
ARTICLES

Comparing the Balkan Demographic Experience, 1860 to 1970

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By the turn of this century the populations of the Balkan States and other areas of Southeastern Europe were growing at rates of about one and one-half percent per year. Although below the growth of 2 to 3 percent per year found in the populations of some developing countries after the Second World War, Southeastern Europe during this period may have had the fastest growing populations ever recorded in Europe. Birth rates were commonly 40 to 45 per thousand, well above the 30 per thousand suggested by Habakkuk as common for pre-industrial Europe, while death rates fluctuated around or slightly below the 30 per thousand he set for the usual pre-industrial society.¹ In Southeastern Europe the population upsurge seems to have been connected more to factors increasing birth rates than to decreasing death rates and was related to expanding land under cultivation. The region was still sparsely populated with uncultivated land to which was added a heretofore missing element of reasonable security for those who would put it

¹ H. J. HABAKKUK, *Population Growth and Economic Development Since 1750* (New York, 1971), pp. 8-9.

to plough. The added pull of ready international markets encouraged the process of expanding population and cultivated land but was a necessary condition for it.

In 1910 the population of Southeastern Europe (excluding European Turkey and on the territory after 1945) totalled 35 million. By 1970 it reached over 60 million, experiencing since 1910 an average annual growth rate of a little less than one percent.

In 1970 it slightly exceeded the population of West Germany, but in an area three times greater. Population density was above that of Spain, but below that of France and other East European countries and Italy. In contrast to its condition at the turn of the century by the mid 1960s, except for Albania and Kosovo in Yugoslavia, the region had one of the slowest growing populations in Europe. It also had, except for Greece, in both the late 1930s and after the Second World War, rates of urbanization significantly below those expected for countries at similar levels of development (as measured by per capita production and percentage of labour in industry).

The demographic character of Southeastern Europe, both before 1910 and after, demands our attention. The continuous record is unfortunately not a long one, stretching back in time to at best the middle of the XIXth century. Thenceforth, it is muddled by incompleteness and suspected inaccuracies. Also, territorial change and large international migrations, especially around the times of the two world wars, so tangle the record that great care must be taken in interpretation of the available data.

The record collected in this survey does not claim to identify all the literature on the subject. Some detailed census reports were unavailable. Still, it brings together more material on population in Southeastern Europe than found in any single source yet encountered in research. The survey is organized in three parts. Part I considers the record up to 1910. Part II disentangles the impact of wars on population from 1911 to 1920. Finally, Part III covers population growth and its sources from 1921 to 1970, the period of continuous identity of the new nations of Southeastern

Europe formed in 1918 and found today with essentially unchanged boundaries.

I. The Population of Southeastern Europe before the Balkan and First World Wars

At the end of 1910, population censuses were taken in Bulgaria, Serbia and both the Austrian and Hungarian parts of the Habsburg Empire. Census estimates for Greece (November 1907), the Romanian Old Kingdom (December 1912), and Russia (January 1897) require, for comparability, estimating their populations at the end of 1910. There seem to be no available censuses of prewar Montenegro or the Ottoman territories in Europe, including Albania, so recourse is made to estimates of uncertain basis in the literature as explained in Table 1 and 9 below.² The least reliable figures in Table 1 are those for the Ottoman territories as illustrated by the case of Macedonia. According to postwar Yugoslav Macedonian sources the pre-1913 geographical area of Macedonia of 66,725 square kilometers had a population in 1874 of 1,873,383 (28.5 per square kilometers) and in 1900 a population of 2,247,574 or 3,358,224.³ But, as shown by the data in Table 2 collected by Hoffman, the size of the Macedonian population and, even more so, its composition was subject to considerable disagreement.⁴

² See LESZEK A. KOSINSKI, "Population Censuses in East-Central Europe in the Twentieth Century", *East European Quarterly*, Vol. V., No. 3, pp. 279-301; and B. R. MITCHELL, *European Historical Statistics, 1750 to 1970* (New York, 1975), p. 25.

³ The first figure is given by L. SOKOLOV, *Industrijata vo NR Makedonija* (Industry in the People's Republic of Macedonia) (Skopje, 1961), p. 75. The second figure is given by DANCHO ZOGRAFSKI, *Razvitokot Na Kapitalistichkite Elementi Vo Makedonija Za Vreme Na Turското Vladee'e* (The Development of Capitalist Elements During the Time of the Turkish Rule) (Skopje, 1967), pp. 23 and 530. Curiously, both give a 1900 population density of 35.8 persons per square kilometre, and both cite the same source V. KUNCHOV, *Macedonija* (Sofia, 1900).

⁴ Stavrianos also notes a 1905 Turkish census of the three Macedonian vilayets which produced the following data on religious affiliation: Greeks (Rum Millet)-648-962; Bulgars (Bulgar Millet)-557-734; Serbs (Serb Millet)-167,601; and miscellaneous-77,386. L. S. STAVRIANOS, *The Balkans Since 1453* (New York, 1958), p. 517.

TABLE I

THE POPULATION OF SOUTHEASTERN EUROPE IN 1910
ACCORDING TO INTERWAR TERRITORY

	Persons	Percent
	(000)	
The Balkan States	17,210	48.9
Bulgaria	4,338	
Greece	2,684	
Montenegro	(238-250)	
Romania	7,026	
Serbia	2,918	
Habsburg territories	9,429	26.8
From Austria:		
To Romania	795	
To Yugoslavia	1,627	
From Hungary:		
To Romania	5,257	
To Yugoslavia	4,131	
From Bosnia-Hercegovina:		
To Yugoslavia	1,898	
Ottoman territories	6,130	17.4
(i) Areas retained after 1912	1,065	
(ii) Areas lost after 1912:		
To Albania	850	
To Bulgaria	308	
To Greece	2,242	
To Yugoslavia	1,665	
Russian territory	2,428	6.9
Total Interwar Southeastern Europe in 1910	35,197	100.0

Notes and sources:

(a) The Balkan states—Bulgarian and Serbian populations are census figures. Romanian and Greek populations are estimates explained in Table 9. One estimate (250) for Montenegro is given by B. R. Mitchell, *European Historical Statistics; 1750 to 1970* (New York, 1975), p. 25 and the other (238) by Jozo Tomasevich, *Peasants, Politics and Economic Change in Yugoslavia* (Stanford, 1955), p. 225, citing figures in the Yugoslav census of 1921.

(b) The Habsburg territories—Figures are based on Institut National de la Statistique et des Études Économiques, Ministère de l'Économie Nationale, *Les Minorités Ethniques en l'Europe Centrale et Balkanique*, Études et documents, serie B-1 (Paris, 1946), pp. 17 and 34, to which are added the populations of Croatia-Slavonia and Bosnia-Hercegovina given by Tomasevich, *op. cit.*, p. 52.

(c) The Ottoman territories—The total population for Ottoman Europe is that given by Stavrianos, *op. cit.*, p. 540, citing an estimate in Report of the *International Commission to Inquire into the Causes and Conduct of the Balkan Wars* (Washington, DC, 1914), p. 418. Estimates for the lost territories are from Table 9.

(d) Russian territory—See Table 9.

TABLE 2

ALTERNATIVE ESTIMATES OF POPULATION
IN OTTOMAN MACEDONIA BEFORE 1910

	Serbian View	Bulgarian View	Greek View	German View	Turkish View
<i>Ethnic Group</i>	1889	1900	1889	1905	1904
Turks	231,400	489,664	576,600	250,000	1,508,507
Bulgars	57,000	1,184,036	—	—	896,497
Serbs	2,048,320	700	—	—	100,717
Macedo-Slavs	—	—	454,700	2,000,000	—
Greeks	201,140	225,152	656,300	200,000	307,000
Albanians	165,620	124,211	—	300,000	—
Vlachs	74,465	77,267	41,200	100,000	—
Other	101,875	147,244	91,700	—	—
TOTAL	2,880,420	2,248,274	1,820,500	2,850,000	2,812,721

(a) The "Bulgarian view" is that of V. Kunchov cited above; also Zografski, *op. cit.*, p. 24 gives it as his source of the following ethnic figures: Turks - 499,204; Greeks - 228,702; Albanians - 128,711; Vlachs - 80,767; Jews - 67,840; and Gypsies - 54,557.

Source: George W. Hoffman, "The Evolution of the Ethnographic Map of Yugoslavia: A Historical Geographic Interpretation," in Francis W. Carter, *An Historical Geography of the Balkans* (London, 1977), p. 484.

Moving back from 1910 we find population censuses began by 1840 for most areas of Southeastern Europe. Bulgaria's first census awaited its independence in 1878. The record of population growth from these first enumerations, as presented in Table 3, is subject to several qualifications. Whenever possible the growth rates there were calculated by census intervals. The exceptions are Romania (1878), Bosnia-Herzegovina (1900), and Bessarabia (1908) which were based on annual estimates, and Montenegro and Ottoman Macedonia which lacked entirely a census base. In addition, the Romanian censuses of 1889 and 1894 were fiscal census and understandably suspected of significant inaccuracy. In Bulgaria's case, the special census of Eastern Roumelia in 1880 was considered inaccurate; hence, the table shows two growth rates for 1881 - 1900, one without Eastern Roumelia (the lower rate) and one including this area (the higher rate). Another problem is that

POPULATION GROWTH IN SOUTHEASTERN EUROPE BEFORE 1910
(average annual percent)

	Period	Growth Rate	Period	Growth Rate	Period	Growth Rate	Period	Growth Rate
Bulgaria	1901-1910	1.48	1881-1900	1.311.42				
Greece	1897-1907	(0.77)	1880-1896	(1.35)	1862-1879	(2.15)	1844-1861	1.01
Romania	1900-1912	1.51	1879-1899	(1.36)	1860-1878	0.75	1845-1859	0.52
Serbia	1901-1910	1.56	1885-1900	1.71	1864-1883	(1.67)	1844-1863	1.27
Montenegro	1898-1910	0.71	1858-1897	1.62				
Bessarabia	1898-1908	1.76						
Transylvania	1901-1910	0.70	1881-1900	0.87				
Bucovina								
Dalmatia	1901-1910	0.84	1881-1900	1.11	1858-1880	0.59	1841-1857	0.25
Bosnia-Herzegovina	1901-1910	1.24	1880-1900	1.78	1866-1879	-0.03	1841-1865	1.06
Croatia-Slavonia	1901-1910	0.82	1881-1900	1.26	1858-1880	0.65	1841-1857	0.09
Slovenia	1901-1910	0.35	1881-1900	0.31	1858-1880	0.18		
Vojvodina	1901-1910							
Ottoman Macedonia	1901-1910	0.66	1875-1900	0.71				
Austria	1901-1910	0.98	1881-1900	0.79	1858-1880	0.86	1841-1857	0.58
Hungary	1901-1910	0.92	1881-1900	1.02	1858-1880	0.37	1841-1857	0.80

Numbers in parentheses are based on excluding that part known to be a result of territorial changes. These adjustments were as follows:

(a) Greece—The population of the Ionian Islands acquired in 1864 were estimated as the product of their area (2,895 sq. km.) and the population density of Greece in 1861 of 23 persons per square kilometre, or 62,000. The population of Thessaly and Arta acquired in 1881 was estimated as 294,000. In 1897 a small strip of Thessaly (395 square kilometre) was ceded to Turkey. Its population was estimated at 16,000 based on a population density of 40 persons per square kilometre.

(b) Romania—The population of Dobrogea gained and the districts of Cahal, Ismail, and Bolgrad in Bessarabia lost in 1878, is not known so growth rates are calculated on each side of the year when the population change was included in Romanian estimates.

(c) Serbia—The estimated population of territories acquired in 1878 was 330,000 persons.

Sources: Except as noted, census estimates are from Mitchell, *op. cit.*, pp. 19-27. Estimates for Habsburg areas which became part of Yugoslavia after 1918 are from Tomasevich, *op. cit.*, p. 152 with several exceptions. Tomasevich's estimates for Slovenia differ from those of Toussaint Hočvar, *The Structure of The Slovenian Economy, 1848-1963* (New York, 1963), p. 81 and the latter are used. For Croatia-Slavonia, Bosnia-Herzegovina, Transylvania, and Ottoman Macedonia during the period 1890-1900 and 1901-1910 are from Table 9.1 in John R. Lampe and Marvin R. Jackson, *Balkan Economic History, 1550 to 1950* (Bloomington, Indiana, Indiana University Press, (1982). For Bessarabia, estimates are from figures given by Romania, *Annual statistic 1934*, p. 30 and 1939-1940, p. 42. For Greece, Bulgaria, and Romania, additional sources were Greece, *Statistike epetiris 1971*, p. 18, Bulgaria, *Statisticheski godisnik 1971*, pp. 21-23 and 74, and Romania, *Annual statistic 1915-1916*, p. 15.

Greece, Romania, and Serbia acquired (or lost) population from territorial change during the intervals between some estimates. In such instances the growth rate in the table is calculated by deducting the estimated population on the changed territory from the nearest census and calculating average rates among census intervals. The cases are indicated by parentheses. Since censuses or base estimates were not the same for all areas, Table 3 has been constructed to show the intervals for each area and growth rates for approximately similar intervals across areas.

All the Balkan States appear to have experienced very high growth rates from 1880 to 1900. In fact, all of Southeastern Europe shared this experience with the notable exception of the Slovenian area and to a less exceptional degree Ottoman Macedonia and Hungarian Transylvania.

Only two areas, Greece and Serbia, appear to have had such rapid growth before 1880. Both seem to have reached their peak population growth beginning about 1860, but only Serbia sustained such growth to the end of the century.

Between 1900 and 1910 Greece, Montenegro, Dalmatia, and Croatia-Slavonia joined the other areas of slower growth, all undoubtedly influenced by the great wave of overseas emigration. In contrast, Romania, Bulgaria, and Serbia continued their extremely high growth rates.

In broader contrast the Balkan States, Bosnia-Herzegovina and possibly even Bessarabia during the period from 1880 to 1900 may have had the highest population growth rates ever experienced on the European continent. Still, with the possible exception of Greece from 1860 to 1880, growth rates were less than the two percent plus found in many less developed countries after the Second World War. For the longer period from 1860 to 1913, Romanian population growth was just about the same as the 1.1 percent average increase reported for European Russia. The Serbian, even the Greek with greatly reduced growth after 1896, and possibly the Bulgarian populations exceeded the rate of growth of

population in European Russia between the Crimean and First World Wars.

The observed rates of population growth may be explained by recourse to records of vital statistics (crude birth and death rates) and evidence of international migration flows. The first vital statistics for Romania appeared in 1859 and for Serbia in 1862. Bulgarian data began in 1881, after its independence. Greek vital statistics started in 1860 and subsequently stopped for several years; only preliminary figures are found for 1889 and 1890 and then no data until 1920.⁵

The recorded rates of birth, death, and natural increase for the four Balkan States and Croatia-Slavonia are presented visually in Figures 1 through 10. The straight line in each figure is the time trend calculated by least squares regression.

Incomplete data for Greece obviously understate both births and deaths and, consequently, natural increase. Data for the other countries are subject to important qualifications.⁶ The rising birth and death rates in Romania from 1859 to 1878 and in Bulgaria from 1881 to the early 1890s could have resulted from increasing coverage of the civil registration systems following their initial organization. Romanian registration up to 1878 is known to be incomplete and possibly so even in the 1890s. Even if crude birth and death rates were reasonably accurate, they would reflect underlying trends in fertility and morbidity only if age-structure of each population was relatively constant. The available age-structure data for Bulgaria and Romania are presented in Table 4.

Table 5 presents average rates for the same time periods in order more easily to compare levels and changes in rates of birth, death, and natural increase. It also compares actual growth with

⁵ Naval Intelligence Division, Division of the Admiralty (Britain), *Greece* Vol. II - Economic Geography, Ports and Communications. Geographical Handbook Series B. R. 516A (October, 1944), p. 26.

⁶ Another minor qualification is that Romanian and Serbian rates around 1878 may have been affected by the addition of populations through territorial changes having different fertility and morbidity characteristics.

TABLE 4

AGE STRUCTURE OF BULGARIAN AND ROMANIAN
POPULATIONS BEFORE THE FIRST WORLD WAR
(percent of total population)

	1888		1892		1900		1905		1910			
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female		
Bulgaria												
15-29 years	18.8	21.2	21.0	22.1	22.4	24.9	25.5	26.1	25.8	26.7		
30-45 years	17.7	18.3	16.2	16.9	15.7	15.7	15.4	15.2	15.5	15.0		
15-45 years	36.5	39.5	37.2	39.0	40.1	40.6	40.9	41.3	31.4	41.7		
46 and over	21.8	19.4	21.2	19.3	20.1	18.9	19.7	19.0	19.1	18.4		
0-15 years	41.7	41.1	41.6	41.7	39.8	40.5	39.4	39.7	39.9	39.9		
1899												
1912												
Male Female												
Male Female												
Romania												
15-29 years					25.0	26.0					26.6	26.2
30-44 years					17.7	17.1					16.9	15.6
15-44 years					42.7	43.1					43.5	41.8
45 and over					17.7	16.4					19.4	22.5
0-15 years					39.6	40.5					37.1	35.7

Source: Calculated from Mitchell, *op. cit.*, pp. 31 and 47.

natural population increase and records the difference as an "implied" migration rate. Greece has been deleted from the table because its vital statistics are missing and of very poor quality. Chief concern in Table 5 is the generally more reliable data after 1900.

Interpretation of death rate trends is confused by three factors. First, in comparison to Croatia-Slavonia, the three Balkan States suffered higher death rates centered on 1892 and again generally between 1906 and 1909. Second, Romanian and Bulgarian death

⁷ In 1982, it appeared that illegitimate births in rural Romania were so incomplete that urban fertility appeared higher than rural fertility. MANEA MANESCU AND CONSTANTIN IONESCU, *Istoria statisticii din Romania*, (The history of Romanian statistics) (Bucharest, 1969), pp. 181-87.

SOURCES OF POPULATION GROWTH, 1860 TO 1910
(per 1000 persons)

Average Rates*

Country	Period	Actual Increase	Births	Deaths	Natural Increase	Territorial Change	Implied Migration
Bulgaria	1881-1887	12.6	36.3	17.9	18.4	—	- 5.7
	1888-1892	9.7	36.8	23.3	13.5	—	- 3.7
	1893-1900	15.2	19.7	25.0	14.7	—	+ 0.6
	1901-1905	15.0	40.6	22.4	18.1	—	- 3.2
	1906-1910	14.4	42.1	24.0	18.1	—	- 3.6
Romania	1860-1878	7.8	32.5	27.3	5.1		+ 2.7
	1880-1889	10.6	42.4	28.9	13.5		- 2.8
	1890-1899	16.7	41.4	30.2	11.2		+ 5.5
	1900-1912	14.9	40.1	25.5	14.6		+ 0.3
Serbia	1864-1874	18.1	45.2	31.4	13.7		+ 4.4
	1875-1884	33.6	42.6	29.7	12.9	20.3	+ 0.5
	1885-1890	21.3	44.6	22.2	22.4		- 1.9
	1891-1895	13.4	43.4	29.1	14.3		- 0.9
	1896-1900	15.1	40.4	22.6	17.8		- 2.5
	1901-1905	15.0	39.1	22.5	16.6		- 1.5
	1906-1910	15.9	39.3	24.4	14.9		+ 1.1
Croatia-Slavonia	1881-1890	15.1	44.4	31.0	13.4		+ 1.7
	1891-1900	9.3	41.3	31.4	9.9		- 0.6
	1901-1910	8.2	39.7	26.8	12.9		- 4.7
Slovenia	1858-1869	4.6			6.9		- 2.3
	1870-1880	3.8	(35)(a)	(27)(a)	6.6		- 2.6
	1881-1890	4.3			8.2		- 3.9
	1891-1900	2.7			8.2		- 3.9
	1891-1900	2.7			8.7		- 6.0
	1901-1910	4.1			10.7		- 6.3

Sources: Calculated from data Mitchell, *op. cit.*, pp. 19-27 and 104-126; and Hocevar, *op. cit.*, p. 83.

(a) 1871-1880.

* Average annual amount divided by the average of beginning and ending period population.

rates may have been under-reported in 1881-1890. Even the Serbian death rate in this period is significantly lower than that of Croatia-Slavonia. Third, the proportion of persons over 45 years in Bulgaria decreases slowly from 1888 to 1910, while in Romania the proportion of older persons declines from 1889 to 1912. Other possible problems of age structure show up in the figures. Serbia around 1865-66 and again around 1882-83 experienced simultaneously high-birth and low-death rates. Croatia-Slavonia shared the latter while Bulgaria had similar experience around 1904-06. Such phenomena could have been caused either by (1) the availability of food supplies and the possibly-related absence of disease which increased live-birth rates and adult deaths, or (2) a shift in age-structure from older persons to persons in the child-bearing ages.

Interpretation of birth rate trends is also confused by possible under-reporting of Romanian and Bulgarian rates in 1881-1890. Romania's birth rate fell in 1901-1910 compared to the earlier period and then rose to an average of 42.1 per thousand in the period 1911-15. Bulgaria's birth rate must be considered in view of an over 5 percent increase in the proportion of females of age 15-29 years which is only partially offset by a slightly declining proportion of older females, 30-45 years.

Given data uncertainties one ought to avoid strong conclusions about trends in the natural increase of population of Southeastern Europe before the Balkan and First World Wars. The Romanian and Bulgarian experiences are most uncertain before 1890 or 1895. After that their natural growth rates may have been increasing slightly due to a combination of mild reductions in death-rates and mild increases in birth rates. Although Slovenia had a natural growth rate which increases, its level is much below that of all other areas. Serbia and Croatia-Slavonia shared a similar experience. Their birth and death rates fell in about the same proportions, generating a nearly constant rate of natural increase in population. It is possible that all areas in Southeastern Europe were experiencing a trend of slightly lower death rates. Also

fluctuations in death rates, measured by the standard deviation around averages, became smaller. These are expected consequences of economic modernization in the region.

The estimates of implied international migration in Table 5 are one of three incomplete statistical evidences of this phenomenon. There is no evidence for Greece and suspect evidence for Romania and Bulgaria up to 1890-95.

Another source of international migration statistics comes from officially recorded direct migration statistics for Serbia and Bulgaria. In Bulgaria's case only emigration data were collected. Table 6 compares these data with implied migration from Table 5. Conflict in the data could hardly be greater in the case of Serbia where the recorded international migration is at least defined in net terms. Bulgaria's immigration between 1887 and 1910 is estimated from changes in foreign-born populations and average death rates between census years. The immigration estimates are: 12,000 in 1898 through 1842; 32,000 in 1893 through 1900; 26,000 in 1900 through 1905; and only 7,500 in 1906 through 1910.⁸ The discrepancy in Table 6 for 1892-1900 is reduced, but not eliminated suggesting a possible understatement of births in Bulgarian vital statistics.

A third source of international migration data is derived from other countries with records of the origins of immigrants and destinations of emigrants. Unfortunately the available information covers only so-called "overseas" migration (generally on the basis of New World, Australian and New Zealand statistics). Two estimates of such data, often cited in the literature on Southeastern Europe, are presented in Table 7.

The data in Table 7 suffer two defects. First, they cover only a part of the possible international migration and cannot be assumed to reflect the time trends. Second, the numbers do not show

⁸ Immigration is estimated by reducing a previous census foreign-born population by the average death rate until the next census and then taking the difference between estimated survivors and the new census figure as immigration. See data in Bulgaria, *Statisticheski godishnik 1910*, p. 37 and *1912*, p. 25.

TABLE 6

IMPLIED AND RECORDED INTERNATIONAL
MIGRATION FOR SERBIA AND BULGARIA
FOR SELECTED PERIODS BEFORE 1910
(1000 persons)

	Implied Net Migration	Recorded Migration
		(Emigration only)
Bulgaria		
1893-1900	+ 17	- 53.1
1901-1905	- 62	- 19.4 (1901-02)
1906-1910	- 76	N.A.
		(Net)
Serbia		
1885-1890	- 23	+ 30.5 (1889-90)
1891-1895	- 10	+ 7.4
1896-1900	- 31	+ 47.8
1901-1905	- 20	+ 24.0
1906-1910	+ 15	- 20.8 (1906-08)

Sources: Table 5; and Mitchell, *op. cit.*, pp. 138-47.

TABLE 7

SOURCES OF GROSS OVERSEAS IMMIGRATION
TO DESTINATION COUNTRIES
(annual averages in thousand persons)

Period	Total Balkan (1000)	Bulgaria	Greece	Romania	Yugoslavia (Serbia and Montenegro)	Austro- Hungary
1881-85	0.4					34.6
1886-90	1.6					52.5
1891-95	2.0					67.6
1896-00	4.6					77.2
1901-05	21.3	7,000	25,000	Nil	15,000	203.0
1906-10	49.5					
1911-15	46.7					
1916-20	14.6	5,000	12,000	10,900	13,600	11.5
1921-25	26.5					
1926-30	39.6					
1931-35	7.2	400	3,100	1,700	1,500	
1936-39	9.1					

Sources: Dudley Kirk, *Europe's Population in the Interwar Years* (League of Nations, 1946), p. 279; and PEP, Economic Research Group, *Economic Development in S. E. Europe* (London, 1945), p. 128.

returning migrants from overseas; therefore, they exaggerate levels of net migration. Other research suggests that even overseas migration before the First World War was very much a to-and-from movement reminiscent of temporary worker migration from Greece and Yugoslavia in the 1960s. There was a high proportion of males (as much as 96 percent among Greeks) and a high proportion of returning migrants. Returnee data are only available for the U.S. and from 1908 on. Between 1908 and 1913 Balkan emigrants from the U.S. averaged 30 to 40 percent of the immigrant flow. From 1908 to 1923 the proportions of returning migrants were even higher, 86 to 89 percent.⁹

It may be concluded that statistical data on international migration before 1910 have as much uncertainty as those on natural increase. Tomasevich cites estimates of immigration flows to Serbia during the period 1876 to 1912 from areas to the south and southwest totalling as many as 400,000 persons.¹⁰ This would correspond with recorded Serbian international migration flows, but not with the implied flows and, hence, the combined result of census and vital statistics. Croatia-Slavonia in Table 5 shows implied net international immigration in 1881-1890, but emigration in 1891-1900 and 1901-1910. In the latter period, implied emigration accounts for a large 36.4 percent of the natural increase in population. Tomasevich explains international migration in Croatia-Slavonia as a result of two movements, a net immigration of Germans and Hungarians, but a heavy net emigration overseas from 1899 to 1903 of as many as 350-400,000 persons.¹¹ Significant gross overseas emigration also took place

⁹ Data are calculated from FERENCZI, *op. cit.*, pp. 272-73, 388-93 and 472-73; also see: FRANK THISTLETHWAITE, "Migration From Europe Overseas in the Nineteenth and Twentieth Centuries", in Herbert Mollar (ed.) *Population Movements in Modern European History* (New York, 1964), pp. 76-77.

¹⁰ JOZO TOMASEVICH, *Peasants, Politics and Economic Change in Yugoslavia* (STANFORD, Ca, 1955), p. 153.

¹¹ *Ibid.*, pp. 153-54. The estimates are 400,000 to 450,000 emigrants and 41,760 returnees.

from other Habsburg territories. The combined totals for Crişana-Maramuriş, the Banat and Transylvania were 28,491 in 1899-1904, 91,405 in 1905-1907 and 103,081 in 1908-1913.¹² Neither implied nor directly recorded Greek international migration data are available. Still, the sharp decrease in the annual growth rate of Greek population from 1.54 percent in 1889-96 to only 0.71 percent in 1896-1907 is only partly explained by a small loss of territory and is unlikely to be explained by sudden change in the balance of births and deaths (although the war of 1897 may have increased death rates).¹³ Greece must have experienced not only a large gross overseas emigration, but also significant net emigration.

II. Population change and the effect of war, 1910 to 1920

The estimating of population change in Southeastern Europe from 1910 to 1920 is especially hampered by the poor quality of records for the Ottoman areas. Additional problems arise because the last prewar Greek census was in 1907, while those for Bessarabia and the Romanian Old Kingdom came in 1908 and 1912. Romania poses difficulties at both ends of the period. Its first complete interwar census came only in 1930, leaving its population for 1920 only slightly less uncertain than for new Albania. During these 'abnormal times, only Bulgaria provided annual accounts of registered births and deaths.

The major barrier to a clear record of population was territorial change, although this did mean that interested native governments replaced less effective Ottoman administration. Table 8 records the settlements from more than one conflict including two Balkan wars, the First World War and the final one between Greece and Turkey.

¹² A. EGYED, "Emigration of Transylvanian Peasants at the Beginning of the 20th Century," in *Comite Nationale des Historiens de la Republic Socialiste de Roumanie, Nouvelles études d'histoire* (Bucharest 1975), p. 256.

¹³ In Table 5 the lost population is estimated at 16,000 persons.

TABLE 8

TERRITORIAL CHANGES IN SOUTHEASTERN EUROPE FROM 1912 TO 1923
(square kilometre)

Country	Changes	Territory
Albania		28,748
Bulgaria		
Prewar		96,346
1913 - Lost Southern Dobrogea to Romania	- 7,696	
1913 - Gained Western Thrace, Northeast Macedonia, South Bulgaria, and Akhtopol Enclave from Turkey	+ 23,187	
1914 - Gained Maritsa Enclave from Turkey	- 2,588	114,588
1919 - Lost in Treaty of Neuilly:		
a) Western Thrace to Greece	- 8,712	
b) Strouma Basin to Yugoslavia	- 1,021	
c) Bosilgrad, Tsaribrod and Timok Enclave to Yugoslavia	- 1,545	
Postwar		103,146
Greece		
Prewar		63,211
1913 - From Turkey:		
Macedonia	+ 34,203	
Crete	+ 8,331	
Aegean Islands	+ 6,408	
Southern Epirus	+ 6,269	118,422
1919 - Western Thrace from Bulgaria	+ 8,578	127,000
1920 - Eastern Thrace and Smyrna Enclave from Turkey	+ 21,834	148,834
1922 - Lost Eastern Thrace and Smyrna to Turkey	- 21,834	
Postwar		127,000 129,281
Romania		
Prewar		130,177
1913 - Gained Southern Dobrogea from Bulgaria	+ 7,726	137,903
1918 - Gained Bessarabia from Russia	+ 44,422	
1918 - Gained from Austria/Hungary:		
Transylvania	+ 62,229	
Crisana-Maramures	+ 21,338	
Banat	+ 18,715	
Bucovina	+ 10,442	
Postwar		295,049

TABLE 8 (cont.)

Country	Changes	Territory
Yugoslavia		
Prewar Serbia and Montenegro		59,618
1913 - Territory acquired from Turkey	+ 41,646	101,264
1919 - Territory acquired from Austria-Hungary	+ 143,712	
- Vojvodina	+ 19,702	
- Croata-Slavonia	+ 43,882	
Slovenia	+ 16,197	
Dalmatsa	+ 12,732	
Bosnia-Hercegovina	+ 51,199	
1919 - Territory acquired from Bulgaria	+ 2,566	
Postwar		247,542

Sources:

Albania - Postwar estimate Albania official data.

Joseph Rothschild, *East Central Europe Between The Two World Wars* (Seattle, WA, 1974), p. 358 gives 27,539 km², and L. S. Stavrianos, *The Balkans Since 1453* (New York, 1958), p. 540 gives 29,311 km².

Bulgaria - *Statisticheski godishnik - 1940*, p. 2.

Romania - *Anuarul statistic 1939/40*, p. 42, and Nicholas Spulber, *The State and Economic Development in Eastern Europe* (New York, 1966), pp. 54-5. Spulber gives 130,491 km for prewar Romania (the old kingdom) and 7,412 km² for Southern Dobrogea (notice that Bulgarian and Romania figures differ).

Greece - *Statistike epeteris 1971*, p. 18. Interwar estimates gave 127,000 sq. km. The total area according to a 1963 area measurement was 129,281 km. Areas of Macedonia, Crete, Aegean Islands, and Southern Epirus based on present areas taking into account Western Thrace for which the Greek present area differs from the Bulgarian estimate.

Yugoslavia - Spulber, *op. cit.*, pp. 54-5 and Tomasevitch, *op. cit.*, pp. 221-2. Territory from Bulgaria based on Bulgarian data above. Territory taken from Turkey in 1913 is derived and includes 39,500 km to Serbia and the remainder to Montenegro.

Table 9 follows actual population changes with the available data. It records the population effects of territorial change with the use of census and national estimates of 1910 and 1920 and by projecting populations of changed territories forward or backward at the same rates at which populations on prewar territories were estimated to have changed (notably in Bulgaria and Greece). The procedure provides estimations of populations for both prewar and postwar territories in 1910 for all countries and, thus, a means for separating influences of territorial change from other influ-

TABLE 9 (cont.)

	1910	1911	1912	1913	1914	1915	1916	1917	1918	1919	1920*
Yugoslavia					(mid-year)						
Actual	3162				4754						11985
Prewar territory	3162				3258						2895
Territorial changes											
Macedonia and											
Novi Pazar 1913					+ 1496						1442
From Bulgaria 1919										+ 169	
From Hungary	(4135)										
From Austria	(3525)										
Croatia-Slavonia	2732										2643
Bosnia-Herzegovina	1932										1890
Slovenia	1064										963
Vojvodina	1353										1536
Dalmatia	333										620
Postwar territory	12241										11985
(Post WW II territory)	(13100)										(12545)

* The Yugoslavian census of January 31, 1921 is considered as year end 1920.

SOURCES AND NOTES

Bulgaria — Actual population and population from changes in territory from *Statisticheski godishnik 1940*, pp. 2 and 21. A detailed list of district changes is found in the same volume for 1913/22 (*Anuarul statistic 1930*, p. 34) pp. 25 and 31-32. The 1910 census population of areas lost to Romania totalled 308,433 persons minus some villages kept in the district of Kourt-boumar (Bulgaria, *Statisticheski godishnik 1912*) (p. 26). The Romanian sources gives these populations as about 281,633 persons (*Anuarul statistic*) (SYR-1939/40, pp. 43-43 - An exact count is confused by Romanian district changes).

Greece — Actual population and population from changes in territories from Greece, *Statistike epeteris* (1930, p.— 23-26). Territorial change added population to Thessaly and Epirus. The 1920 census population of Western Thrace was 202,660 and is counted as territory from Bulgaria in 1919. Population of territory gained from Turkey in 1919 in the Treaty of Sevres was subsequently lost in 1922 in the Treat of Sausanne. Other estimates of Greek population may be found in Andres Andreades (ed.), *Les Effets Économiques et Sociaux de la Guerre en Grèce* (Paris, n.d.), pp. 84-85 and 131-46.

Romania — Actual Romanian population is estimated as end-of-year population, coinciding with other data in the table and the 1912 census, from mid-year estimates in Romania, *Anuarul statistic 1939-1940* (p. 41). The 1910 populations for added territories are from p. 42 of the same volume, except for Bessarabia and Southern Dobrogea. The figure for Bessarabia is estimated by applying the 1897-1908 average annual growth rate to the Russian estimate for 1908 of 2,344,800 cited in *Anuarul statistic 1934* (SYR-1934, p. 30). Southern Dobrogea is taken from Bulgarian data above. Figures for Bessarabia and Bucovina in 1919 and the total for Transylvania, Crisana-Maramuris and the Banat in 1920 are from Romania, *Anuarul statistic 1922*, pp. 21-24. The population of Bessarabia in 1923 is given as 2957 thousand. Estimates of population on post World War II territory for 1912 and 1920 (both year end) are from Directia Centrala de Statistica, *Recensamintul Populatiei si Locuintelor din 15 Martie 1966*, Vol. I (Bucharest, 1969, 1969), p. XVII.

Yugoslavia — Prewar territory refers to Serbia and Montenegro. Different estimates exist for both 1910 and 1920 (or the census of January 31, 1921).

For 1910, the estimates are based on Tomasevich, *op. cit.*, pp. 152 and 225, except the figure for gains from Bulgaria in 1919 which is estimated from the Bulgarian and Greek data in the Table. The gain in 1913 is Tomasevich's figure minus the 1919 gain from Bulgaria. The estimate for 1910 population on post WW II territory are from Ivo Vinski, "National Product and Fixed Assets in the Territory of Yugoslavia 1909-1959," in International Association for Research in Income and Wealth, *Studies in Social and Financial Accounting*, Income and Wealth Series IX, (London, 1961), p. 211. However, a different estimate is cited by Hamilton, *op. cit.*, p. 33, of 11,698,000.

For 1920, the estimates are from Rothschild, *op. cit.*, p. 204 and are based on the final results of the census of January 31, 1921. Data for Dalmatia and the Vojvodina are for different territories than in 1910 (Vojvodina includes the Mur district). Estimates for the Vojvodina in 1921 are 1,320 thousand given by Hoffman, *op. cit.*, p. 481 and 1,380 thousand given by Tomasevich, *op. cit.*, p. 225. Data given on that page by Tomasevich are from the preliminary census results which gave a smaller total population (11,619,750) and different figures for each area. The estimates for 1920 population on post WW II territory is from Savcenzi Za Statistiku, *Jugoslavia 1945-1964; Statisticki Pregled* (Beograd, November, 1965), p. 41.

ences on population during the period. For example, while Bulgarian population increased by 12.9 percent from 1910 on prewar territory to 1920 in postwar territory, the increase from territorial change alone (1910 base) is estimated to have been only 0.6 percent. Most of the change was due to immigration and natural increase. In a similar fashion, the percentage changes for the other three countries are: Greece, 86.9 and 83.4; Romania, 122.5 and 125.0; Yugoslavia, 267.5 and 287.1. In the cases of Romania and Yugoslavia, territorial change on a 1910 base was larger than actual change because the combined impact of immigration and reduced natural growth (mostly the latter) resulted in smaller postwar populations on equivalent territories.¹⁴

Table 10 attempts to explain special influences on population change. First, the 1910 postwar territory population is projected to 1920 using natural rates of increase characteristic of the decade before 1910. The difference between actual and projected populations is assumed to be the result of international migration and "abnormal" natural increase (or decrease) from 1910 to 1920. The estimates of international migration are subtracted giving an estimate of the influence of unusual wartime death rates and birth rates.

Continental migrations are those estimates for 1912 to 1920 from a separate paper.¹⁵ Overseas migration is estimated from Tables 6 and 7.¹⁶ Bulgaria provides the only possibility for check-

¹⁴ If complete data for 1920 were available, a similar calculation of the effects of territorial change on a 1920 base would bring slightly different results.

¹⁵ MARVIN R. JACKSON, "Changes in the Ethnic Content of Balkan National Populations, 1912 to 1970," *Faculty Working Papers in Economics*, No. 79-87, as revised in 1982, College of Business Administration, Arizona State University, Tempe, Arizona 85287.

¹⁶ U. S. records show net Greek immigration falling from an average of nearly 12,000 from 1908 to 1912 to about 5,000 from 1913 to 1920. Before 1908 only gross immigration data is available. In three years, 1913, 1918 and 1919 more Greeks left the U. S. than arrived. Also, from 1911 to 1919 there was net emigration of Bulgarians, Serbs, and Montenegrins whose migrations were reported together. IMRE FERENCZI, *International Migrations, Volume I - Statistics* (New York: National Bureau of Economic Research, 1929), pp. 388-93 and 472-3.

TABLE 10

POPULATION BALANCES FOR 1910 TO 1920

Area	Estimated Actual Population		Estimated Population with • normal • Natural Increase and no Migration	Estimated Difference Due to Migration and Changes in Birth and Death Rates	Estimated Migration 1911-1920		Estimated Difference Due to • abnormal • Natural Increase	Estimated War Death		
	1910	1920			Overseas	Continental				
	(000)	(000)	(000)	(000)	(000)	(000)	(000)	Percent	(000)	(Per cent)
Postwar Territories										
Bulgaria	4363	4847	5157	310	- 1	65	373	8.1	264	70.7
Greece (Lausanne Treaty)	4924	5017	5687	670	-70	- 12	588	11.8	209	35.5
Romania	15805	15635	17979	2344	-86	-117	2141	13.6	894	41.8
Yugoslavia	12241	11985	13982	1997	-89	- 85	1823	15.0	1022	56.1

Sources: See text.

Note: In the absence of vital statistics, Greece is projected by using its population growth rate from 1889 to 1896 of 1.54 percent per year. Bessarabia is projected at the rate for the Old Kingdom. Romanian area acquired from Austria and Hungary is projected at the rate for Croatia-Slavonia, as is the Vojvodina. Dalmatia is projected at the Slovenian rate while Bosnia-Herzegovina, Macedonia and Montenegro are projected at Serbian rate.

* Difference due to "abnormal" natural increase divided by the average of 1910 and 1920 populations.

ing the estimates. From 1901-10 to 1911-20, its birth rate fell from an average of 41.4 to 32.6 and its death rate also fell slightly from 23.2 to 22.7, resulting in a reduced rate of natural increase from 18.2 to 9.9.¹⁷ The recorded births and deaths during 1911-20 may also be compared with those calculated using the 1901-10 rates of birth and death. The shortfall of the actual increase compared to expected natural increase turns out to be about 389,000 in contrast to 373,000 in Table 10. But the shortfall is composed of 410,000 fewer births than expected and 21,000 fewer deaths than expected. It would appear by this account that estimated Bulgarian war deaths in Table 10 did not push average death rates above "normal" levels.

Estimates of war deaths in Table 10 include only military casualties in the Balkan Wars and both military and civilian casualties in the First World War.¹⁸ Balkan War losses are estimated as Greece 33,000; Serbia and Montenegro 45,000; Bulgaria 76,000; and Turkey 76,000.¹⁹

Total civilian and military deaths during the First World are estimated as Serbia and Montenegro 728,000; Romania 680,000;

¹⁷ The average natural increase hides negative rates of 3.3, 4.0, and 10.8 recorded in 1913, 1917, and 1918, respectively. See, Bulgaria, *Statisticheski godishnik 1940*, p. 89.

¹⁸ Uralnis estimates 224,000 total military casualties (battlefield deaths and deaths from wounds, sickness, accidents, and captivity) in the Balkan Wars, but does not give estimates for each country. B. URLANIS, *Wars and Population* (Moscow, 1971), pp. 46, 63, 186 and 226.

GEORGE DANAILLOW *Les Effets de la Guerre en Bulgarie* (Paris, 1932), p. 168) cites Bulgarian war ministry reports of 53,825 battlefield deaths.

The International Commission to Inquire into the Causes and Conduct of the Balkan Wars reported that Serbia suffered about 29.8 to 31.8 thousand total military casualties and that 44.9 to 53.7 thousand Bulgarian military personnel were "killed" (unclear if deaths from wounds and other non-battlefield causes are included). The Commission failed to obtain reports from Greece, Montenegro, and Turkey. Carnegie Endowment for International Peace, Division of Intercourse and Education, Publication No. 4, *Report of the International Commission to Inquire into the Causes and Conduct of the Balkan Wars* (Washington, D. C.: Carnegie Endowment for International Peace, 1914), p. 243.

¹⁹ Estimates are Uralnis' figure for total losses distributed according to proportions reported by ERNEST L. BOGART, *Direct and Indirect Costs of the Great War* (New York, 1919), p. 270.

Bulgaria 188,000; and Greece 176,000. Deaths in Serbia, which include "South Serbia", reflect a 1915 typhus epidemic during the military occupation and the intensity of Serbian involvement. The Serbian death rate (148 per 1000 population) was over three times that of France (46), Italy (44), Germany (40), Austria-Hungary (31), or Russia (20). The Romanian death rate was also high (89 per 1000). Even Bulgaria (40) and Greece (36) suffered high losses by international comparison.²⁰

The influence of war casualties on the postwar populations of Yugoslavia and Romania should include populations in Austro-Hungarian areas. Very roughly, Austro-Hungarian casualties (1.8 million) can be attributed to Yugoslavia and Romania as the same percentage of the 1910 populations of areas to become parts of those countries, or 249,000 additional casualties for Yugoslavia and 214,000 additional casualties for Romania.²¹

III. Sources of population change, 1920 to 1970

Reduction of population growth rates in southeastern Europe became more evident in the inter-war period. By the late 1960s, except in Albania, population growth was characteristic of developed countries. In the record we seek to evaluate the relative contributions of changing rates of natural increase and international migration. Changes in age-structure were induced by both world wars and complicated the analysis of long term changes in fertility and morbidity. Finally a second world war brought on another set of territorial changes, listed in Table 13. Part of the

²⁰ Total casualties are found by adding civilian to military and comparing them to Uralanis' population data (URLANIS, *op. cit.*, pp. 209 and 268).

²¹ The combined populations of Austria, Hungary, and Bosnia-Herzegovina in 1910 were 51.4 million (B. R. MITCHELL, "STATISTICAL APPENDIX," in *The Fontana Economic History of Europe*, edited by Carlo M. Cipolla, Volume 4, Part 2, p. 747. The portion of this population in post-1918 Romanian areas was 6.1 million according to HENRY L. ROBERTS, *Rumania* (New Haven: Yale University Press, 1951), p. 355, and the portion in post-1918 Yugoslavia was 7.1 million according to TOMASEVICH, *op. cit.*, p. 225.

changes in birth and death rates following each set of territorial shifts came from a new combination of population groups.

Table 11 compares estimated sources of population change throughout the period and across countries except for Albania. Few interwar vital statistics are available for it and in the postwar era virtually no international migration is indicated. But, in any case, the region's least developed country belongs in a special category. Before turning to a further consideration of data in Table 11 it would be well to review the numerous uncertainties of their derivation.

Romania's single interwar census was taken in 1930. Its population estimates at the beginning of the interwar period were based on vital and international migration statistics and a partial census of Bucovina in 1919. Population estimates at the end of the interwar period were based on vital and international migration statistics and a partial census of Bucovina in 1919. Population estimates at the end of the interwar period published in its statistical yearbook of 1939/40 had a similar basis. Censuses were taken in 1941 by Romania on its then reduced territory and by Hungary on the occupied territory of Romania (although at slightly different dates). After the Second World War, Romania's first census came in 1948. Subsequently its official record gives estimates of interwar population only for post-1944 territory. Both Yugoslavian and Bulgarian population estimates on the eve of the Second World War lack a census base. Bulgaria's annual estimates, the basis for "actual increase" rates in Table 11, were calculated by the simple procedure of applying a constant growth rate between census years. Thus, Bulgarian population grows at slightly over 2 percent from 1920 to 1926, 1.3 percent from 1926 to 1934, 0.78 percent from 1934 to 1940, and, after a jump for the reacquisition of Southern Dobrogea, a constant 0.83 percent through 1946. Yugoslavia's annual population grows at a constant 1.48 between the censuses of 1921 and 1931. In neither case are annual estimates of population based on annually observed data from vital statistics and international migration.

TABLE 11

SOURCES OF POPULATION CHANGE, 1920 TO 1970
(Annual average per 1000 population)

		Actual Increase	Births	Deaths	Natural Increase	Implied Migration
Bulgaria	1921-25	20.4	39.0	20.8	18.2	2.2
	1926-30	14.5	33.0	17.9	15.3	-0.8
	1931-35	12.0	29.3	15.5	13.8	-1.8
	1936-40	7.8	23.3	13.7	9.6	-1.8
	1941-45	8.3(a)	22.5	15.8	6.7	1.6
	1946-50	8.5	24.8	11.8	13.0	-4.5
	1951-55	7.1	20.7	9.9	10.8	-3.7
	1956-60	9.5	18.2	8.7	9.5	nil
	1961-65	8.0	16.4	8.2	8.2	-0.2
1966-70	6.8	16.0	8.9	7.1	-0.3	
Greece	1921-25	35.5	21.5	15.4	6.1	29.4
	1926-30	13.4	29.9	16.4	13.5	-0.1
	1931-35	14.2	29.4	16.5	12.9	1.3
	1936-40	13.6(b)	25.8	14.0	11.8	1.8
	1941-45	n.a.	19.6	17.1	2.5	n.a.
	1946-50	n.a.	24.2	9.3	14.9	n.a.
	1951-55	10.3	19.3	7.1	12.2	-1.9
	1956-60	8.9	19.3	7.4	11.9	-3.0
	1961-65	5.3	17.8	7.9	9.9	-4.6
1966-70	5.6	17.8	8.2	9.6	-4.0	
Romania	1921-25	14.5	36.7	22.3	14.4	0.1
	1926-30	14.3	34.5	20.8	13.7	-0.6
	1931-35	12.3	32.9	20.6	12.3	nil
	1936-40	10.5(b)	29.3	19.2	10.1	0.4
	1941-45	n.a.	21.8	19.3	2.5	n.a.
	1946-50	8.8(c)	25.2	16.5	8.7	0.1
	1951-55	12.6	24.8	11.5	13.3	-0.7
	1955-60	11.5	21.6	9.5	12.1	-0.6
	1961-65	6.4	15.8	8.6	7.2	-0.6
1966-70	13.0	22.6	9.3	13.3	-0.3	
Yugoslavia	1921-25	14.8	35.0	20.2	14.8	nil
	1926-30	14.8	34.2	20.0	14.2	0.6
	1931-35	13.6	31.9	18.0	13.9	-0.3
	1936-40	13.9	27.4	15.7	11.7	2.2
	1941-45	n.a.	n.a.	n.a.	n.a.	n.a.
	1946-50	14.0(d)	28.7	13.2	15.5	-1.5
	1951-55	13.3	28.1	12.1	16.1	-2.8
	1956-60	10.0	24.2	10.2	14.0	-4.0
	1961-65	10.9	12.6	9.2	12.4	-1.5
1966-70	9.3	19.2	8.8	10.4	-1.1	

Notes: War year data are highly uncertain for Romania and Greece.

(a) Excluding acquisition of Southern Dobrogea

(b) 1936-39

(c) 1947-50

(d) 1948-50

Weakness in recording vital statistics are evident in all countries except possibly Bulgaria. Kirk suggests that around 1930 nearly 10 percent of births may have not been recorded in Greece, Romania and Yugoslavia.²² Greece may well have had the worst records of vital statistics. After thirty years of no registration, in 1920 a law was passed for compulsory civil registration, but it was not enforced until 1925.²³ Even as late as 1965, Greece remained the only European country listed in the UN, *Demographic Yearbook*, as having birth and death registration less than 90 percent complete.

Direct measurement of international migration was uncommon in the interwar period. Bulgaria recorded only emigration and that only after 1930. Numerous years are missing from Greek data between 1920 and 1930. Romania published no data before 1926 and Yugoslavia only partial records for 1921 through 1923. After 1944 only Bulgaria has provided reasonably complete international migration data. Romania has such data but chooses not to publish them. Yugoslavia has published admittedly incomplete official annual estimates up to 1969 while Greece began relatively complete recording only in 1968. A final source of possible confusion is in the census definitions of population. Bulgarian and Yugoslavian interwar censuses counted *de facto* or population present. The Romanian census counted *de jure* or legally resident population while Greece counted both.²⁴ The bases of Bulgarian and Romanian postwar censuses are not known. But Greece counted *de facto* population while Yugoslavia counted *de jure* population. Hence, Yugoslavian postwar population estimates include citizens living "temporarily" abroad.

²² DUDLEY KIRK, *Europe's Population in the Interwar years* (League of Nations, 1946), p. 259.

²³ Naval Intelligence Division, *op. cit.*, p. 26.

²⁴ KIRK, *op. cit.*, p. 258. In 1920, the *de facto* Greek population was 5,017,000 and the *de jure* was 5,139,000; in 1928 the respective populations were 6,131,000 and 6,205,000. Only the *de facto* figures are used.

A. Natural Increase, Fertility and Morbidity

The behaviour of crude birth and death rates with resulting natural increases is seen with some clarity in Figures 11 through 14. The top line in each figure shows the movements of crude birth rates. Crude death rates are shown by the vertical distance between the top and bottom lines so that the latter represents natural increase. A general decline in the rates is the most obvious impression gained from the figures. Only part of the apparently large reduction of birth rates is absorbed by a reduction in death rates with a consequent lowering of natural rates of increase. The reduction of natural increase from the interwar to the postwar makes Southeastern Europe a general exception to the experience of the rest of Europe.²⁵

A first question to ask about the interwar pattern of birth and death rates is how they may have been influenced by the new combinations of people resulting from territorial changes. The incomplete pre-1910 data showed Slovenia's natural increase to be much lower and Croatia-Slavonia's to be slightly lower than that of Serbia. More complete data by administrative regions of each country for the middle of the interwar period are presented in Table 12. We may note that regional variations of natural increase are greatest in Romania because of the especially low figure for the Banat. The other three countries exhibit roughly similar regional variations.²⁶ The new areas of Bulgaria, which in any case shows the least regional variation, are not represented in the table. For Yugoslavia identity of the historical areas is confused by interwar administrative boundaries. Two *banovine*, Drava and Sava, with very low rates of natural increase, were, respectively, Slovenia and

²⁵ Only Hungary, Germany, Italy, and Denmark also had lower postwar rates of natural increases. KOSINSKI, *op. cit.*, p. 43.

²⁶ When the difference between region of lowest and highest natural increase is divided by the country average coefficient is 1.13 for Romania, 0.60 for Greece and Yugoslavia, and 0.50 for Bulgaria.

DEMOGRAPHIC CHARACTERISTICS AND POPULATION
GROWTH OF COUNTRIES AND THEIR REGIONS
ABOUT 1930

TABLE 12

M. Jackson

	Population (000)	Density per km ²	Interwar Growth Rate Per Cent Per Year	Average Vital Rates 1930-31			Infant Reproduction Rates - 1930 Gross	Literacy Mortality 1930-31 Net	Rate Over 10 Years Percent	
				Birth	Death	Natural Increase				
Bulgaria - 1934	6,078	59	1.30	30.4	16.5	13.9	1.70	1.20	147	31
Bourgas	555	41	1.68	35.9	18.2	17.7	2.08	1.48	173	32
Vratza	739	66	1.11	28M4	14.8	13.6	1.40	1.00	139	32
Plovdiv	802	51	1.46	33.3	18.0	15.3	1.96	1.40	160	34
Plieven	997	65	.83	25.2	14.5	10.7	1.31	.93	129	25
Sofia	1,152	88	1.93	30.4	15.7	14.7	1.62	1.16	129	24
Stara Zagora	813	52	.91	30.3	17.2	13.1	1.80	1.28	145	40
Choumen	1,020	70	1.18	31.7	18.2	13.5	1.79	1.28	164	36
Greece - 1928	6,205	48	1.93	31.2	17.1	14.1	1.80	1.26	117	41
Central Greece and Euboea	1,593	64	2.52	27.8	15.6	12.2	1.56	1.09	115	34
Thessaly	493	37	1.37	30.8	18.5	12.3	1.88	1.32	114	43
Ionian Islands	213	111	.86	23.5	13.9	9.6	1.47	1.03	95	45
Cyclades	130	50	1.02	29.3	14.3	15.0	2.17	1.52	108	38
Peloponnesus	1,053	47	1.36	29.6	15.7	13.9	1.71	1.20	114	40
Macedonia	1,412	40	2.48	38.8	20.7	18.1	2.19	1.53	126	43
Epirus	313	33	1.19	33.4	16.9	16.5	1.81	1.27	102	50
Aegean Islands	308	80	1.45	24.6	14.1	10.5	1.57	1.10	104	37
Crete	386	47	1.34	26.0	12.6	13.4	1.47	1.03	101	43
Western Thrace	303	35	2.91	36.6	22.4	14.2	2.30	1.61	133	61
Romania - 1930	18,057	61	1.27	34.2	20.1	14.1	2.16	1.40	178	*43
Oltenia	1,513	63	1.44	33.7	20.4	13.3	2.11	1.37	166	*50
Mutenia	4,029	77	2.33	35.4	20.1	15.3	2.22	1.44	181	*42
Dobrogea	815	35	.64	39.2	23.7	15.5	2.70	1.75	204	*47
Moldova	2,434	64	1.66	39.9	21.4	18.5	2.48	1.61	182	*43
Basarabia	2,864	64	.09	38.3	20.8	17.5	2.57	1.67	181	*62
Bucovina	853	82	—	31.3	19.0	12.3	1.88	1.22	188	*34
Transylvania	3,218	52	—	30.1	18.5	11.6	2.01	1.30	158	*32
Banat	940	50	1.05 ¹⁰	21.3	18.7	2.6	1.25	.81	168	*28
Crisana and Maramures	1,390	65	—	28.8	19.1	9.7	1.77	1.15	190	*38
Yugoslavia - 1931	13,934	56	1.43	34.6	19.4	15.2	2.09	1.45	159	45
Drava	1,144	72	.68	28.1	16.3	11.8	1.66	1.15	130	7
Drina	1,535	55	2.30	40.3	19.6	20.7	.55	1.77	152	62
Dunava	2,387	76	.84 ³	29.8 ³	19.1 ³	10.7 ³	1.74	1.21	176	29 ³
Morava	1,436	56	1.71	35.4	17.8	17.6	2.15	1.49	113	62
Primora	902	46	1.07	37.0	20.2	16.8	2.25	1.56	165	58
Sava	2,704	67	1.02	31.9	20.3	11.6	1.84	1.28	206	28
Vardar	1,574	43	1.65	40.4	23.2	17.2	2.73	1.90	161	71
Vrba	1,037	55	1.90	42.2	20.5	21.7	2.66	1.85	142	73
Zetska	926	30	1.57	35.0	17.5	17.5	2.23	1.55	132	66
Beograd	289	764	5.50 ³	19.7 ³	11.8 ³	7.9 ³	.95	.66	128	11 ³

part of Croatia-Slavonia. Dunava, with the lowest rates, mixed the Vojvodina with a portion of former Serbia. The two *banovine* with highest rates of natural increase were Drina and Vrba which were most of Bosnia.²⁷

Yugoslavia was created out of areas with both low and high natural increase, but averaging close to that of former Serbia. Historical regions are readily identified in both Greece and Romania. With the predominant weight of Macedonia, Greece's new territories do seem to have raised its rate of natural increase over what it would have been in 1930-31 without them. Romanian rates appear influenced in the opposite direction (i.e., lowered), even though the high rates of Bessarabia partly offset the downward pull of the former Habsburg regions. However, nowhere do the effects of territorial change seem to be causes of any sharp break with the past in terms of average rates of natural increase.

A second problem is the impacts of war and international migration on rates of birth, death, and natural increase. The war experience of 1912 to 1918 resulted in both high death rates and low birth rates, although in Bulgaria the major impact seems to have lowered the birth rates. Greece suffered a major disruption in 1922-23 in which its estimated military casualties of 60,000 in the war with Turkey may have been only a small part of the effects of higher civilian death rates and lower birth rates among the wave of immigrants from Turkish areas. The Second World War also had strong direct impacts on the population of Southeastern Europe whose dimensions are estimated in Table 14. In order to follow its data, reference should be made first to Table 13 showing the second set of territorial shifts.

Table 14 is filled with usual uncertainty. By comparison with other countries Bulgarian birth rates appear to have felt the main

²⁷ For a comparison of Yugoslavian *banovine* of the interwar period with the historical areas see TOMASEVICH, *op. cit.*, pp. 238.39.

TABLE 13

TERRITORIAL CHANGES IN SOUTHEASTERN EUROPE FROM 1940 TO 1947
(square kilometre)

Country	Changes	Territory
Albania (1)		28,748
Bulgaria		
Prewar		103,146
1940 - Southern Dobrogea from Romania	+ 7,969	
Postwar		110,842
Greece		
Prewar		129,281
1947 - Dodcanese Islands from Italy	+ 2,663	
Postwar		131,944
Romania		
Prewar		295,049
1940 - Northern Bucovina and Bessarabia to the Soviet Russia	- 49,823	
1940 - Southern Dobrogea to Bulgaria	- 7,726	
Postwar		237,500
Yugoslavia		
Prewar		247,542
1947 - Istria and the Islands of Lastovo and Palagruza from Italy	+ 8,262	
Postwar		255,804

(1) Interwar Albanian territory was reduced slightly through the ceding of Sveti Naum Monastery to Yugoslavia in 1925 and the occupation of the Island of Sazau by Italy. (United Nations, *Economic Survey of Europe in 1960*. Geneva - 1971, p. 10).

TABLE 14

POPULATION BALANCES FOR 1939 TO 1947¹
(000 persons)

	Year-end population estimates		Changes due to territorial shifts	1947 projected population using prewar (1936-40) rates of natural increase (e)	Differences due to migration and abnormal birth and death rates	Net emigration and Jewish disappearance (f)	Balance due to abnormal births and deaths	Estimates of Total military and civilian casualties (g)
	1939	1947						
Bulgaria	6319	6743	325	7168	- 425	- 133	- 292	- 35
Greece	7270	7259	(a)	7985	- 726	- 63	- 663	- 450
Romania	20030	15871	4067(c)	17343	- 1472	- 474	- 998	- 500
Yugoslavia	15703	15790	700(d)	17950	- 2160	- 558	- 1602	- 1700

(a) The estimated Greek population of 1949 (midyear) was 7,482,748 and included the Dodecanese Islands acquired in 1949 whose 1951 population was 151,000 (Greece, *Statistike epeteris 1971*, p. 29; and Mitchell, *p. cit.*, p. 26). The 1947 estimate subtracts 150,000 from the 1949 figure and reduces it by one percent.

(b) Based on the differences in estimated total growth from 1940 to 1941 of 374,500 and the normal projected growth of 49,000 in Bulgaria, *Statisticheski godishnik 1968*, p. 19.

(c) Based on the differences in estimates of population for 1939 (midyear) of 19,933,802 on prewar territory and 15,907,000 on postwar territory given in *Anuarul statistic 1939-1940*, p. 41; and *Anuarul Demografic-1947*, p. 3.

(d) Territory acquired from Italy in 1945.

(e) Projections add or subtract populations on changed territories in the years in which changes took place.

(f) Estimates from Marvin R. Jackson, "Changes in the Ethnic Content of Balkan National Populations, 1912 to 1970," *Southeastern Europe forthcoming*, Tables 12 to 15.

(g) Urfanis, *p. cit.*, pp. 291-92. Civilian casualties probably include deported Jews. Also see Kirk, *p. cit.*, p. 69n.

(h) Somewhat different balances based on earlier and less complete information are found in Frumkin, *p. cit.*, pp. 46-47, 89-91, 129-34 and 154-57; and W. S. Woytinsky and E. S. Woytinsky, *World Population and Production* (New York 1952), pp. 12-13.

impact of the war, a point supported by Figure 11. The limited record of birth and death rates for wartime Romania also suggests that the war's main impact was a deficit of births, although it is likely that Jewish deportations (and subsequent deaths) were not registered in the death rate. Official Greek estimates are somewhat larger than those of Table 14, placing war deaths at 415,300 and a combination of deportations and birth losses of 515,000.²⁸ In contrast, Yugoslavia seems to have suffered more from increased death rates. It may be that part of the 558,000 net migration and Jewish disappearance is counted in estimates of casualties. Still, the estimated casualty rates appear too high; otherwise Yugoslavia would have had to have nearly "normal" birth rates during the war.

The war's effects on birth and death rates were clearly not confined to the war periods. A reduced age-cohort born during the wars meant (1) a subsequent birth rate reduction as the war-torn cohort entered the most fertile age groups and (2) a subsequent reduction in death rates as the cohort then moved through age groups more likely to die. Similar future impacts would be caused by war deaths concentrated in some age groups. Of course, some of the wartime deficit in births was only birth delay because of uncertainty and family separation. In the absence of other problems, such as the general food shortage of 1919 in Bulgaria and Romania in 1947, war would be followed by a "baby boom". This unusually large age cohort will produce its own new waves of temporary increases in birth rates and then death rates. Finally, waves of international migration, if concentrated among age groups, also impact upon crude birth and crude death rates, both at the time of migration and in the future.

Table 15 on the age-structure of census populations in South-eastern Europe, with Figures 11 through 14, reveals some of the long term effects of war and international migration. The wave of overseas migration earlier in the first decade of the century that

²⁸ Cited by KIRK, *op. cit.*, p. 70n.

TABLE 15

AGE-STRUCTURE OF POPULATIONS
(percent of total population)

	1910	1920	1926	1934	1946	1956	1965
Bulgaria 0- 4	14.3	10.2	14.3	11.7	9.4	9.0	7.6
5- 9	13.4	12.8	10.4	11.8	8.6	9.3	8.0
10- 4	12.0	13.2	10.3	11.9	9.9	8.2	8.2
15-19	9.7	11.1	11.0	7.3	9.9	7.5	8.6
20-24	8.5	9.0	9.7	9.4	10.4	8.6	7.1
25-29	8.1	7.1	8.1	8.8	7.1	8.5	7.0
30-34	5.8	6.2	6.3	7.7	7.3	8.9	7.9
35-39	5.2	6.4	5.6	6.3	7.6	6.1	8.0
40-44	4.3	4.6	5.4	4.9	6.8	6.3	7.9
0-14	39.8	36.2	34.9	35.5	27.9	26.5	23.8
15-29	26.3	27.2	28.8	25.5	27.4	24.6	22.7
30-44	15.2	17.3	17.3	18.9	21.7	21.3	23.8
45-64	13.4	13.5	13.6	14.8	16.8	20.3	21.1
over 64	5.3	5.7	5.4	5.3	6.2	7.3	11.3
Dependency ratio	82.1	72.1	67.5	68.9	51.7	51.1	53.3
	1907	1920	1928	1940	1950	1961	
Greece 0- 4	14.2	9.7	12.4	10.3	9.7	9.4	
5- 9	13.1	12.4	10.1	11.2	8.5	8.6	
10-14	11.0	12.2	9.7	11.5	10.3	8.7	
15-19	10.4	10.7	11.2	9.3	10.3	7.4	
20-24	8.0	8.2	8.9	7.5	9.6	8.6	
30-34	4.6	5.9	6.2	7.5	6.6	8.4	
35-39	8.4	6.4	6.1	6.7	6.7	6.3	
40-44	4.6	5.7	5.3	5.7	6.5	5.4	
0-14	38.3	34.3	32.2	33.0	28.5	26.7	
15-29	26.7	25.8	28.5	25.0	27.8	24.6	
30-44	17.6	18.0	17.6	19.9	13.8	20.1	
45-64	13.4	16.1	16.0	15.7	17.2	20.3	
over 64	4.0	5.8	5.7	6.4	12.7	8.3	
Dependency ratio	73.3	66.9	61.0	65.0	70.1	53.8	

TABLE 15 (cont.)

	1912	1930 (a)	1930 (b)	1956	1966
Romania 0- 4	13.6	14.4	14.2	10.6	7.3
5- 9	12.6	12.0	11.7	9.3	9.1
10-14	11.1	7.9	7.6	7.6	9.6
15-19	10.3	11.6	11.5	9.0	8.3
20-24	8.7	9.1	9.2	9.1	6.6
25-29	8.2	8.7	8.8	8.9	8.2
30-34	6.4	6.0	6.1	7.9	8.2
35-39	5.5	6.5	6.6	4.9	8.0
40-44	4.8	5.0	5.1	6.5	7.1
0-14	37.3	34.3	33.5	27.5	26.0
15-29	27.2	29.4	29.5	27.0	23.1
30-44	16.7	17.5	17.8	19.3	23.3
45-64	14.5	13.8	14.2	19.9	19.7
over 64	4.3	5.0	5.0	6.3	7.9
Dependency ratio	71.2	64.7	62.6	51.5	51.3

	1921	1931	1948	1953	1961
Yugoslavia 0- 4	10.2	14.2	10.5	12.1	10.5
5- 9	11.8	12.6	10.7	8.9	10.8
10-14	12.8	7.9	11.5	9.5	9.9
15-19	10.8	9.2	10.9	10.4	7.4
20-24	8.9	9.8	9.2	10.2	8.5
25-29	6.6	8.4	6.7	8.5	8.9
30-34	6.6	7.2	5.0	6.3	8.4
35-39	6.1	5.4	7.2	4.4	6.7
40-44	5.6	5.2	6.3	6.4	4.1
0-14	34.8	34.7	32.7	30.5	31.2
15-29	26.3	27.4	26.8	29.1	24.8
30-44	18.3	17.8	18.5	17.1	19.2
45-64	15.4	14.7	16.5	17.3	18.6
over 64	5.2	5.4	5.5	6.0	6.2
Dependency ratio	66.7	66.9	61.8	57.5	59.7

Dependency ratio equals the number of persons under 15 and over 64 per 100 persons of ages 15 to 64.

Sources:

Bulgaria - *Statisticheski godishnik 1940*, p. 43; *1965*, pp. 16-17; and *1968*, p. 16.

Greece - *Statistike epeteris 1930*, pp. 51-59; and Mitchell, *op. cit.*, p. 39.

Romania - *Anuarul demografic 1974* (Bucharest, 1975), pp. 12-13; and *Anuarul statistic 1939-1940*, p. 55.

Yugoslavia - *Jugoslavia 1945-1964: Statisticki Pregled* (Beograd, 1965), pp. 42-43.

was numerically significant in Greece, Croatia-Slavonia and possibly other Habsburg areas, may have already caused a reduced age-cohort of children born from 1900 to 1910 and, hence, a tendency to reduce crude birth rates from about 1925 to 1935.²⁹ In 1920-21 in Bulgaria, Greece and Yugoslavia, the youngest age-cohort is significantly reduced; Romania's 10-14 year group is similarly reduced in 1930. Some of the reduction of birth rates in the 1930s was from this temporary effect.³⁰ In Greece, a probable fall in birth rates in 1922-24 added to the expected effects of the Second World War. Moving further in time, one would have expected birth rates to fall in the late 1950s and early 1960s since the age-cohort of those born from 1935 to 1945 must have been unusually small. A "baby boom" is evident in all countries after the Second World War, but may have been delayed by famine in Romania in 1947 and cut short by civil war in Greece. It is not surprising that birth rates should rise again in the late 1960s, although Romania's exploding birth rates were mostly the result of the abrupt outlawing of legal abortion in 1967. Finally, the large emigrations of Greece and Yugoslavia in the 1960s could have caused crude birth rates to fall because emigrants were predominantly males in the most fertile ages. However, because many of their emigrants left temporarily, the main effect may have been to delay family formation. Thus, crude birth rates in the 1970s could be pushed upwards.

These considerable sources of temporary fluctuations in crude birth (and death) rates because of changing age-structure confuse the underlying trends in fertility independently of age-

²⁹ The proportions of immigrants to the United States under 40 years old varied from 86 percent to 95 percent. THISTLETHWAITE, *op. cit.*, p. 90.

³⁰ KIRK, (*op. cit.*, p. 59), in reference to the falling rates of natural increase in Bulgaria, Greece, Romania, and Yugoslavia from 1930-31 to 1939, observes that, "Since changes in age composition of the population in these countries were probably not unfavorable to the continuation of high natural increase, this decrease very likely represents a true drop in fertility." The evidence of Table 15 does not support his assumption about age composition.

structure. The gross reproduction rate estimates the number of daughters that would be born to a given group of women over their lifetimes; the net rate reduces the gross rate by considering the number of daughters who would die before completing the ages of reproduction.³¹ Available estimates for Southeastern Europe are presented in Table 16. The scattered estimates for the interwar period only partially answer the question of if and how far fertility actually decreased. Two needed statistics are missing for the interwar period: (1) births by mother's age for calculations of gross reproduction rates and (2) mortality tables for calculation of the net rates. According to Kirk, only Bulgaria provided such data in the interwar period. His estimates for the other three countries apply Bulgarian fertility rates by age of mother and mortality rates by age of female to the population of women (by age) of Greece, Romania, and Yugoslavia.³² Bulgaria shows a significant decline in fertility in the interwar period, although the high level of 1921-22 may indicate a baby boom. Romania's slight decline may be insignificant, given the way it is estimated. By the middle 1960s women in Southeastern Europe seem to have been having about half the number of children as did women in the region in the early 1920s (Albanian women excepted). In fact, postwar gross reproduction rates in Bulgaria, Greece, and Romania are lower than in such advanced countries as Switzerland, England, France, and Germany. The "demographic revolution" had been completed in the region, but subject to a possible temporary reversal through government policy such as took place in Romania in 1967.³³

The other side of the "demographic revolution", death rates and morbidity, may be noted as still leaving some room for improvement in Romania, Yugoslavia, and especially Albania. By

³¹ More precise definitions and a discussion of estimating methods may be found in United Nations, *Demographic Yearbook, 1975*, pp. 33-45.

³² KIRK, *op. cit.*, p. 260.

³³ As a postscript, the Romanian gross reproduction rate fell to 1.182 in 1973 only to be raised again to 1.32 in 1974 by a State campaign against illegal abortions.

TABLE 16

GROSS AND NET REPRODUCTION RATES

	Bulgaria		Greece		Romania		Yugoslavia		Albania	
	Gross	Net	Gross	Net	Gross	Net	Gross	Net	Gross	Net
1. 1921-22	2.73									
2. 1925-28	2.21									
3. 1928			1.80	1.26						
4. 1930					2.16	1.40				
5. 1931							2.90	1.45		
6. 1931-32			1.87	1.25						
7. 1934-35	1.76									
8. 1935-39	1.47				1.81					
9. 1946-49	1.44						1.80(b)			
1950-54	1.24		1.2(a)				1.882	1.406	2.98	
1955	1.17				1.49		1.531	1.236	3.41	
1956-60	1.125(c)	1.012(c)	1.095	1.006	1.27		1.362	1.115	3.20	
1961-65	1.064	0.985	1.061	0.981	0.978(f)	0.906(f)	1.304	1.072	275(d)	
1966-70	1.047	0.996	1.151	1.071	1.78(g)	1.63(g)	1.204	1.061	2.37(e)	2.20(e)

Sources: (1), (2), and (7) League of Nations, *Statistical Yearbook 1940/41*, p. 46.

(3), (4), and (5) Kirk, *op. cit.*, pp. 263-75.

(6), (8), and (9) United Nations, *Demographic Yearbook 1965*, pp. 611-16; 1969, pp. 475-77; 1975, pp. 524-26.

(a) 1951-56

(b) 1946-50

(c) 1956-57 and 1960

(d) 1965

(e) 1973

(f) 1963

(g) 1967 and 1968

the 1960s Bulgaria ranked among the top one-third of 27 European countries in terms of the expected length of life. Greece was just below, but in the second one-third. Romania, Albania, and Yugoslavia were all in the bottom third with the latter two countries ranked, respectively, 25th and 26th. The region ranked more poorly in terms of infant mortality with all countries being among the one-third of Europe's countries with the highest rates. Albania topped the list with Yugoslavia second and Romania fourth.³⁴

B. International Migration

Kirk noted that in the 1920s continental migration continued to be as important as it had been in earlier decades. The general pattern of European emigration shifted from overseas to continental destinations so that by 1927 the latter outnumbered the former. By the 1930s Europe was gaining population from in-migration.³⁵

The extent to which the countries of Southeastern Europe participated in these trends is nearly as confused as it is clarified by the available data shown in Table 15. Kirk's estimates identified by "C" are based on census and vital statistics and are similar to implied migration estimates already explained in Table 5 above. His estimate of immigration based on direct country data. Kirk's estimates marked "D" are also based on the same country migration reports as those in column 2.. These estimates agree with each other except for Greece and Yugoslavia in 1931-39. Kirk's estimates marked "E" are a combination of both direct country migration data and data of countries of immigration. They are similar in the basis of estimation for the overseas migration data from Kulischer and estimates of net ethnic migration in column 4.

Bulgaria in the first part of the 1920s seems to have experienced net immigration, as it did from 1911-1920, but on a diminished

³⁴ See KOSINSKI, *op. cit.*, pp. 42 and 46.

³⁵ KIRK, *op. cit.*, pp. 83-88 and 105.

scale. The record for the remainder of the 1920s suggests a net emigration balance. Whether it was large enough to offset earlier gains is a matter of doubt. In the decade of the 1930s Bulgaria appears to have experienced the largest ever emigration recorded in the country, mostly an exodus to Turkey. Emigration seems to absorb nearly 20 percent of Bulgaria's natural population increase, a percent nearly equal to that indicated in 1901-10 (although both rates of natural increase and emigration were reduced).

The estimate of implied migration for Greece is too likely a distortion of incomplete vital statistics between her censuses of 1920, 1928, and 1940. But there is little doubt of a very large immigration in the 1920s of Greeks from Turkey which was only in a small way offset by continuing overseas emigration. The Greek record for the 1930s is in conflict. Possibly vital statistics are still at fault in suggesting that net immigration continued. What does seem certain is that net international migration either way played the smallest role in Greek population change since the turn of the century.

Most of Romania's continuing emigration took place in the 1920s and may have been larger than indicated by direct reports. It probably had significant overseas and continental ethnic components. By past comparisons emigration was a smaller element of population change in Romanian territories. As in the case of Greece, Romania's net international migration had an insignificant effect on population in the 1930s.

By all indications, Yugoslavia's census and vital statistics provide a very poor record of international migration. In the 1920s the records of other countries and estimates of ethnic emigration add up to much greater population losses than implied by the censuses of 1921 and 1931 and vital statistics in between. There was no census to end the period. Therefore, the estimate of implied immigration may merely suggest that annual population estimates were exaggerated after the census of 1931. Yugoslavia seems to follow the Romanian pattern with a significant emigration from 1921 to 1931, but one reduced from levels experienced in

ESTIMATES OF INTERNATIONAL MIGRATION 1921 TO 1939^(a)
(000 persons)

TABLE 17

M. Jackson

Country	Type of Estimate (b)	Period (c)	(1)		(2)		(3)	
			Migration	Implied Estimates	Direct Estimates	Overseas Gross	Migration Net	Net Ethnic Migration
Bulgaria	C (c)	1921-26	+ 58	+ 57.7				
	C	1927-34	- 94	- 56.7				
	E	1921-30	- 10	+ 33.9		- (8.2) ^(d)	- (8.0) ^(d)	
	D (c)	1931-39	111	- 108.9	- 110.9	- 11.7	- 3.5	- 3.5
TOTAL			- 121	- 75		- 11.7	- 11.5	- 132.5
Greece	E	1921-28	+ 505	+ 793.2				
	E	1921-30		+ 797.9		- (91.4-101)		
	D	1931-39	- 67	+ 89.3	- 20.5	- (30.5-103)	- 31.5	
	TOTAL		+ 438	+ 887.2		- 160.0		+ (572-872)
Romania	E (c)	1921-30	- 150	- 2.1		- 180.0	- 86.0	
	D (c)	1931-39	- 18	- 20.1	- 15.9			
	TOTAL		- 168	- 22.1		- 123	- 92.2	- 98
Yugoslavia	C	1921-31	+ 45	- 41.5		- 137.5	- 77.9	
	E	1920-30	- (140-200)					
	D	1931-39	- 37	+ 119.0	- 30.9 ^(f)	- 28.0	+ 0.5	
	TOTAL					- 165.5	- 77.4	- 251.9

Sources: (1) Dudley Kirk, *Europe's Population in the Postwar Years*, (League of Nations, 1946), pp. 284-85.

(2) Author's estimates from country statistics.

(3) Eugene M. Kulischer, *Europe on the Move: War and Population Changes, 1917-47*, (New York: Columbia University Press, 1948), p. 152.

(4) Jackson, *op. cit.*, Tables 2-8.

Notes: (a) Emigration indicated by (-); immigration by (+).

(b) The basis of Kirk's estimates are:

C - computation from census and vital statistics, or implied migration.

D - direct from migration statistics.

E - direct migration statistics and statistics of countries of immigration.

(c) Periods include the first and last year mentioned. The Bulgarian censuses were on the last day of 1920, 1926 and 1934. Hence, Kirk's identification of periods is in error and 1920-26 is changed to 1921-26. His estimate marked 1931-38 is consistent with the data for 1931-39 and has been so changed. The Romanian census was also at the end of 1930; it is assumed that Kirk's data refer to 1921-30.

(d) Includes only 1927-1930.

(e) Partial data missing for 1939.

(f) Does not include 1939.

the century's first two decades, followed by insignificant international migration in the 1930s.

International migration records disappear during the Second World War. Lacking them, separately estimated figures derived from changes in the ethnic composition of populations may be used. The estimates are from Table 14 above.

For the period after 1939 and through 1947, the following net emigrations are indicated: Greece - 76,000, Bulgaria - 133,000, Romania - 371,000 and Yugoslavia - 558,000. In order to obtain estimates for the decade 1940-50 we may add the figures for 1948-50, available for all, but Greece, in Table 18 below with resulting totals of 238-244,000 for Bulgaria, 405,000 for Romania, and 666,000 for Yugoslavia. As explained above, the estimates may include some deported Jews and even Germans and Yugoslavs who were killed on Yugoslavian territory. Still with some discount, emigrations from Bulgaria, Romania, and Yugoslavia were probably the largest ever. They were large absolutely and large compared to the prewar populations of each country.

In contradiction to the above figures, Bulgarian data in Table 11 imply immigration, not emigration. Given the known emigration from Bulgaria to Turkey from 1939 to 1945 and the balances exchanged with Romania in 1941, the implied immigration in Table 11 may be doubted. Bulgarian emigration from 1946 to 1950 appears to absorb nearly half of the recorded natural increase in population, a far greater share than either in 1901-10 or 1931-39.

Table 18 estimates international emigration in the two postwar decades, 1951-60 and 1961-70. For Bulgaria, the only country providing a continuous record of direct international migration, estimates by the "implied" method correspond with the direct record. A similar correspondence for Greece and Romania can be assumed. However, Yugoslavian postwar censuses include persons living "temporarily" abroad. The possibility of even greater emigration from Yugoslavia will be considered below.

Both Bulgaria and Romania have followed relatively strict non-emigration policies for ethnic majorities, that is Bulgarians

TABLE 18

INTERNATIONAL MIGRATION AFTER THE SECOND WORLD WAR
(000 persons)

		Implied	Direct	Migration Per 1000 Population
Bulgaria	1945-50	- 148.2		3.5
	1948-50	- 110.7	- 94.7	5.2
	1951-60	- 131.2	- 101.8	1.7
	1961-70	- 22.3	- 21.2	0.3
Greece	1951-60	- 202.1	- 241.4(b)	4.4
Romania	1947-50	- 34.0		0.5
	1951-60	- 117.0		0.7
	1961-70	- 107.0		0.6
Yugoslavia	1948-50	- 108.2		2.2
	1951-60	- 583.3	- 273.9(c)	3.3
	1961-70	- 246.1(c)	- 72.2(d)	1.3

(a) Annual average implied emigration divided by mid-period population.

(b) Arrivals minus departures of Greek citizens.

(c) 1953-60.

(d) 1961-69.

(e) Does not include "temporary" emigrants; see text.

and Romanians, under their socialist governments. Their emigration primarily involved ethnic minorities, mostly Turks and some Jews from Bulgaria and mostly Jews and some Germans from Romania. While Bulgarian emigration took about 40 percent of the natural increase in 1951-55, since 1953, as in Romania since 1950, emigration has had unimportant demographic consequences.

Greek and Yugoslavian net emigration from 1950 to 1970 was not only much larger than in the cases of Bulgaria and Romania, but also involved ethnic majorities (south slavs in the case of Yugoslavia) many of whom were so-called "temporary" migrant

workers in Western Europe. Available Greek international migration indicators are presented in Table 19.

Probably the best indicator is net departures of Greek citizens which shows the balance of all citizens departing over all citizens arriving. It exaggerates slightly by not including alien Greek immigrants from Turkey, Egypt, and other areas. Direct emigrant numbers include a more certain group departing with contracts from the Ministry of Labor (temporary emigrants) and an uncertain group ascertained by official judgment of information filed at a border crossing.³⁶ A greater problem is that the flow of returning emigrants (repatriations) was only registered beginning

TABLE 19
INDICATORS OF GREEK INTERNATIONAL MIGRATION

Period	Net Departures of Greek Citizens	Permanent Emigrants	Temporary Emigrants	Overseas Emigrants	Repatriations	
					Total	Overseas
1946-50	35,255	n.a.	n.a.	20,176	n.a.	n.a.
1951-55	89,169	n.a.	n.a.	68,063		
1955 only	33,425	29,787	14,465	19,766		
1956-60	152,215	161,750	108,129	84,407		
1961-65	280,387	465,699	195,388	118,116		
1966-70	223,294	364,725	323,081	137,885		
1966	23,329	86,896	61,518	33,093		
1967	— 30,826	42,730	59,732	26,323	n.a.	n.a.
1968	56,886	50,866	64,132	25,891	18,882	4,734
1969	90,288	91,552	67,123	28,425	18,132	5,156
1970	83,617	92,681	70,570	24,153	22,665	7,112

Source: Greece, *Statistike epeteris 1972*, pp. 51, 64 and 297.

³⁶ Thus, authors of an OECD report on Greece remark, "Emigration has so far been only roughly and empirically computed by the Greek National Statistics Institute. Most Greeks can cross the frontiers freely and only a few of those who leave the country are officially known to be classifiable as emigrants, that is to say, those who have a Ministry of Labour contract. Hence, notwithstanding the partial data obtainable from this source, the number of "permanent emigrants" is reckoned entirely on the basis of forms which all outward-bound travellers have to hand in to the police at the frontier. It is by sorting those forms, with regard to the information on three points: country of destination-occupation-date of last entry into Greece, that ordinary travellers can be sifted from genuine emigrants." Organization for Economic Cooperation and Development, *Manpower Policy and Problems in Greece* (Paris, 1965), p. 31.

in 1968. The data suggest that the inflow was about 44 percent in 1956-60, 57 percent in 1961-65 and 67 percent in 1966-70 of the outflow.³⁷ With such large possible inflows any estimates of the effects on population change based on gross outflows are clearly exaggerated.³⁸ Still, the net outflow was very large, taking 20-25 percent of the natural increase in population in 1951-60 and half or more in 1961-70. In the latter decade Greece returned to international emigration as intense compared to natural population growth as in the decade before the Balkan and First World Wars. But the latter emigration wave differed from the former in two probably interconnected aspects. First, the two-way movement was more intense suggesting a more temporary character of emigration. Second, emigration was far more often to Western Europe than overseas. Only emigration immediately following the Second World War was predominantly overseas. European emigration was based on treaties (with France in 1954, Belgium in 1957 and West Germany in 1960) and the evident demand for labour in Western Europe. It grew in the mid-1950s and swelled under German labor demand in the early 1960s which took nearly 90 percent of Greek emigrants to Europe. However, by the last half of the 1960s under the combined influence of Greek government restrictions, West German recession, and changes in immigration policies in the United States and Australia, not only did net emigration decrease somewhat, but overseas (and probably permanent) emigration increased.³⁹

³⁷ The OECD report cites estimates of 30-35 percent. *Ibid.*, p. 31.

³⁸ See, for example, DIMITRIOS A. GERMIDIS AND MARIA NEGREPONTI-DELIVANIS, *Industrialization Employment and Income Distribution in Greece, A Case Study*; Development Centre of the Organization for Economic Cooperation and Development, Employment Series No. 12 (Paris, 1975), p. 97; and EVAN VLACHOS, "Worker Migration to Western Europe: The Ramifications of Population Outflow for the Demographic Future of Greece," a paper presented at the American Association for the Advancement of Slavic Studies (Dallas, Texas, March 15-18, 1972), p. 13.

³⁹ VLACHOS, *op. cit.*, pp. 15 and 122-23. Vlachos also notes that December 19, 1971 the Greek government instituted a pro-natalist policy, including tax benefits and family allowances (p. 42).

Postwar international migration statistics for Yugoslavia are more incomplete than those for Greece. The obviously incomplete direct estimates given in Table 18 probably measure only legal emigration before 1964 and so may include principally ethnic migration of Turkish (or Moslem) people. But as early as 1954 Yugoslavs began illegal emigration for work in Western Europe which by 1964 was finally accepted by the Yugoslavian government as an economic necessity.⁴⁰ With the nearly free movement across frontiers, the official estimates seemed meaningless. The volume of work migration grew in the last 1960s and reached a level in 1970 of 210,000 as estimated by the Institute of Geography of Zagreb University.⁴¹ According to the same source, gross emigration in 1966-70 totalled 713,800 including 606,900 "workers".⁴² The Yugoslavian census of 1971 estimated 671,900 "temporary" emigrants abroad (including 584,900 workers) of whom some 70 percent were in West Germany. However, the census figure is thought to be too low. Other estimates range as high as 860,000 and are based on an implied emigration figure like that in Table 18, plus the 1971 census indication of those living temporarily abroad.⁴³ Few temporary emigrants in 1966-70 had returned. Hence, emigration for the period could have been over 700,000. This would have been a rate of about 3.7 per 1000 population and equal to 36 percent of the natural increase of population, the same proportion of natural increase as suggested for Croatia-Slavonia in 1901-10.

⁴⁰ MICHAEL B. PETROVICH, "Population Structure" in Klaus-Detlev Grothusen, *Sudosteuropa-Handbuch: Jugoslawien*, Band I (Göttingen, 1975), p. 332.

⁴¹ Slightly different figures are given by the OECD showing worker net emigration 1964 and 1965, respectively, of 10,000 and 20,000 rising to 240,000 in 1970. Organization for Economic Cooperation and Development, *Economic Surveys, Yugoslavia* (Paris, June, 1973), p. 64.

⁴² Data cited in the International Bank for Reconstruction and Development, *Yugoslavia: Development with Decentralization* (Report of World Bank mission under Vinod Dubey). (Baltimore and London, 1975), p. 375.

⁴³ *Ibid.*, p. 375; PETROVICH, *op. cit.*, p. 333; and JOSEF VELIKONJA, "EMIGRATION," in GROTHUSEN, *op. cit.*, p. 377.

FIGURE 1 BULGARIA: CRUDE BIRTH AND DEATH RATES

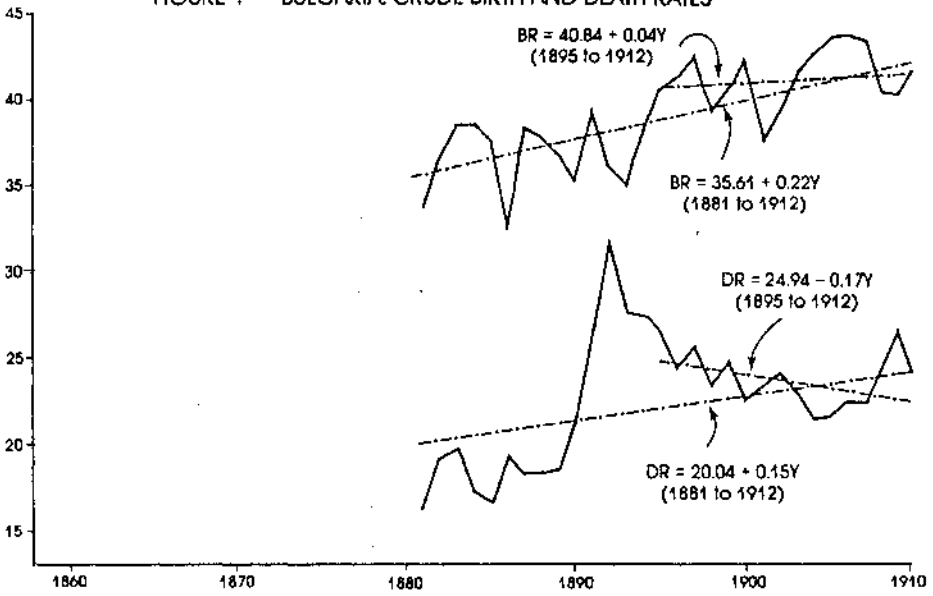


FIGURE 2 GREECE: CRUDE BIRTH AND DEATH RATES

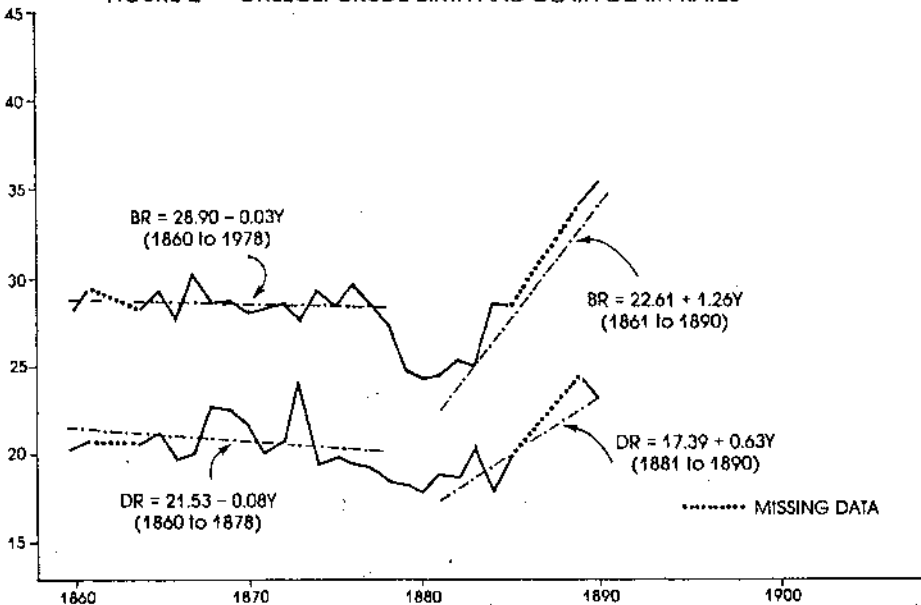


FIGURE 3 ROMANIA: CRUDE BIRTH AND DEATH RATES

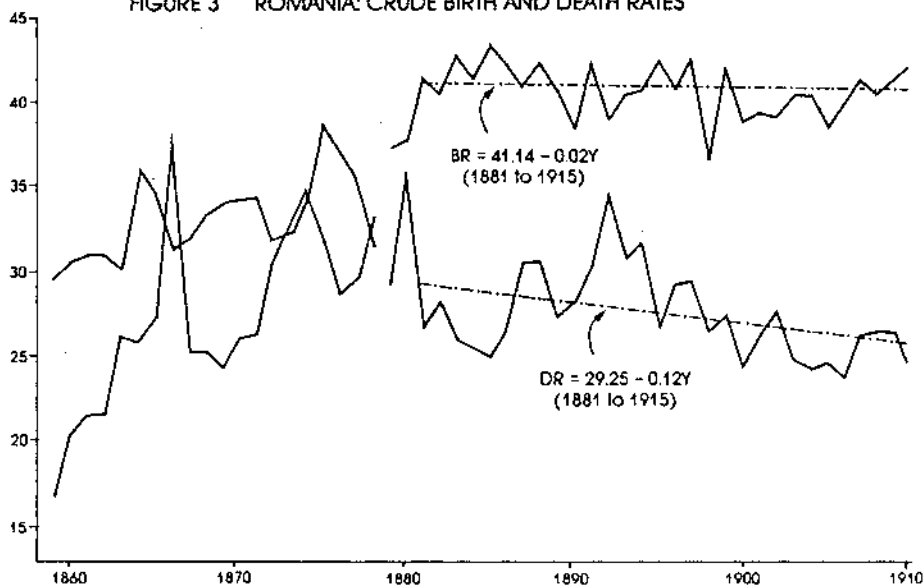


FIGURE 4 SERBIA: CRUDE BIRTH AND DEATH RATES

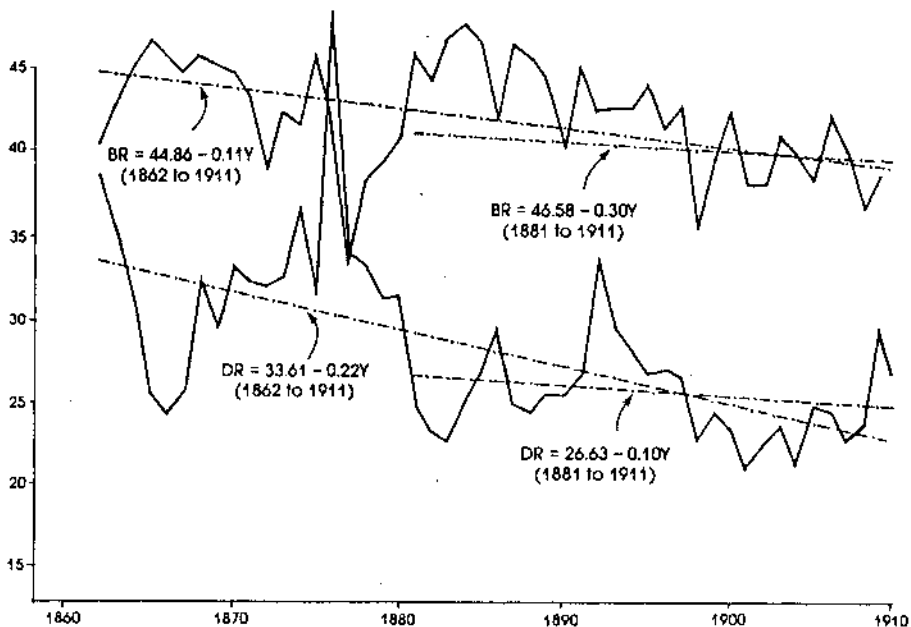


FIGURE 5 CROATIA-SLAVONIA: CRUDE BIRTH AND DEATH RATES

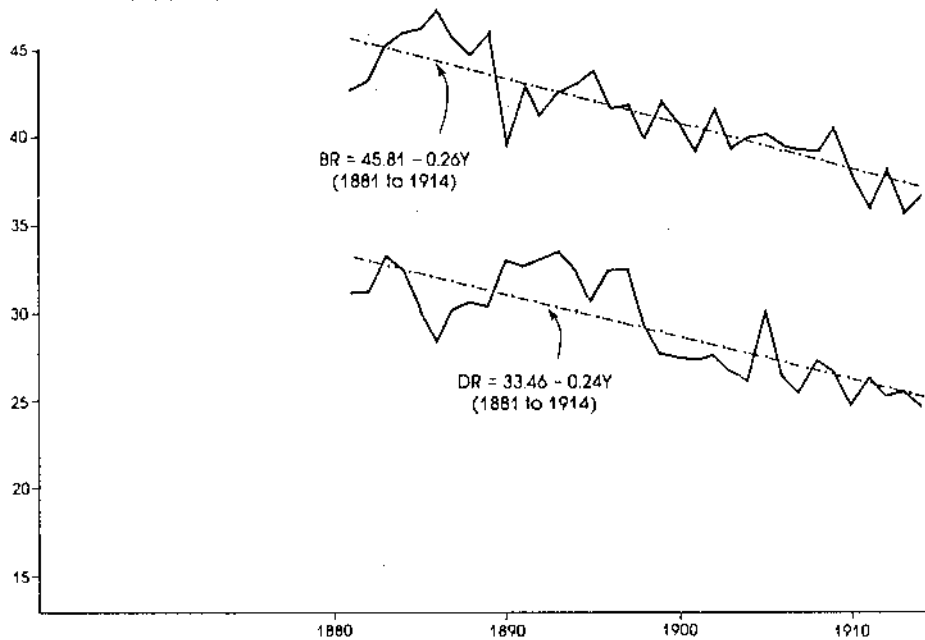


FIGURE 6 BULGARIA: RATES OF NATURAL POPULATION INCREASE

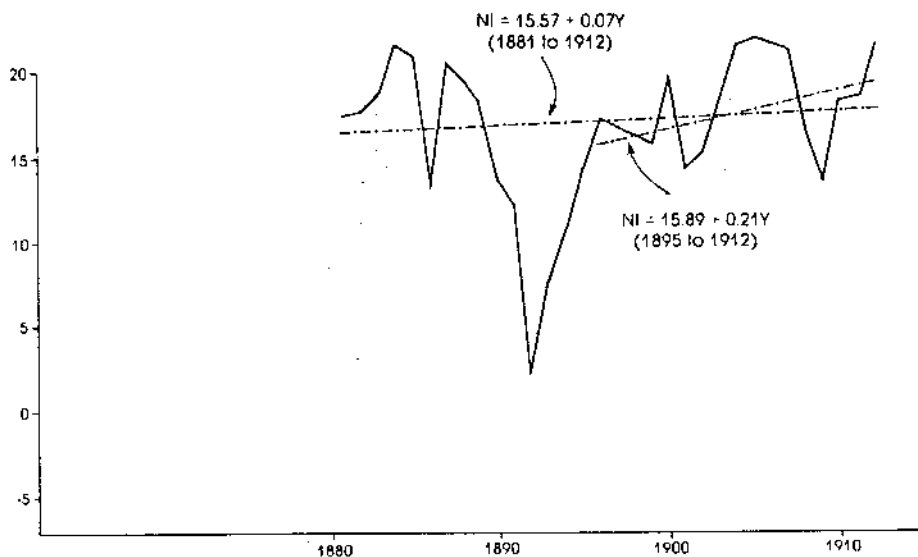


FIGURE 7 GREECE: RATES OF NATURAL POPULATION INCREASE

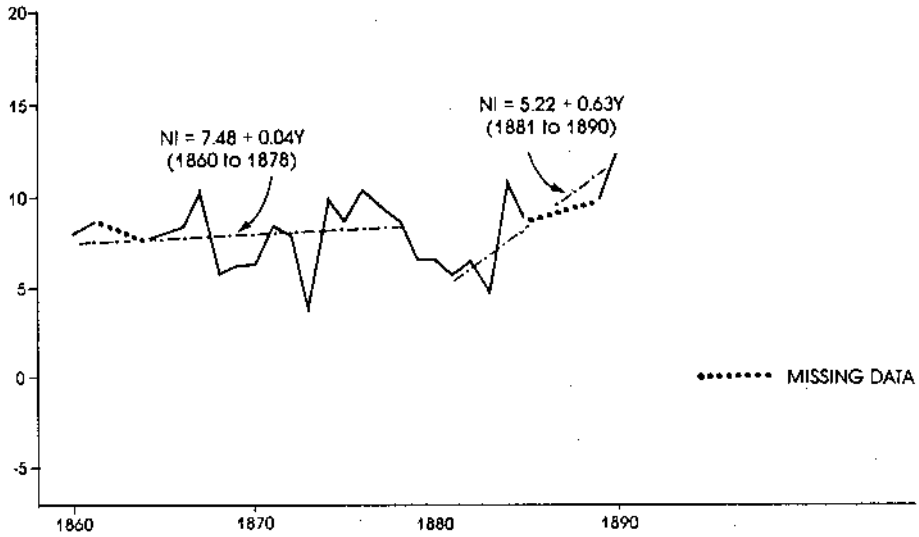


FIGURE 8 ROMANIA: RATES OF NATURAL POPULATION INCREASE

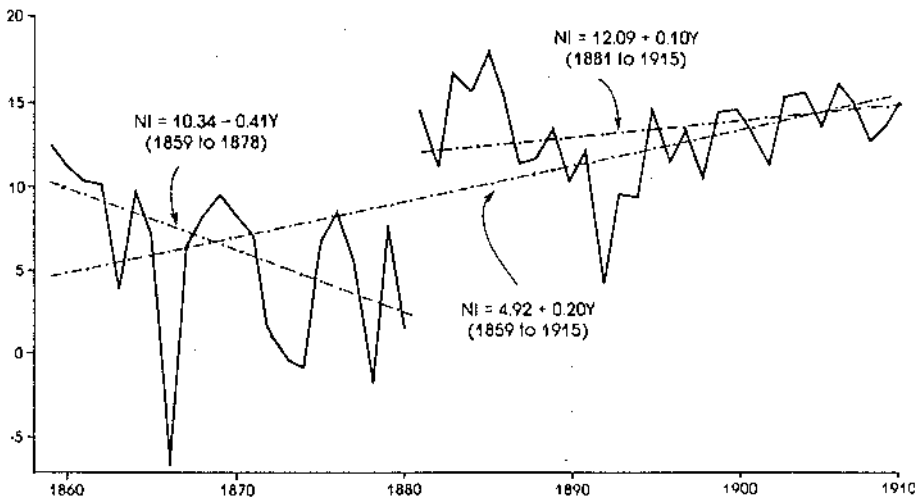


FIGURE 9 SERBIA: RATES OF NATURAL POPULATION INCREASE

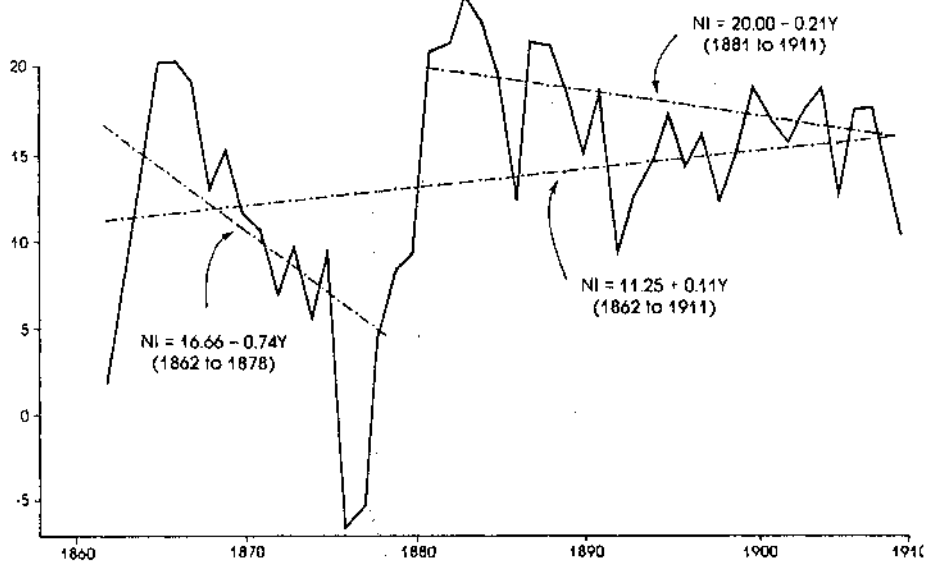


FIGURE 10 CROATIA-SLAVONIA: RATES OF NATURAL POPULATION INCREASE

