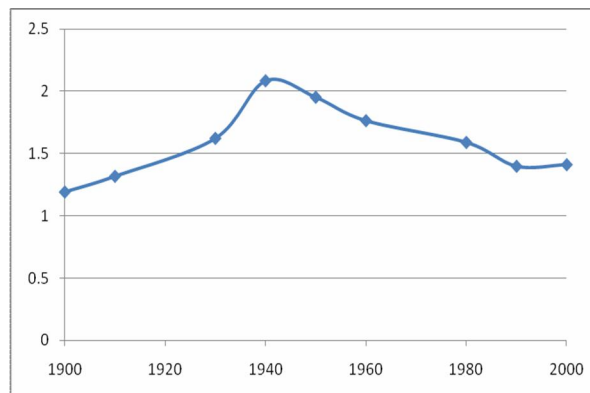
Source: own calculations based on census data

Figure 80 CV-40 largest cities on the territory of Former Yugoslavia 1910-2001



Source: own calculations based on census data

Figure 81 CV-30 largest cities of Romania 1900-2001



Source: own calculations based on census data

