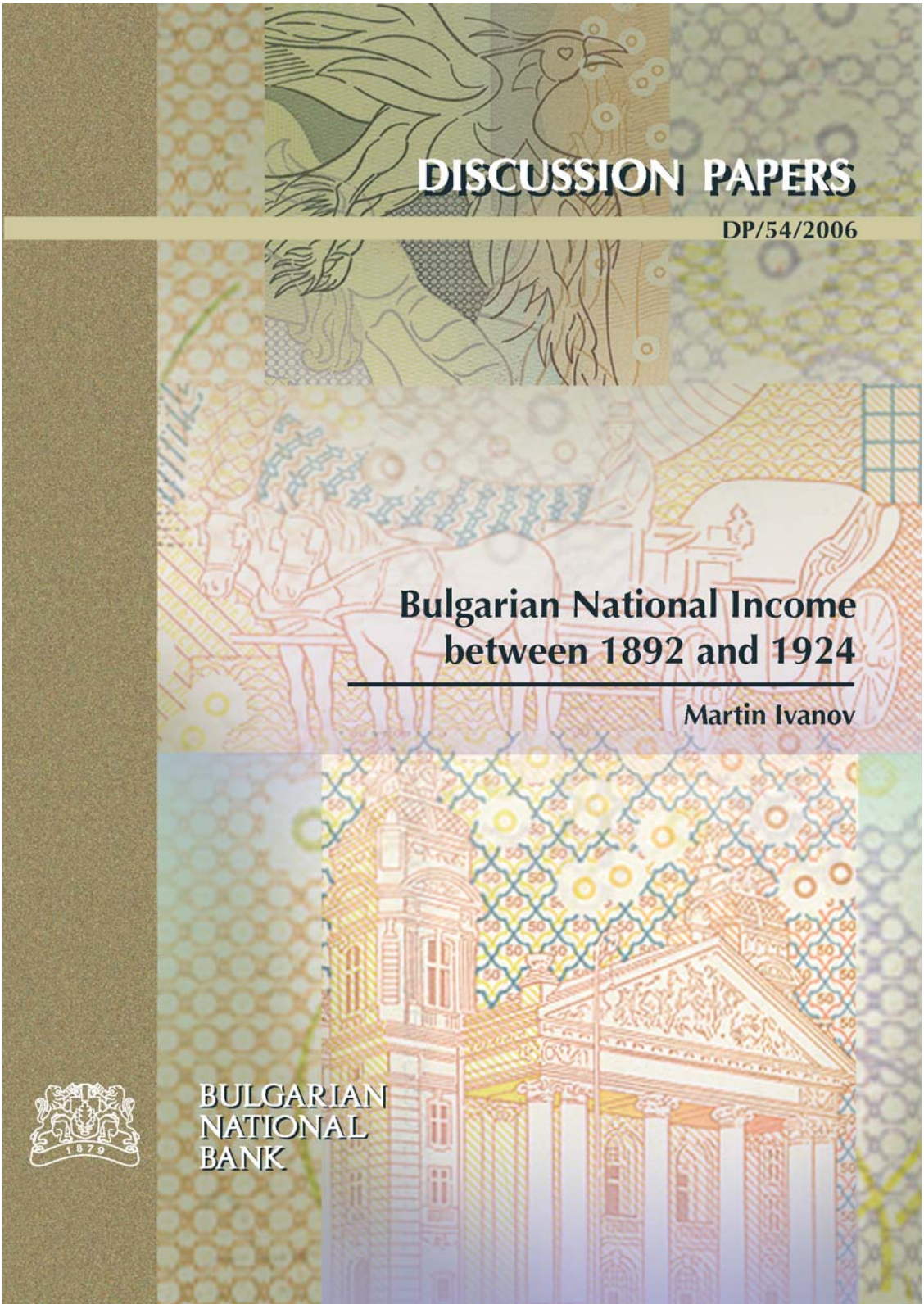
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FINANCE AND BANKING HISTORY

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Contents

SUMMARY.* For quantitative information about the Bulgarian economy before 1945 we are forced to rely on contemporary estimates, compiled for the period 1924–1945 by Asen Chakalov and two spot estimates, for 1892 and 1911, by Kiril Popov. These are, to reiterate, the only serious estimates of national income available for Bulgaria. The per capita figures for 1870, 1890 and 1900 presented by Maddison in his latest dataset would appear to be the product of *a priori* assumptions about 'minimum per capita growth rates'.

Given the sophistication of Chakalov's estimates and the desirability of chaining new data onto his estimate for 1924, my methodology consists in the first instance in replicating Chakalov's figure for 1924 on the basis of original sources and then using these sources to create a series of properly documented estimates for the years between 1892 and 1924.

To provide a meaningful comparison over the long run between 1892 and 1945 we must allow for prices changes, population changes and the impact of territorial redistribution in the course of the Balkan Wars and World War 1. Following Chakalov's procedure for the 1920s and 1930s I reject the suggestion that nominal national income figures should be deflated using the retail price index. In an economy in which the vast majority of the population were self-provisioning in food and in which heavy industrial protection distorted the urban price level upwards, such a procedure is likely to give rise to serious biases. Instead, I apply farm gate prices of 1911 to the physical output series for agriculture and industry. To arrive at incomes from employment data I apply wage and salary figures for 1911. Deflation by means of the retail price index is therefore confined to the incomes of civil servants, financial services and commerce, or just 13.6 per cent of the total estimate. Similar deflation technique was used for the recalculation of Chakalov's figures at current prices for 1925–1945. To make them compatible with my GNP estimates the same base year 1911 was applied for the later period as well. The improvised 'GNP deflator' was again preferred to the retail price index.

The results are striking. For 1924 I achieve a reassuring match with Chakalov's estimate. And using his methodology and the obvious official sources, I am also able to replicate almost completely Popov's nominal estimates both for 1892 and 1911.

The new GNP series indicates that Bulgarian economy did not achieve staggering results during the period under review – an average of 0.93 per cent on a yearly basis. True, there were subperiods in which the GNP was growing a bit faster (2.76 per cent between 1899 and 1905 and 2.16 per cent during 1905–1911). However, this is both a misleading (due to the low base of the crisis 1899) and unsustainable phenomenon. Including the population factor into the picture makes the situation even more dismal. In per capita terms Bulgaria achieved a negative growth rate of -0.32 per cent annually. Apparently, the economy fell behind the population increase, which turned to be a serious obstacle for switching over to a higher gear.

*The earlier version of the article was discussed at the Seminar on Economic (Social) Bulgaria (Sofia), the Economic History Society Conference (Reading) and at the First General Meeting of South-East Europe Monetary History Network (Sofia). I should express my gratitude to several people that supported my work in all the phases of this painstaking project: Adam Tooze from Jesus College, Cambridge, in dialogue with whom most of this text was written; Rositsa Rangelova from the Institute of Economics at the Bulgarian Academy of Sciences and Roumen Avramov from the Centre for Liberal Strategies. The author also thanks to the staff of Sofia State Archives, St. St. Cyril and Methodius National Library and the library of the National Statistical Institute for their dedicated assistance. As usual, the responsibility for the errors and misinterpretations remains ours.

Introduction

For more than six decades Bulgarian economic historiography successfully 'resists' the quantitive research temptations. That is why it is hardly surprising that cliometrics is not yet recognized as a legitimate member of the Olympic family of sports. Attempts for quantifications of history are extremely rare and by proxy are done and 'used' only within a purely economic domain. It was to be expected that during the era of centrally planned economy there would have been an institutional incentive for promotion of quantitive research. However, neither the Central Planning Agency nor other institutions have come with any estimates of economic aggregates like the national income, the NMP, the GNP or the GDP for the period before World War 2. Due to informational limitations Western colleagues also often omit Bulgaria (and most of what is now called South Eastern Europe) when compiling estimates for the pre-World War 1 period. As a result of this historians are forced to speak mainly by intuition about Bulgarian history converting into myths different historical episodes of the country's resent past. Furthermore, they have no proper tools for unbiased comparisons of various spots of Bulgarian economic development (not to mention cross-country comparisons). We still do not really know whether the Golden Decade (actually less than six prosperous years, 1905–1912) was as successful in economic terms as the second half of 1930s. Whether the exogenous shock of the three consecutive wars (1912–1919) retarded Bulgarian modernisation condemning it to a slow and painful reconstruction or the War of Independence (1877–1878) inhibited the growth potential of the economy cutting it from the vast market of the Ottoman Empire.[1]

The current research is not as ambitious as to pretend that it could offer the answer to all these questions. However, it chooses to follow different 'unconventional' lines. The intuitive narrative here would be commuted with an attempt to come up with GNP estimates for the period 1892–1924, which would allow us to create a more plausible hypothesis on Bulgarian modernisation endeavour. In so doing it will draw heavily on the few preceding GNP estimations (Kiril Popov, Asen Chakalov, Angus Maddison).

The paper is divided into five sections. The first two are intended to present the applied methodology and sources that have been used. The third and the fourth sections provide details on the actual calculations by sector of

[1] Cf. for example Palairet, M., *The Balkan Economies c. 1800–1914: Evolution Without Development*, Cambridge: CUP, 1997, p. 183–212; Palairet, M., *Bulgaria's Economic Development, 1828–1910*, a paper presented at the Seminar on Economic (Social) Bulgaria at the Centre for Liberal Strategies, Sofia, July 2005; Ivanov, M., What Would Have Happened If...: Constructing a No-liberation Counterfactual for Bulgaria (forthcoming).

economy both at current and at constant 1911 prices. The brief analysis of the results and the conclusions drawn are presented in the last section. However, I should underline the fact that the main aim of the paper is to display the way of compiling the GNP estimates, thus enabling their future examination and corrections. Due to space limitations, the more detailed analysis had to be postponed and it will be presented in a separate paper.[2]

I. Sixty Years after and a Quarter of a Century before Chakalov's Estimates: Methodology

The above-mentioned 'quantitive virginity' of Bulgarian historiography does not apply to contemporary interwar economic research. On the contrary, the following study will try to adhere to the excellent, even though somehow forgotten, tradition of the contemporary economists and statisticians like Kiril Popov, Prodan Kiranov, Asen Chakalov, Ivan Iliev, Hristo Madrov, George Toshev, to mention just a few names.[3] Thanks to their painstaking work Bulgaria was among the first ten countries in the world with an estimate of its national income[4] and is present, even though by only few spot estimates, in widely cited international GDP database compiled by Angus Maddison and his team from the Organisation for Economic Co-operation and Development. Maddison's *Monitoring of the World Economy* is nowadays generally acknowledged as the most authoritative historical statistical series. His pre-1945 estimates Maddison based on the work of two Bulgarian statisticians: Popov, the first chief of the Statistical General Directorate (for 1911) and Chakalov (for the period between 1924 and 1945)

[2]Ivanov, M., and Tooze, A., Agriculture. Population and National Economic Development in Bulgaria, 1892–1945 (forthcoming).

[3]Popov, K., *Economic Bulgaria,* Bulgarian Academy of Sciences, Sofia: 1915; Kiranov, P., The National Income of Bulgaria for 1929–1932, *in: Izvestia na Direktsiata na statistikata*, 1933: 1; Kiranov, P., *The National Income of Bulgaria for 1934–1944/1945* ; Chakalov, A., The National Income of Bulgaria for 1924–1935, in: *Trudove na statisticheskia institut za stopanski prouchvania pri Sofiaskia Drjaven universitet*, 1937: 2. 1–128; Chakalov, A., The National Income of Bulgaria for 1936–1938, in: *Bulgarsko stopanstvo*, 1940: 10, 147–149; Chakalov, A., *The National Income and Outlay of Bulgaria for 1924–1945,* Knipegraf, Sofia, 1946; Iliev, I., The National Income, in: *Bulgarski tjutjun*, 1939: 1–2, 18–23; Kiamilev, A., The Orientation of the Money National Income in Bulgaria, in: *Spisanie na Bulgarskoto ikonomichesko drujestvo*, 1938: 7, 393–423; Madrov, H., The National Income and the Economic Policy, in: *Stopanstvo i kultura*, 1941: 2, 13–16; Toshev, G., The National Income of Bulgaria, in: *Kooperativen podem*, 1930: 1–2, 1–5.

[4]In that respect Bulgaria 'overtook' core countries like Belgium and Canada and semiperipheral ones – Spain, Denmark, Finland, Sweeden as well as all the other SEE countries, Greece had its first estimate in 1921, Yugoslavia in 1927, Turkey in 1935 and Romania and Albania only in 1948). Cf. Studenski, P., *The Income of Nations*, Part One: History, New York: 1956, p. 156–7.

thus 'consecrating' their national income aggregates.[5] Maddison's 'seal of approval' is one of the key reasons for applying Chakalov's methodology in the current research paper.

Unfortunately we know very little about Popov's 1911 estimate. In his 'Economic Bulgaria' survey he only published the final results excusing himself with space limitations for not providing the proper calculations. In fact, Asen Chakalov gives a very detailed account of the method applied as well as of his calculations for the period 1924–1945. No wonder, Maddison appreciates highly Chakalov's estimates and utilizes them with practically no further corrections and improvements. Chakalov's study of national income in Bulgaria in the interwar period is a great gift to economic historians deserving attention beyond the specialist circles of the Balkan economic historiography. Chakalov had trained at the London School of Economics and was familiar with Western debates on national income accounting. His estimates were a major contribution to the development of national income accounting in the interwar period. Even though the method used by Chakalov is not completely consistent with the current System of National Acconunts – 1993, it allows us to construct properly documented estimates of Bulgarian real GNP.

Chakalov's definition of what he calls 'national income and outlay' is the 'aggregate of all net incomes produced and derived within the national economy during a given period of time, i.e., one year'. The national income thus comprises: 'incomes from newly acquired economic goods, the remuneration of all services rendered by individuals and legal entities, as well as interest on capital'.[6] It consists of:

1. the aggregate of the incomes of all individuals and legal entities within a given territory (the national economy);

2. plus the incomes of all individuals and legal entities resident within the country, received and derived from abroad, and

3. less the incomes earned and derived within the country, but transferred abroad.

As Rositsa Rangelova has shown, Chakalov's estimates correspond closely to modern definitions of gross national product (GNP) i.e. the total income of Bulgarian individuals and legal entities regardless of their location within or outside the national borders.[7] In contemporary terms Chakalov agreed with

[5]Maddison, A., *Monitoring the World Economy 1820–1992,* Paris: 2000; Maddison, A., *The World Economy: Historical Statistics,* Paris: 2003.

[6]Chakalov, A., *The National Income and Outlay*, p. 11.

[7]Rangelova. R. Bulgaria's National Income and Economic Growth 1913–1945, in: *Review of Income and Wealth No.* 46 (2000), 231–248.

Alfred Marshal that only the labour valued in money terms at the market could form GNP. As a result of this the work in the family like cooking, washing and cleaning could not generate income for the economy. But since Bulgaria was in large part a subsistence peasant economy, he made extensive provision for the inclusion of 'own consumption' of farm output.

Given the sophistication of Chakalov's estimates and the desirability of chaining new data onto his estimate for 1924, my methodology consists in the first instance in replicating Chakalov's figure for 1924 on the basis of original sources and then using these sources to create a series of properly documented estimates for the years between 1892 and 1921.

Following in Chakalov's footsteps, my reestimate of Bulgarian GNP is compiled using four different sets of sources and methods: for 47.6 per cent of the estimate for 1911 I can rely on agricultural and industrial output data multiplied by current prices with input costs deducted; state budget and business account data provide direct information on salary bills (9.3 per cent of the total in 1911); where neither of the former is available, Chakalov estimated annual incomes on the basis of employment census data multiplied by estimates for annual earnings (36.5 per cent); finally for the commercial sector he used a more approximate estimate, deriving incomes earned from retailing and wholesaling as a fixed percentage of total sales (6.6 per cent).

Due to the importance of subsistence farming and the many gaps in the statistical information available I was compelled to resort repeatedly to indirect methods for clarification of the value added received in different branches of the economy (cf. hunting – on the value of the exported hides and furs, or industry before 1900 – on the coal import and local production). In yet other cases the income has been assessed by an arbitrary estimate based on Chakalov's personal inquiries in the concrete branch (crafts, freelance, milk producers, *etc.*). However, the immense importance of agriculture and its relatively good coverage by the national statistics makes me confident that such bypasses and estimates could not dilute substantially the final GNP results.

A few words should also be mentioned about the criteria that are used for determining the years of the six spot estimates. Both 1892 and 1911 would allow me to compare the results with the figures calculated by Kiril Popov.[8] Furthermore, 1892 is the first year with enough statistical information on the arable agriculture. 1899, 1905 and 1911 are supposed to present three different phases of the economic cycle prior to World War 1. Due to the lacking data on grain harvest I was compelled to resort to 1899 and not to

[8]Popov, K., *Economic Bulgaria*, p. 459.

1900, which in many ways seems a much more logical year. The choice in favour of 1905 was determined by the population, occupations, dwellings and livestock censuses conducted that year and the 1904 inquiry on industrial undertakings. 1921 is among the first 'normal' postwar years for which we can also rely on the industrial census as well as on the population, dwellings and livestock censuses (conducted in 1920). The replication of Chakalov's figure for 1924 was aiming at a general check on his final results, which was expected to, validate my GNP series and certify the consistency of the applied methodology.

Exactly 60 years after the publication of Chakalov's study on Bulgarian national income the current paper would try to translate into his own methodology the available statistical information about the two and a half decades that preceded his estimates. It would be the fourth recent GNP estimate in the South East European region (after those of Vedal Eldem, Sevket Pamuk and George Kostelenos[9]) that would attempt to deconstruct the myth of the 'statistical iron curtain' falling east of Vienna.[10]

II. 'Correct Sum of Incorrect Figures'? Sources

Official sources published by the General Directorate of Statistics (GDS) have always been preferred for compiling the GNP estimates. Besides its well-known Statistical Yearbooks (starting from 1909 onwards but covering the period after early 1890s retrospectively) the current research has drawn heavily on all the available GDS series – for external trade, prices, state railways, co–operative societies, population, occupation, livestock, dwellings, education and industry. Finally, additional information was taken from the 'Trimestrial Journal' and the 'Monthly Bulletin' of the statistical office.

The estimates of economic sectors and branches that are omitted or poorly covered by the official sources were constructed on the basis of various semiofficial publications – the 'Bulgarian National Bank Bulletin', the Journal of the Union of Popular Banks, the 'Co-operator' newspaper, the 'Darjaven Vestnik', the 'Banking Review' journal, the 'Commercial Lighthouse' newspaper, the Annual Reports of the BNB, Bulgarian

[9]Eldem, V., *Osmanly Ympartorludu'nm Yktisadi Partlary Hakkynda bir Tetkik* [Research on the Economic Conditions of the Ottoman Empire] Turk Tarih Kurumu Basymevi: Ankara, 1994; Pamuk, S., Estimating Economic Growth in the Middle East since 1820, in: *The Journal of Economic History* (forthcoming); Kostelenos, G. C., *Money and Output of Greece, 1858–1938.* Centre for Planning and Economic Research: Athens, 1995. Special thanks to Sophia Lazaretou and to G. Kostelenos for providing the author with the estimates of the Greek GDP in the period between 1858 and 1938.

[10]Good, D., and T. Ma, The Economic Growth of Central and Eastern Europe in Comparative Perspective, 1870–1989, in: *European Review of Economic History*, 1999: 2, p. 111., O'Rourke, K., and J. Williamson, *Globalisation and History: The Evolution of a Nineteen-century Atlantic Economy*. The MIT Press, Cambridge, MASS: 2000, p. 18.

Agricultural Bank, Bulgarian Central Co-operative Bank and various other private financial institutions (published or preserved at the Sofia State Archives. Last but not least, the wage bills and figures for public constructions were taken from the central and municipal governments' budgets.

When neither of the former was available I was compelled to resort to various indirect ways of estimating the incomes of some sectors or indicators (rents prior to 1911, municipal and regional revenues and expenditures from 1921 onwards, hunting, seasonal migrants and emigrants, interests on agricultural loans, *etc.*). In such cases contemporary qualitative estimates were used for filling in the gaps of data. The particular sources by sector and branch are presented in Table A of the Appendix.

III. Calculation of the National Income in Current Prices

1. Arable Agriculture, Stockbreeding and Additional Rural Activities

Arable agriculture (23.2 per cent of the total in 1911) was calculated by the output volumes and current prices data provided by the national statistics, net of the reuse within agriculture itself for sowing and feeding (ranging between 35 and 45 per cent for the various fodder cereals) but inclusive of farmers' domestic consumption. The calculation of value added in stockbreeding (16.7 per cent) rests on the number of beasts in key census years and average milk and meat yields applied by Chakalov but somewhat decreased since the process of slowly growing yields should be taken into account. For example for 1924 Chakalov reckons 1000 litres of milk *per* cow while for 1892 I assum 900 litres. The same technique is applied to wool and hair production. Consumption of eggs (0.8 per cent of the total in 1911) is included in the transport statistics.

The production of forestry and fishing (3.7 per cent) is derived from the official figures published by the General Directorate of Statistics. The output of home industry (9.2 per cent) is calculated by adding the number of females aged between 16 and 60 years and the average number of days spent for housework based on peasant account books and contemporary surveys. Similar procedure is applied to servants (0.2 per cent). Implicit rental income of both rural and urban dwellings (14 per cent) is based on census information about the number of buildings and the yearly data on rents. Following Chalkalov's methodology, to reach the net value added of agriculture, seasonal migrants' remittances are also included and interests paid on agricultural loans deducted.

The results of the respective calculations are presented in the Appendix.

2. Industry and Crafts

Thanks to the protective policy of the Bulgarian government we possess fairly good statistical information about the production of industry and mining (4 per cent of the total in 1911). Value added is arrived at in the normal way by deducting input costs from sales figures. Only for 1892 and 1899 I was compelled to use coal consumption and the number of factories to arrive at a reasonable estimate of the industrial output.

For the sectors of construction and crafts the situation with the source is worse. Figures for public construction were taken from central and local government budgets. For private construction and the craft sector (6.2 per cent) I follow Chakalov in relying on census figures for the number of craftsmen and builders as displayed in the censuses, multiplied by the figures for annual earnings for masons, masters, journeymen and apprentices.

3. Transport and Communications

Due to the significant presence of the state in the transport and communication sector (2.3 per cent) I have at my disposal very detailed data on their income net of working expenses. The only difficulty was encountered in estimating the incomes of transport companies and services. For the cart transport and porters at sea and river ports incomes were obtained by multiplying the occupation census data on the number of employed people by the estimated salaries.

4. Turnover of Goods and Commerce

The relatively small percentage of marketisation of the economy creates a serious problem for the calculation of commercial incomes (6.6 per cent of the total in 1911). Following Chakalov's suggestion I arrived at a proxy on the basis of an estimate of agricultural goods sales and the value added of various industrial branches and imports. The flow of traded agricultural goods is approximated by summing up the value of exports and the value of commodities transported by the railways. The industry and crafts figure is arrived at in the same way as that of industrial production. To avoid double counting, industrial output is netted of local raw material consumption and of excises and taxes paid. The income of commerce is taken to be a fixed 15 per cent share of this total sales figure.

5. Financial Services Sector

Due to the significant state involvement the financial services sector (2.2 per cent), enjoys a fairly good statistical coverage. Only for private banking or insurance institutions (2 per cent) I was compelled to resort to their individual

profit and loss statements published in the Darjaven Vestnik or preserved in the archives.

6. Freelance Professionals and Services

Aggregate incomes of freelance professionals and services (2.2 per cent) were estimated by applying estimated salary levels to census data. For lack of alternative information, the salary levels were derived from masons wages, adjusted for wage differentials and the longer working year of white-collar employees.

7. Urban Dwellings

The implicit rental income of urban dwellings is based on census information about the number of buildings and the yearly data on rents.

8. State and Municipal Civil Servants and Pensions

Earnings from state employment (4.8 per cent of total in 1911) by contrast could be taken directly from budget data on wage bills and public works of national and local government as well as of autonomous state agencies.

9. Summery of GNP Estimates at Current Prices

Applying Chakalov's methodology to the obvious time series taken in the main from official sources I achieved a reassuring match with his estimate for 1924. In addition and perhaps more surprisingly I was also able to replicate Popov's nominal estimates both for 1892 and 1911 as well as to add new data points for 1899, 1905 and 1921.

Table 1

IVANOV – TOOZE'S (IT) VS. POPOV'S GNP ESTIMATES (1892 AND 1911) AND IT VS. CHAKALOV'S (1924) IN NOMINAL TERMS

Estimates	Author's estimate, per cent of other estimates
1892, Kiril Popov	+4.82
1911, Kiril Popov	+0.22
1924, Asen Chakalov	-3.53

Source: see the text.

IV. GNP and Constant Prices and Territory

To provide a meaningful comparison over the long run between 1892 and 1945 we must allow for price changes, population changes and the impact of territorial redistribution in the course of the Balkan Wars and World War 1.

Population data are taken from obvious sources and it can be assumed that they are relatively uncontroversial. Following Chakalov's procedure for the 1920s and 1930s I reject Palairet's suggestion that nominal national income figures should be deflated using the retail price index.[11] In an economy in which the vast majority of the population were self-provisioning in food and in which heavy industrial protection distorted the urban price level upwards, such a procedure is likely to give rise to serious biases. Instead, I apply farm gate prices of 1911 to the physical output series for agriculture. For lack of subsectoral data, industrial output is deflated by an unweighted average of the available wholesale prices for the different lines of industrial production. To arrive at incomes from employment data I apply wage and salary figures for 1911. Deflation by means of the retail price index is therefore confined to the incomes of civil servants, financial services and commerce, or just 13.6 per cent of the total estimate.

Adopting this more sophisticated deflation procedure turns out to have major implications since by comparison with the retail price index cited by Popov and Palairet, which rises by a surprising 41 per cent between 1892 and 1911, my improvised 'GNP deflator' increases by only 12 per cent. This discrepancy is largely accounted for by the heavy weight of farm gate prices applied to agricultural output the majority of which was directly consumed by households.

Table 2

INDICES, 1911=100

	1892	1899	1905	1911	1921	1924
Retail Price Index	70.80	67.55	80.48	100	2388.59	3223.24
Wage Indices						
Wage index – daily, labourer	82.11	67.89	76.15	100	1848.17	2972.48
Wage index – mason	73.46	62.20	69.97	100	1776.94	3313.40
Average wage index	77.78	65.04	73.06	100	1812.55	3142.94
Rent ndex	70.80	67.55	80.48	100	547.40	863.71
Industrial prices index	78.88	90.49	92.65	100	2819.48	2924.85
Transport index	65.91	63.36	81.02	100	602.51	1569.10

Source: see the text.

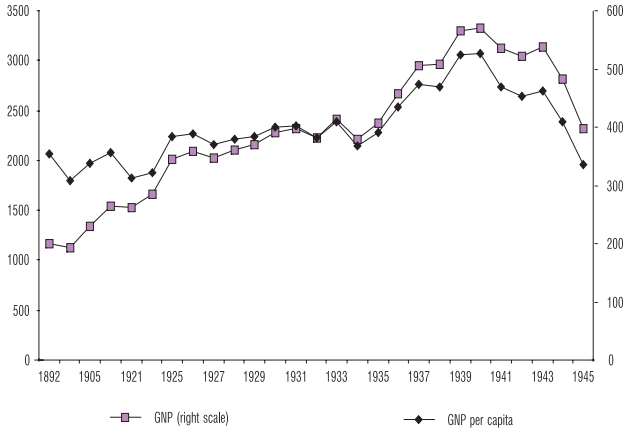
[11] Palairet, M., *The Balkan Economies c. 1800–1914: Evolution without Development,* Cambridge, 1997.

To connect to 1924 data I must also allow for territorial changes. As a result of the two consecutive Balkan Wars in 1912 and 1913, and despite its involvement on the losing side in World War 1, by 1919 Bulgaria managed to increase its national territory as a whole by roughly 6 per cent. However, the initial gains in the First Balkan War were offset at the Neuilly Peace Conference of 1919 by the painful loss of Dobrudja, the most fertile agricultural region. In consequence, Bulgaria ended its period of warlike activity having suffered a net loss of cultivated land of 6.81 per cent. Given the importance of agriculture to the overall estimate and the correlation between settlement and agricultural activity, I adjust the entire estimate of national income by this factor.

A similar deflation technique was used for the recalculation of Chakalov's figures at current prices for 1925–1945. To make them compatible with my GNP estimates, the same base year 1911 was applied for the later period as well. The improvised 'GNP deflator' was again preferred to the retail price index.

Graph 1

GNP AND GNP PER CAPITA IN CONSTANT PRICES AND TERRITORY, 1892–1945



Source: see the text.

V. Analysis of the Results

As indicated by the first two series of Table 3, the Bulgarian economy did not achieve staggering results during the period under review – an average of 0.93 per cent on a yearly basis. True, there were subperiods in which the GNP was growing a bit faster (2.76 per cent between 1899 and 1905 and 2.16 per cent between 1905 and 1911). However, this is both a misleading

(due to the low base of the crisis 1899) and an unsustainable phenomenon. Including the population factor into the picture makes the situation even more dismal. In per capita terms, Bulgaria achieved a negative growth rate of -0.32 per cent annually. Apparently, the economy fell behind the population increase, which turned out to be a serious obstacle to switching over to a higher gear. In that respect lines 1 and 2 of the table confirm the qualitative narratives of both the contemporaries and the historiography of the overpopulation and underemployment in Bulgarian agriculture.

Table 3

AVERAGE GROWTH RATES IN CONSTANT PRICES AND TERRITORY, PER CENT

	1892–1899	1892–1911	1892–1924	1899–1905	1905–1911	1911–1921	1921–1924	1911–1924
1. GNP	-0.51	1.30	**0.93**	2.76	2.16	-0.14	2.69	0.52
2. GNP per capita	-2.10	0.02	**-0.32**	1.44	0.84	-1.37	0.84	-0.83
3. Population	1.38	1.28	**1.14**	1.45	1.39	1.08	1.90	1.22

Source: author's calculations.

My estimates allow us to conduct a sectoral analysis of the sources of this stagnation.

What the table reveals is the divergent experience of the agricultural and non-agricultural economies. In agriculture, short-term fluctuations were still largely determined by climatic factors. By contrast, industry was used as a testing ground for policy experimentation. Prior to 1913 there was certainly little evidence that the industrial protection policy created the necessary conditions for a successful 'take off' in the secondary sector. During the five-year period after the National Industry Encouragement Act was enforced in 1894 industry achieved a negative growth rate of -5.4 per cent. It was not before mid-1900s when it embarked upon a positive growth. It should be noted, however, that even then the results were far from impressive. More important, prior to 1914 the primary sector provides no impulses for per capita growth. Bulgarian agriculture did manage to keep pace with population growth. However, without clear signs of modernisation (agricultural machinery, fertilizers) and structural transformation (higher value added crops), this was achieved through ***extensive*** growth. Between 1889 and 1911 according to national statistics, the area under grain increased by 157 per cent. Nor was this necessarily inferior marginal land since following the displacement of nearly 300, 000 Turks the Bulgarian peasantry were able to appropriate the fertile low-lying areas. This one-off extension of agricultural land is clearly crucial to explaining the population boom. But, it also explains Bulgaria's predicament in the interwar period, when extensive growth reached its limit.

According to the sectoral data, the fastest growing sector was the financial one, which experienced an impetuous growth resulting into a four-time increase in per capita terms on the eve of World War 1. Surprisingly, the growth is even faster between 1892 and 1905, i.e. before the foreign banks entry into the market. Before 1906 when German, French, Austrian and Belgian capitals were invested in Bulgarian banking sector, its dynamics was completely dictated by the two public financial institutions – the National Bank and the Agrarian Bank. The other two branches with a serious state presence (civil servants and transport and communications) achieved a similar fast growth rate. In the light of these findings the Gerschenkronian hypothesis[12] of the passive role of the Bulgarian state does not withstand scrutiny. In his chapter on Bulgarian backwardness, Gerschenkron was clearly right in his supposition that there was no 'growth spurt' in Bulgaria before 1914, but it was not for want of effort on the part of the state.

Table 4

GNP BY SECTORS OF ECONOMY, CONSTANT 1911 PRICES, TERRITORY AS OF 1920s, 1892–1924

A. Sectors of economy, million levs	1892	1911	1921	1929	1939
Agriculture	758.3	668.5	853	955.9	935.7
Industry and crafts	120.4	124.5	118	158	177
Transport and communications	13.6	13.4	20.3	35.4	50.3
Commerce	64.5	61.1	75.7	108	95
Credit and insurance	9.6	26.7	43	67.4	34.9
Freelance professions	34.9	40.5	31.5	33.8	39
Urban dwellings	104.9	115.2	131.5	110.9	134.7
Civil servants	55.7	71.7	71.7	75	56.1
Total national income	1162.4	1122	1344.8	1544.7	1523
B. Sectors of economy, per cent of GNP					
Agriculture	65.25	59.59	63.43	61.88	61.44
Industry and crafts	10.36	11.10	8.78	10.23	11.63
Of that: industry and mining	1.03	1.18	1.49	4.12	2.18
Transport and communications	1.18	1.20	1.52	2.29	3.30
Commerce	5.55	5.45	5.62	6.99	6.24
Credit and insurance	0.83	2.38	3.20	4.37	2.30
Freelance professions	3.01	3.61	2.34	2.19	2.56
Urban dwellings	9.03	10.27	9.78	7.18	8.85
Civil servants	4.79	6.40	5.33	4.86	3.69

Source: author's calculations.

[12]Gerschenkron. A. *Europe in the Russian Mirror: Four Lectures in Economic History,* Cambridge, 1970, p. 126; Gerschenkron, A., *Economic Backwardness in Historical Perspective: A Book of Essays*, Belknap Press: Cambridge, MASS, 1962, pp. 232–233.

As indicated in tables 3 and 4, the exogenous shock of a nearly decade long military campaigns (three consecutive wars – the First and the Second Balkan Wars and World War 1) appears surprisingly small. As a result of the huge contribution of arable agriculture to Bulgarian GNP, national income fell by only 1.4 per cent between 1911 and 1921. In per capita terms, however, the picture looks different. Compared with 1911 in 1921, the slump was 14 per cent in 1924. The influx of over 300,000 refugees and the unabated demographic pressure were actually the factors determining the dynamics in the economy. These findings too are inconsistent with Maddison's Bulgarian GDP series.

Table 5

DIFFERENT ESTIMATES FOR THE WAR DECADE IMPACT ON BULGARIAN GNP GROWTH, PER CENT

	GNP decrease 1911–1921, per cent	GNP per capita decrease 1911–1921, per cent
Maddison (2000 and 2001)	30.17	39.32
Maddison (2003)	31.27	40.74
Ivanov (2006)	1.42	13.65

Source: Maddison (2000, 2001 and 2003) and author's calculations.

Maddison's 1911 estimate was based on Popov's work, while the one for 1924 was derived from Chakalov. But it is unclear how Maddison linked his series. The interpretative consequences are serious, however, Maddison's estimates, with their exaggerated prewar growth trend, attach a disproportionate importance to the war – especially when Bulgaria is compared to Greece. By contrast, my revised GNP figures deemphasize the war. It was not the exogenous factors, such as the war shock or even the Great Depression, that retarded Bulgaria, but the unsuccessful structural transformation of agriculture. Indeed, the relative immunity of real output to exogenous shocks is a testimony in itself to the depressing dominance of the self-sufficient arable agriculture in Bulgarian economic activity.

And this brings me to my final point, the balance of priorities in economic policy. In the 1890s and 1900s, the pro-industrialist camp won the industry – agriculture debate decisively. In mid-1890s it managed to install an import-substitution industrial model. At the same time agriculture was left aside and the public interest in its transformation emerged not before the interwar period when the agrarian party formed a government. At the same time, the slow and painful modernisation of the Bulgarian village limited the growth capacity of the inward-orientated industry. The result was depressed economic growth and decreasing per capita income, which widened the gap between Bulgaria and the Western European industrial core.

By the 1930s the emphasis in economic policy had significantly changed in favour of agricultural modernisation. And the comparison of the upward slopes of the economic cycle (1905–1911 and 1934–1940) is very telling. During six consecutive good years before World War 1, the economy achieved 2.16 per cent on an annual basis (0.84 per cent in per capita terms), by comparison with 5.58 per cent in the 1930s growth phase (5.02 per cent per capita).

Table 6

GROWTH RATE OF SELECTED COUNTRIES FROM THE EUROPEAN PERIPHERY IN LATE-1930s

	GNP growth, per cent	GNP per capita growth, per cent
Denmark (1934–1939)	2.19	1.46
Finland (1934–1939)	2.59	1.76
Ireland (1934–1940)	0.74	0.80
Portugal (1934–1940)	-0.37	-1.49
Spain (1934–1940)	-2.31	-3.27
Bulgaria (1934–1940)	**5.58**	**5.02**
Czechoslovakia (1934–1937)	5.36	5.08
Greece (1934–1939)	2.39	1.65
Hungary (1934–1940)	1.91	1.39
Poland (1934–1938)	10.01	9.00
Romania (1934–1938)	2.98	1.61
Yugoslavia (1934–1939)	4.48	3.33

Source: Maddison (2003) and author's calculations for Bulgaria.

During late-1930s with the population explosion over and with the transformation of agriculture well under way (structural change into cash crops, imports of fertilizers and agricultural machinery, research in agronomics and knowledge dissemination, increased literacy levels, *etc.*) the Bulgarian economy achieved the second highest growth rate in the European periphery. Furthermore, the only country that overtook Bulgaria was not a typical peasant economy.

Bulgaria's idiosyncratic experience highlights the difficulties of the agricultural periphery in the pre-1914 period and singles out the agricultural transformation as a key growth factor. Had the countries east of Vienna been faster and more persistent in their efforts in modernising the primary sector, they would have been much better positioned to achieve faster and sustainable economic development.

Appendix

Table A

SOURCES

Economic sector/branch	Sources
1. Arable agriculture	
Cereals	SYBBK
Industrial and oil plants	SYBBK
Pulse	SYBBK
Vegetables	SYBBK
Fodder	SYBBK, Statistical Bulletin of Bulgarian Railways and Ports
Fruit and brandy	SYBBK, Act on Excise Duties and Brandy Brewing – Darjaven Vestnik, XXV, No. 287, 30–12–1903; Act on the Way of Assessing the Materials for Brandy Production – Darjaven Vestnik, XXX, No. 163. 25–7–1908
Vineyards	SYBBK, Popov, p. 195–197
Rose gardens	SYBBK
Melon fields	SYBBK
Interest on agricultural credits	See *Banks and credit* of this table
seasonal migrants and emigrants	Mishaikov, D., The Population of Bulgaria, Sofia, 1920, pp. 175–177; Bajzharov, P., The External Migration of Bulgaria since the Liberation to 1933, in: Statistical Bulletin of GDS,1934: 5, 235; Danailov, G., Study on the Demography of Bulgaria, Sofia, 1930, pp. 142–146, 336–337; Tabakov, S., The Emigrants' Question: Contribution to the Bulgarian Emigration, Tsarigrad, 1911, pp. 179–180; Hinkov, H., Gardeninig and the Gardeners' Societies from Turnovo Region, SBID, 1900: 2–3, pp. 150–165; Hinkov, H., Gardening (bahchevandjiluk) in Turnovo in Connection with Our Railways, SBID, 1903: 7, pp. 465–473
Milk	Census of Livestock
Meat	Census of Livestock, SYBBK for slaughtered animals between 1921–1924; Chakalov
Eggs	SYBBK, Statistical Bulletin of Bulgarian Railways and Ports
Wool and hair	SYBBK, Statistical Bulletin of Bulgarian Railways and Ports
Apiculture	Census of Livestock, Popov, pp. 270–271
Fishing	First Fishermen Convention, Ruse, 1910, pp. 49, 67–68; Jordanov, M., General Review of Our Fishing Economy (from an Economic and Social Point), Stopanska Misal, 1933: 2, pp. 82–100; Darjaven Vestnik (for 1899 and 1905)
Hunting	SYBBK, Chakalov

Home Industry	Census of Livestock, Popov, K., Kasi-Lak Village (An Attempt at a Statistical and Economic Monograph), Sofia,1909; Chakalov
Rural dwellings	General Results from the Dwellings Census, SYBBK, Mihailov, N., Expensive Life, Civil Servants' Salaries and Wages, SBID, 1923: 4–5, pp. 191–199; Mutafov, H., The Housing Question and the Housing Policy, SBID, 1909: 7– 8, pp. 465 – 487
Forestry	SYBBK, Chakalov
Servants	Results from Population Census, v. 4, Occupational Census
2. Industry and crafts	
Crafts	Results from Population Census, v. 4, Occupational Census; Chakalov
Construction	Results from Population Census, v. 4, Occupational Census; Chakalov, State Budget
Protected large industry	SYBBK; Yablansky, D., What Should Be Bulgarian Economic Policy, SBID, 1901: 4–5, pp. 205–249, Investigation 1904, 1909, 1921, BNB Bulletin, Chakalov
Mining and Quarrying	Zagralov, I., The State Mines in Pernik, SBID, 1911: 10, p. 894–945; The Sixty-year Anniversary of the Mines in Pernik; Chakalov; Balance sheets of private mining companies from Darjaven Vestnik, state archive and Jordanov
Petty industry	Results from Population Census, v. 4, Occupational Census; Chakalov
3. Transport	
Railways	Statistical Bulletin of Bulgarian Railways and Ports, SYBBK, State Budget
Post, telegraphs and telephones	Statistical Bulletin of Bulgarian Railways and Ports, SYBBK, State Budget, SYBBK, State Budget, the Sixty-year Anniversary of the Post, Telegraphs and Telephones
Water communications	Annual Reports of Bulgarian Commercial Shipping Company
Transport services	Results from Population Census, v. 4 Occupational Census; Chakalov
Transport companies	Balance sheets of private transport companies from Darjaven Vestnik, state archives and Jordanov
4. Commerce	Results from Population Census, v. 4, Occupational Census; Statistical Bulletin of Bulgarian Railways and Ports; Bulgarian Trade with Foreign Countries; SYBBK, Chakalov
5. Banking and credit	
Private banks	Balance sheets from Darjaven Vestnik, state archives, Jordanov, Banking Review, Commercial Lighthouse and BNB Bulletin
Popular (Raiffeisen) banks	Statistics of the Co-operative Societies in the Bulgarian Kingdom; Commercial Lighthouse

Credit co-operative societies	Statistics of the Co-operative Societies in the Bulgarian Kingdom; Co-operator
State Banks	Annual Reports of BNB, BAB and BCCB; SYBBK
Incomes from capitals	Balance sheets from Darjaven Vestnik, state archives, Jordanov, Banking Review, Commercial Lighthouse and BNB Bulletin; Statistics of the Co-operative Societies in the Bulgarian Kingdom; Co-operator; Annual Reports of BNB, BAB and BCCB; SYBBK; History of the Financial and Credit System, v. 2, Sofia, 1983 p. 389
Insurance companies	SYBBK, Balance sheets from Darjaven Vestnik, state archives, Jordanov, Banking Review, Commercial Lighthouse and BNB Bulletin; History of the Financial and Credit System, v. 2, Sofia, 1983, p. 389
6. Freelance professionals and services	
Freelance professionals	Results from Population Census, v. 4, Occupational Census; Chakalov
Hotels, pubs, restaurants	Results from Population Census, v. 4, Occupational Census; Chakalov
7. Urban dwellings	SYBBK, General Results from the Dwellings Census, Mihailov, N., Expensive Life, Civil Servants' Salaries and Wages, SBID, 1923: 4–5, pp. 191–199; Mutafov, H., The Housing Question and the Housing Policy, SBID, 1909: 7–8, pp. 465–487
8. Civil servants	
State civil servants	State Budget; Civil Servants Statistics
Municipal Civil Servants	SYBBK, Vasiliov, T., Budgets of Urban Municipalities for 1911, SBID, 1912: 1, pp. 7–19; Vasiliov, T., Regional Budgets for 1900, SBID, 1899: 11–12, pp. 494–500; Stoyanov, H., Municipal Finances, SBID, 1907: 2–3, pp. 81–148
Funds and autonomous state agencies	SYBBK, State Budget
Pensions	SYBBK, State Budget
State and municipal undertakings	SYBBK, State Budget; Vasiliov, T., Budgets of Urban Municipalities for 1911, SBID, 1912: 1, pp. 7–19; Vasiliov, T., Regional Budgets for 1900, SBID, 1899: 11–12, pp. 494–500; Stoyanov, H., Municipal Finances, SBID, 1907: 2–3, pp. 81–148

Source: see the text.

Notes:

SYBBK – Statistical Yearbook of Bulgarian Kingdom

SBID – Spisanie na Bulgarskoto ikonomichesko drujestvo (a magazine of the Bulgarian Economic Society)

Table B

INCOME FROM CEREALS, 1892–1924

Crop	Output	Sowing seeds	Deduction 35–45 per cent	Net output	Farm gate price	Income
measure	kg	kg	kg	kg	levs/kg	levs
	1	2	3	4	5	6
1892						
Wheat	1111108900	351045373	0	760063527	0.1408	107016945
Rye	226078100	79295876	0	146782224	0.1159	17012060
Mixed cereals	90049200	42159883	0	47889317	0.0339	1623448
Barley	275508800	72850335	91196309	111462156	0.0879	9797523
Oats	94166500	24176303	31495588	38494608	0.0965	3714730
Spelt	14865300	4865666	4499835	5499799	0.0856	470783
Millet	23373700	1138586	10005801	12229313	0.0958	1171568
Maize	608603300	22545968	205120066	380937266	0.0993	37827070
Rice	7400000	813952	0	6586048	0.478	3148131
Buckwheat	16100	4313	0	11788	0.1443	1701
Total	**2451169900**	**598896253**	**342317601**	**1509956046**		**181783959**
1899						
Wheat	588664100	185983398*	0	402680702	0.1616	65073202
Rye	118254200	41477128	0	76777072	0.1240	9520357
Mixed cereals	75133800	35176684	0	39957116	0.1429	5709872
Barley	144789200	38285317	47926747	58577136	0.1166	6830094
Oats	83730600	21496992	28005124	34228485	0.0924	3162712
Spelt	8113900	2655818	2456137	3001945	0.0913	291789
Millet	15116500	736359	6471064	7909078	0.0913	722099
Maize	519763500	19254860	175178024	325330616	0.1024	33443987
Rice	4486600	493497	0	3993103	0.4205	1679100
Buckwheat	39900	10688	0	29213	0.1350	3944
Total	**1558092300**	**345570738**	**260037096**	**952484466**		**126437155**
1905						
Wheat	951163800	203952400*	0	747211400	0.1452	108495095
Rye	180666400	34106300	0	146560100	0.1071	15696587
Mixed cereals	107148000	23363300	0	83784700	0.1223	10246869
Barley	248878500	39348200	94288635	115241665	0.1040	11985133
Oats	136160200	25766500	49677165	60716535	0.0968	5877361
Spelt	8700700	1601000	3194865	3904835	0.0977	381502
Millet	8611600	268300	3754485	4588815	0.1217	558459
Maize	460806700	12501900	156906680	291398120	0.1131	32957127
Rice	4943300	468100		4475200	0.4788	2142726
Buckwheat	5600	1100		4500	0.0950	428
Total	**2107084800**	**341377100**	**307821830**	**1457885870**		**188341286**
1911						
Wheat	1314381200	237268200	0	1077113000	0.1622	174707729
Rye	228413900	41134900	0	187279000	0.1236	23147684
Mixed cereals	110704400	2711400	0	108533000	0.1410	15303153
Barley	269766500	41819700	102576060	125370740	0.1195	14981803
Oats	151263700	26734700	56038050	68490950	0.1082	7410721
Spelt	9386400	1643000	3484530	4258870	0.1139	485085
Millet	12319400	312900	5402925	6603575	0.1164	768656
Maize	777042200	17024500	266006195	494011505	0.1132	55922102
Rice	3023900	361900	0	2662000	0.4927	1311567
Buckwheat	3300	400	0	2900	0.1515	439
Total	**2876304900**	**369011600**	**433507760**	**2074325540**		**294038941**

1921						
Wheat	795751100	204339000	0	591412100	3.8924	2302012458
Rye	154829000	38194400	0	116634600	3.0585	356726924
Mixed cereals	89041000	22309000	0	66732000	3.3406	222924919
Barley	184836300	40679600	64870515	79286185	2.7511	218124224
Oats	96621200	21773300	33681555	41166345	2.2519	92702492
Spelt	5690200	1425100	1919295	2345805	2.4452	5735962
Millet	4323000	189000	1860300	2273700	2.6490	6023031
Maize	416078100	17640100	139453300	258984700	2.6600	688899302
Rice	4523300	440900	0	4082400	17.1566	70040104
Total	**1751693200**	**346990400**	**241784965**	**1162917835**		**3963189417**
1924						
Wheat	672164600	220422800	0	451741800	6.7047	3028793246
Rye	109290100	31763300	0	77526800	5.6972	441685685
Mixed cereals	57763900	19855500	0	37908400	6.5327	247644205
Barley	153872200	39492900	51470685	62908615	4.8654	306075575
Oats	92472600	23783100	30910275	37779225	4.0991	154860821
Spelt	5278400	1303800	1788570	2186030	3.8063	8320686
Millet	6986500	241000	3035475	3710025	4.4790	16617202
Maize	628850000	17231600	214066440	397551960	4.3172	1716311322
Rice	6058400	789100		5269300	22.0493	116184376
Total	**1732736700**	**354883100**	**301271445**	**1076582155**		**6036493119**

Source: col. 1–4 – SYBBK various years, col. 5 – 1899 prices – Popov; 1905–1924 – SYBBK 1929–1930, p. 160–161.

Note: Since there is no official statistics on the sowing seeds input for 1892 and 1899, they are taken as equal to the seeds provisions in 1907 when the harvest was approximately the same in volume as in 1899.

Table C

INCOME FROM INDUSTRIAL AND OIL CROPS, 1892–1924

Crops	Output	Of which: sowing seeds*	Net output	Farm gate price	Income
measure	**kg**	**kg**	**kg**	**levs/kg**	**levs**
	1	**2**	**3**	**4**	**5**
1892**					
Colza	1013000	247877	765123	0.2577	197196
Sesame	14000	3426	10574	0.5268	5570
Anise	51000	12479	38521	0.5487	21136
Fennel	50000	12235	37765	0.3039	11475
Tobacco	2114000	0	2114000	1.1634	2459438
Opium poppy	10	0	10	35.9497	359
Poppy seeds	800	196	604	0.4141	250
Hops	500	0	500	6.1362	3068
Cotton fibre	100000	0	100000	1.8149	181491
Flax seeds	10000	2447	7553	0.4931	3725
Flax fibre	10000	0	10000	2.8245	28245
Hemp seeds	900000	220226	679774	0.6638	451213
Hemp fibre	700000	0	700000	1.3398	937862
Sugar beet	800000	195757	604243	0.0242	14630
Total	**5763310**	**694643**	**5068667**		**4315657**
1899					
Colza	39000	9543	29457	0.2459	7243
Sesame	676100	165439	510661	0.5026	256658
Anise	221800	54274	167526	0.5235	87700

Fennel	48900	11966	36934	0.2899	10707
Tobacco	4026000	0	4026000	1.1100	4468860
Opium poppy	20	0	20	34.2995	686
Poppy seeds	1000	245	755	0.3951	298
Hops	200	0	200	5.8545	1171
Cotton fibre	115200	0	115200	1.7316	199480
Flax seeds	14700	3597	11103	0.4705	5224
Flax fibre	12300		12300	2.6948	33146
Hemp seeds	1248200	305430	942770	0.6333	597057
Hemp fibre	734100	0	734100	1.2783	938400
Sugar beet	9611100	2351798	7259302	0.0231	167690
Total	**16748620**	**2902290**	**13846330**		**6774321**
1905					
Colza	33818500	5079573	28738927	0.2120	6092653
Sesame	1434400	215448	1218952	0.4333	528172
Anise	668100	100349	567751	0.4514	256283
Fennel	27900	4191	23709	0.2500	5927
Tobacco	3918000		3918000	0.9397	3681745
Opium poppy	7		7	29.5700	207
Poppy seeds	300	45	255	0.3407	87
Hops	900		900	5.0473	4543
Cotton fibre	187400		187400	1.4929	279769
Flax seeds	101600	15260	86340	0.4057	35028
Flax fibre	131300		131300	2.3233	305049
Hemp seeds	830700	124772	705928	0.5460	385437
Hemp fibre	854500		854500	1.1021	941744
Sugar beet	22064700	3314140	18750560	0.0200	375011
Total	**64038307**	**8853778**	**55184529**		**12891654**
1911					
Colza	14463500	1706838	12763706	0.2153	2748026
Sesame	881800	104061	778168	0.5390	419433
Anise	725300	85593	640061	0.4958	317342
Fennel	84400	9960	74481	0.4451	33152
Tobacco	10647300	0	10647300	0.9643	10267191
Poppy seeds	800	94	706	0.8353	590
Hops	13	0	13	2.5385	33
Cotton fibre	198800	0	198800	1.9729	392213
Flax seeds	292900	34565	258478	0.3526	91139
Flax fibre	398100	0	398100	1.0807	430227
Hemp seeds	1216400	143547	1073445	0.5582	599197
Hemp fibre	1127100	0	1127100	1.1264	1269565
Sugar beet	65175200	7691325	57515615	0.0228	1311356
Total	**95211613**	**9775984**	**85475972**		**17879463**
1921					
Colza	610100	110733	499367	4.7876	2390769
Sesame	844300	153240	691060	17.9762	12422625
Anise	164900	29929	134971	7.4815	1009783
Fennel	20700	3757	16943	5.2181	88410
Tobacco	1629700	0	16294700	215.7630	3515793356
Opium poppy	1400	0	1400	298.6900	418166
Poppy seeds	162200	29439	132761	14.6940	1950786
Sunflower seeds	2666800	484024	2182776	4.0453	8829983
Cotton fibre	243100	0	243100	42.3300	10290423
Flax seeds	70900	12868	58032	9.2942	539358
Flax fibre	76700	0	76700	30.9576	2374448

Hemp seeds	1382500	250924	1131576	8.6833	9825816
Hemp fibre	1263500	0	1263500	24.6396	31132135
Sugar beet	117476400	21321967	96154433	0.3500	33654052
Total	**120513100**	**22396882**	**118881318**		**3630720108**
1924					
Colza	108900	23174	85726	5.3162	455737
Sesame	1613100	343268	1269832	15.9288	20226905
Anise	174100	37048	137052	18.4704	2531396
Fennel	28600	6086	22514	9.8284	221276
Tobacco	49191400	0	49191400	37.1815	1829010039
Opium poppy	200	0	200	1107.3000	221460
Poppy seeds	74900	15939	58961	14.7810	871507
Sunflower seeds	10622900	2260553	8362347	5.8034	48530044
Cotton fibre	270400	0	270400	63.7316	17233025
Flax seeds	98000	20854	77146	10.9854	847475
Flax fibre	86700	0	86700	52.4151	4544389
Hemp seeds	1142000	243018	898982	15.4569	13895481
Hemp fibre	1209900	0	1209900	37.2415	45058491
Sugar beet	404278400	86030444	318247956	0.9200	292788120
Total	**468899500**	**88980384**	**379919116**		**2276435345**

Source: col. 1–3 –SYBBK various years, col. 4 – 1899 prices – Popov; 1905–1924 prices – SYBBK 1913–1922, pp. 88–89 and SYBBK 1929–30, pp. 160–161.

*Since there is no official statistical information about the sowing seeds input of the industrial and oil plants they are taken to be equal to those for the cereals during the same year.

**Due to missing data on the output volumes in 1892 (except for the colza, the sesame, the anis and the tobacco), they were estimated on the basis of the physical output in the period between 1899 and 1911.

Table D

INCOME FROM VINEYARDS, 1892–1924

	1892	1899	1905	1911	1921	1924
1. Grape output, kg	...	366505800	277270400	104632400	106095800	174934200
2. Must output, liters	...	192849000	146218600	55100200	60890300	95879900
3. Must as kg of grape (55 per cent of row 2)	...	106066950	80420230	30305110	33489665	52733945
4. Residual grape, kg (1-3)	...	260438850	196850170	74327290	72606135	122200255
5. National consumption of grape, kg (approx. 15 per cent)	...	37763633	29527526	11892366	12343043	21385045
6. Grape price, BGN/kg	...	0.37	0.1500	0.1600	2.790	5.2200
7. Wine price, BGN/litre	...	0.58	0.3914	0.6564	10.771	10.2173
8. Grape income, BGN	...	13853589	4412889	1919428	34441204	111606409
9. Wine income, BGN	...	67111452	34337976	21700663	393509653	587780221
10. Total	**68757141***	**80965041**	**38750865**	**23620091**	**427950857**	**699386631**

Source: see the text and Table A.

*Due to missing data on the grape output in 1892, it was estimated on the basis of the average physical output during the period between 1899 and 1911.

Table E

INCOME FROM FRUIT AND BRANDY, 1892–1924

	1892***	1899	1905	1911	1921	1924
1. Output, kg						
Plumps	...	14278700	29220200	10948700	28782900	18579100
Apples	...	192500	114300	610200	167200	285600
Pears					32800	111700
Miscellaneous fruit	...	3703900	13087800	9328900	15913500	21106700
1.a. Total	**...**	**18175100**	**42422300**	**20887800**	**44896400**	**40083100**
2. Exports, kg*	15975	15975	2058766	682257	400136	630398
3. Internal consumption, kg**	7000000	6361285	14847805	7310730	15713740	14183950
4. Total consumption (2 + 3)	7015975	6377260	16906571	7992987	16113876	14814348
5. Residual for brandy production, kg (1a - 4)	...	11797840	25515729	12894813	28782524	25268752
6. Brandy, litres	1200000	1179784	2551573	1289481	2878252	2526875
7. Brandy price, reduced by 20 per cent	0.7280	1.0160	1.1120	1.4000	33.9440	39.0320
8. Average fruit price, BGN/kg	0.2425	0.2322	0.2083	0.2938	3.3258	5.09700
9. Brandy income	873600	1198661	2837349	1805274	97699399	98628993
10. Fruit income	1701374	1480800	3521639	2348340	53591529	75508731
11. Total	**2574974**	**2679460**	**6358987.8**	**4153613.4**	**151290928**	**174137724**

Source: see the text and Table A.

*Dried fruit are assumed to be 50 per cent of the fresh.

**Based on Chakalov who envisaged 35 per cent internal consumption in 1924.

***Due to missing data about the fruit output in 1892, it was estimated on the basis of the average physical output during the period between 1899 and 1911.

Table F

INCOME FROM FODDER, 1892–1924

	1892	1899	1905	1911	1921	1924
1. Exports, BGN	...	1744	5513	9482	248441	696552
2. Transported by railways, BNG	...	4562	637421	1973997	991990	29085643
3. Total consumption, BGN (1 + 2)	...	6306	642934	1983479	1240431	29782195
4. Fodder price, reduced by 15 per cent, BGN/kg*	...	0.0369	0.0374	0.0382	0.9296	1.5448
5. Income, BGN	4500**	5360	546494	1685957	1054366	25314866

Source: see the text and Table A.

*For calculating the real income of the producers, Chakalov decreased the prices with 15 per cent.

**Due to missing data on the fodder output in 1892, it was estimated on the basis of the average physical output during the period between 1899 and 1911.

Table G

INCOME FROM PULSE, VEGETABLES, MELON FIELDS AND ROSE GARDENS, 1892–1924

	1892***	1899	1905	1911	1921	1924
Pulses						
Output, kg						
Beans	...	9042400	27220900	54053400	28879600	49752200
Beans planted among other crops	...	0	0	0	7816100	11015800
Lentils	...	0	0	6080000	1535700	3229700
Broad beans, peas, chick peas	...	0	0	1677400	727900	1183300
Potatoes	...	20873200	8171000	13866100	28299600	34443500
Sowing seeds						
Beans	...	2212675	4088579	6352518	5241647	10587268
Beans planted among other crops	...	0	0	0	1418622	2344162
Lentils	...	0	0	714540	278730	687280
Broad beans, peas, chick peas	...	0	0	197133	132114	251806
Potatoes	...	5107672	1227284	1629586	5136377	7329577
Net output						
Beans	...	6829725	23132321	47700882	23637953	39164932
Beans planted among other crops	...	0	0	0	6397478	8671638
Lentils	...	0	0	5365460	1256970	2542420
Broad beans, peas, chick peas	...	0	0	1480267	595786	931494
Potatoes	...	15765528	6943716	12236514	23163223	27113923
Farm gate price, BGN/kg						
Beans	...	0.1898	0.3042	0.3102	4.1442	7.4861
Beans planted among other crops	...	0.1898	0.3042	0.3102	4.2990	7.3052
Lentils	...	0.1883	0.2376	0.2589	3.8157	6.149
Broad beans, peas, chick peas	...	0.1883	0.2256	0.2562	3.1540	6.1719
Potatoes	...	0.0978	0.1109	0.1411	1.4399	2.6171
Income, BGN						
Beans	...	1296282	7036852	14796814	97960403	293192596
Beans planted among other crops	...	0	0	0	27502757	63348048
Lentils	...	0	0	1389118	4796222	15633340
Broad beans, peas, chick peas	...	0	0	379244	1879110	5749086
Potatoes	...	1541869	770058	1726572	33352724	70959848
Total pulse	**1525401**	**2838150**	**7806910**	**18291748**	**165491216**	**448882919**
Vegetables						
Net production						
Cabbage	53000000	61938100	36775100	52907000	31872800	32775400
Onion	6042432	8568244	11092439	16083408	8862800	9869900
Onion seeds*	700000	732900	543400	0	0	0
Peppers	0	0	0	0	7805100	9619700
Tomatoes	0	0	0	0	2950600	3810500
Miscellaneous vegetables, kg	0	0	0	0	22359700	18546700
Miscellaneous vegetables, BGN		1340000	2102202	4734212	38625652	52902203
Farm gate price, BGN/kg						
Cabbage	0.0923	0.1081	0.1109	0.1411	1.7569	2.1142
Onion	0.1100	0.0976	0.1251	0.1078	2.8138	3.2236
Onion seeds	0.0802	0.0712	0.0473	0.0719		

Peppers		0.0438		0.0756	1.9519	2.8607
Tomatoes				0.0650	1.6775	2.6998
Miscellaneous vegetables, kg				0.0669	1.7274	2.8524
Miscellaneous vegetables, BGN				0.0669	1.7274	2.8524
Income, BGN						
Cabbage	4891900	6695509	4078359	7465178	55997322	69293751
Onion	664667	836261	1387664	1733791	24938147	31816610
Onion seeds	56172	52182	25703	0	0	0
Peppers	0	0	0	0	15234775	27519076
Tomatoes	0	0	0	0	4949632	10287588
Miscellaneous vegetables, kg	0	0	0	0	38624146	52902607
Miscellaneous vegetables, BGN	0	1340000	2102202	4734212	0	0
Total vegetables	**5612739**	**8923952**	**7593928**	**13933181**	**139744021**	**191819631**
Melon fields						
Output, BGN	**2832000**	**3113415**	**4418774**	**6895161**	**120370023**	**212223971**
Rose gardens						
Output rose attar, muskals**	400000	445602	894464	653730	276061	372909
Farm gate price BGN/muskal	4.6630	4.4583	3.35	8.63	86.72	150.74
Income, BGN	**1865181**	**1986627**	**2996454**	**5641690**	**23940010**	**56212303**

Source: see the text and Table A.

*Sowing seeds provisions are made only for the onion. They are estimated to be equal to those for cereals in the respective year.

**Muskal – an oriental measure for rose oil, equal approx, to 5 grams.

***Due to missing data on the output in 1892, it was estimated on the basis of the average physical output during the period between 1899 and 1911.

Table H

INCOME FROM MILK, 1892–1924

	1892	1899	1905	1911	1921	1924
1. Number of beasts						
Buffaloes over 3 years for breeding or milking	75917	90364	126145	114394	114624	114760
Buffaloes over 3 years for harnessing	40878	48657	42760	37744	35554	70610
Cows over 3 years for breeding or milking	284561	287450	480867	399794	346246	395037
Cows over 3 years for harnessing	153225	154781	131520	166002	226294	227430
Female sheep over 1 year	5136091	5241984	6114730	6984072	6508945	6592334
Female goats over 1 year	992185	1124011	1156479	1194567	989478	1008598
2. Average milk yield, litres/beast						
Buffaloes over 3 years for breeding or milking	700	700	750	750	700	800
Buffaloes over 3 years for harnessing	300	300	350	350	300	400
Cows over 3 years for breeding or milking	900	900	950	950	900	1000
Cows over 3 years for harnessing	375	375	400	400	375	425
Female sheep over 1 year	20	20	25	25	20	28
Female goats over 1 year	30	30	35	35	30	40

3. Milk output, litres						
Buffaloes over 3 years for breeding or milking	53141900	63254490	94608750	85795286	80236500	91808229
Buffaloes over 3 years for harnessing	12263400	14597190	14966000	13210550	10666243	28243829
Cows over 3 years for breeding or milking	256104900	258705135	456823650	379804029	311621271	395037429
Cows over 3 years for harnessing	57459375	58042819	52608000	66400629	84860196	96657932
Female sheep over 1 year	102721820	104839669	152868250	174601789	130178903	184585340
Female goats over 1 year	29765550	33720324	40476765	41809850	29684327	40343931
Total	511456945	533159627	812351415	761622132	647247441	836676689
4. Milk price, reduced by 15 per cent, BGN/litre						
Cow and buffalo milk	0.1792	0.1680	0.1890	0.2380	4.6410	6.5590
Sheep milk	0.1487	0.1394	0.1568	0.1975	3.8520	5.4439
Goat milk	0.0896	0.0840	0.0945	0.1190	2.3205	3.2795
5. Income, BGN						
Cow and buffalo milk	67911348	66292738	116992210	129760097	2261950122	4012451314
Sheep milk	15278433	14618843	23980442	34490837	501453039	1004877053
Goat milk	2666993	2832507	3825054	4975372	68882481	132307923
Total	**85856774**	**83744089**	**144797706**	**169226307**	**2832285642**	**5149636290**

Source: see the text and Table A.

Table I

INCOME FROM MEAT, 1899–1924

	1892	1899	1905	1911	1921	1924
*1. Number of beasts (male for breeding excluded)**						
Oxen and cows**	1267598	1459270	1518194	1464171	1535012	1590904
Calves under 6 months	76418	97913	112674	106294	174310	157715
Buffaloes	263994	441758	531038	439395	419611	431504
Buffalo calves under 6 months	45502	70107	80841	63259	84291	83355
Sheep***	6458781	6622679	7683877	8277214	8124602	8065261
Lambs under 6 months	114267	116722	130166	150186	459563	428093
Goats	1170416	1303515	1297843	1369350	1174579	1164227
Kids under 6 months	28062	31254	24947	35142	90647	74464
Pigs****	235176	188578	212396	287510	545796	548657
Piglets under 6 months	219190	175759	232948	273233	498811	431633
Poultry	3237358	4562452	6408260	8549371	7764675	9176594
2. Slaughtered beasts, settlements with 25 per cent of population, numbers						
Oxen and cows**	33910	39038	40614	39169	34430	49435
Calves under 6 months	4499	5765	6634	6258	5790	13332
Buffaloes	5009	8382	10076	8337	34430	49435
Buffalo calves under 6 months	821	1265	1459	1141	5790	13332
Sheep***	131337	134670	156249	168315	140152	188881
Lambs under 6 months	112751	115173	128439	148194	388743	482706
Goats	18456	20555	20466	21593	19373	17515
Kids under 6 months	16072	17900	14288	20127	34405	57034
Pigs****	15160	12156	13692	18534	35988	34560
Piglets under 6 months	413	331	439	515	1104	671
Poultry	2116705	2983101	4189960	5589898	5076834	6000000

3. Slaughtered meat, settlements with 25 per cent of population, kg

Oxen and cows**	4747450	5465304	5685990	5483661	4881719	6657922
Calves under 6 months	233952	299759	344947	325416	287265	694945
Buffaloes	806447	1349482	1622214	1342263	1207073	1420433
Buffalo calves under 6 months	50903	78429	90437	70768	87858	93864
Sheep***	1838723	1885383	2187491	2356405	1989922	2731096
Lambs under 6 months	732882	748626	834855	963259	2706402	3166190
Goats	295300	328881	327450	345491	312884	284964
Kids under 6 months	96434	107401	85728	120765	217923	329056
Pigs****	1273463	1021136	1150109	1556844	2645612	2911769
Piglets under 6 months	4336	3477	4608	5405	13779	7105
Poultry	4233411	5966203	8379919	11179796	10153669	12000000

4. Meat in the whole country, kg

Oxen and cows**	7273139	8372898	8710991	8401022	7478840	10200000
Calves under 6 months	3299158	4227147	4864380	4588962	4050964	9800000
Buffaloes	2356152	3942707	4739532	3921616	3526638	4150000
Buffalo calves under 6 months	2250568	3467566	3998484	3128859	3884457	
Sheep***	22163547	22725968	26367510	28403566	23986060	32920000
Lambs under 6 months	7620033	7783727	8680282	10015348	28139421	
Goats	6424874	7155507	7124371	7516900	6807459	6200000
Kids under 6 months	1816993	2023620	1615260	2275426	4106057	
Pigs****	22326327	17902536	20175786	27296371	46466186	51000000
Piglets under 6 months	4233411	5966203	8379919	11179796	10153669	12000000

5. Meat price, BGN/kg reduced by 25 per cent

Oxen and cows**	0.36	0.36	0.50	0.68	14.27	16.46
Calves under 6 months	0.42	0.42	0.56	0.77	15.79	21.46
Buffaloes	0.36	0.36	0.50	0.68	14.27	16.46
Buffalo calves under 6 months	0.42	0.42	0.56	0.77	15.79	21.46
Sheep***	0.39	0.40	0.53	0.74	14.70	19.06
Lambs under 6 months	0.40	0.42	0.50	0.71	13.99	19.55
Goats	0.41	0.29	0.40	0.62	12.57	17.09
Kids under 6 months	0.32	0.29	0.40	0.62	12.57	17.09
Pigs****	0.57	0.55	0.67	0.91	17.26	26.75
Piglets under 6 months	0.57	0.55	0.67	0.91	17.26	26.75
Poultry	0.41	0.41	0.53	0.74	14.76	20.06

6. Meat income, BGN

Oxen and cows**	2585601	3051921	4377273	5733697	106685654	167917500
Calves under 6 months	1380698	1775402	2699731	3544973	63979401	210322371
Buffaloes	837612	1437117	2381615	2676503	50307491	68319375
Buffalo calves under 6 months	941863	1456378	2219159	2417044	61349661	0
Sheep***	8610538	9135839	14040699	20876621	352595080	627372900
Lambs under 6 months	3078798	3269165	4361842	7060820	393600153	0
Goats	2630986	2103719	2831937	4622893	85594033	105932132
Kids under 6 months	575078	594944	642066	1399387	51627773	0
Pigs****	12759496	9855346	13467337	24771456	801890198	1364377500
Piglets under 6 months	1735698	2437194	4409933	8231125	149897239	240729588
Total income	**35136368**	**35117025**	**51431591**	**81334520**	**2117526683**	**2784971366**

Source: see the text and Table A.

*The number of beasts is interpolated using the livestock censuses.

**Bulls for service are excluded.

***Rams are excluded.

****Boars are excluded.

Table J

INCOME FROM EGGS, 1892–1924

	1892	1899	1905	1911	1921	1924
1. Exported eggs, kg	294131	28488	117205	153695	2686321	9256844
2. Transported by railways, kg	4000000	4041290	10254890	19608250	7931000	18834000
3. Total consumption (1+2)	4294131	4069778	10372095	19761945	10617321	28090844
4. Correlation (3/Chakalov, p. 33*)	88.996	88.996	88.996	88.996	88.996	88.996
5. Egg consumption, kg (3 x 4 per cent), rounded up	3800000	3500000	9000000	17000000	9500000	25000000
6. Number of eggs *per* kg	20	20	20	20	20	20
7. Egg consumption, number	76000000	70000000	180000000	340000000	190000000	500000000
8. Egg price, BGN/number, reduced by 20 per cent and rounded up	0.025	0.03	0.037	0.04	1.00	1.50
9. Income, BGN (7 x 8)	**1900000**	**2100000**	**6660000**	**13600000**	**190000000**	**750000000**

Source: see the text and Table A.

* The correlation in 1924 is also used for the previous years.

Table K

INCOME FROM WOOL AND GOATHAIR, 1892–1924

	1892	1899	1905	1911	1921	1924*
1. Number of beasts						
1.a. Sheep	5135458	5245791	6114730	6984072	6508945	6592334
1.b. Goats	1019727	1130425	1156479	1194567	989478	1008598
2. Average output per animal, kg/year						
2.a. Sheep	1.25	1.25	1.25	1.25	1.25	1.25
2.b. Goats	0.35	0.35	0.35	0.35	0.35	0.35
3. Output, kg						
3.a. Wool	6419323	6557239	7643413	8730089	8136181	8240417
3.b. Hair	356904	395649	404768	418099	346317	353009
4. Price, BNG/kg						
4.a. Unwashed wool	1.6005	1.4761	1.9136	2.1055	46.9146	76.0563
4.b. Wool reduced by 20 per cent	1.2804	1.1808	1.5308	1.6844	37.5316	60.8450
4.c. Hair (70 per cent of 4. b)	1.12035	1.0332	1.3395	1.4738	32.8402	53.2394
5. Income, BGN						
5.a. Wool (3.a x 4.b)	8219301	7743313	11701147	14704963	305364558	501388500
5.b. Hair (3.b x 4.c)	399858	408812	542194	616214	11373131	18794012

Source: see the text and Table A.

* The correlation in 1924 is also used for the previous years.

Table L

INCOME FROM APICULTURE AND COCOONS, 1892–1924

	1892	1899	1905	1911	1921	1924
Apiculture						
1. Bee hives, number	190000	200000	239077	381406	332222	333429
2. Honey output, kg	1197000	1260000	1614000	2311000	2093000	2100601
3. Wax output, kg	95000	100000	120600	178500	166111	166714
4. Price, BGN/kg						
4. a. Honey	1.8254	1.7414	1.0799	2.5781	61.5813	83.0998
4. b. Wax	3.7384	3.5665	5.1600	5.2801	126.1201	170.1905
Income, BGN						
Honey (2 x 4. a)	2184966	2194221	1743000	5958100	128889708	174559510
Wax (3 x 4. b)	355148	356652	622300	942500	20949950	28373197
Total apiculture	**2540114**	**2550874**	**2365300**	**6900600**	**149839658**	**202932707**
Cocoons						
Output, kg	1000000	807719	1857009	1777123	1200000	1600000
Average market price, BGN/kg	2.6	2.50	2.49	2.60	35.00	100.00
Total output, BGN	2600000	2019298	4623952	4620520	42000000	160000000
25 per cent production expenses	650000	504824	1155988	1155130	10500000	40000000
Net income, BGN	**1950000**	**1514473**	**3467964**	**3465390**	**31500000**	**120000000**

Source: see the text and Table A.

Table M

INCOME FROM FORESTRY, 1892–1924

	1892*	1899*	1905**	1911	1921	1924
1. Output, BGN						
*1. a. Hardwood****						
State forests	713644	830319	1112273	3080451	6253042	11629962
Municipal forests	1428603	1631577	1812023	4771905	17143884	22583484
Private forests	1222176	1384944	1282284	10370964	30005272	30019968
Total	**3364422**	**3846841**	**4206579**	**18223320**	**53402198**	**64233414**
1. b. Softwood						
State forests				1673446	26870780	22601592
Municipal forests				1165263	4193980	34982640
Private forests				457491.9	3360000	7898604
Total				**3296201**	**34424760**	**65482836**
1. c. Fire wood						
State forests	761321	865425	777856	1443933	12576979	9444150
Municipal forests	2469004	2806619	2381464	11211612	57445630	49139619
Private forests	2418308	2748990	2279869	8665928	54046792	31626690
Total	**5648633**	**6421034**	**5439189**	**21321473**	**124069401**	**90210459**
1. d. Charcoal						
State forests	6302721	7164563	5912936	7222953	386545600	175187340
Municipal forests	19781528	22486476	16388002	26871099	1641830240	96752490
Private forests	4347548	4942037	8928007	20717762	681383360	126672014
Total	**30431797**	**34593076**	**31228945**	**54811814**	**2709759200**	**398611844**
2. Total income, BGN**	**27330375**	**31078744**	**28244593**	**62529357**	**2138267580**	**408922238**
3. Incomes from public forests, BGN	690330	690330	1150299	2567637	57884342	116642251
4. Net income, BGN (2-3)	**26640045**	**30388414**	**27094294**	**59961720**	**2080383238**	**292279987**

Source: see the text and Table A.

*Due to the lack of data the output in 1892 and 1899 is taken to be equal to that in 1901 given by SYBBK. Prices in 1892 and 1899 are retropolated from the ones in 1902 using the retail price index.

**Due to the lack of data the output in 1905 is taken to be equal to that in 1902 given by SYBBK. Prices are retropolated from the ones in 1902 using the retail price index.

***Before deduction of 50 per cent of the timber and 25 per cent of the char coal.

****After the deduction of prices with respectively 25 and 50 per cent (see also note ***).

Table N

INCOME FROM HOME INDUSTRY, 1892–1924

	1892	1899	1905	1911	1921	1924*
1. Female peasants 16 – 60 years of age, number	987642	875673	982445	1086718	1329528	1255000
2. Days for home industry (per cent of total 300 days)	35	35	35	35	25	21.5
3. Days for home industry	140	140	140	140	110	100
4. Total number of days (1 x 3)	138269880	122594164	137542300	152140520	146248080	125500000
5. 50 per cent labourer's daily wage, BGN	0.90	0.70	0.80	1.00	20.00	32.00
6. Income, BGN (4 x 5)	**124442892**	**85815915**	**110033840**	**152140520**	**2924961600**	**4016000000**

Source: see the text and Table A.

* The data for 1924 is from Chakalov (Chakalov, pp. 39–41).

Table O

INCOME FROM RURAL DWELLINGS, 1892–1924

	1892	1899	1905	1911	1921	1924*
1. Buildings, number						
1. a. Group A (for living)	...	488848	526282	566073	654737	688625
1. b. Group B (more profitable buildings)	...	19114	22965	25808	23537	26592
2. Annual rent (1/2 of the city rents)						
2. a. Group D	...	132.5	157.5	195	1067.5	1682.5
2. b. Group B	...	265	315	390	2135	3365
3. Annual income, BGN						
3. a. Group A	...	64772373	82889336	110384138	698931748	1158611563
3. b. Group B	...	5065290	7233817.5	10064964	50252136	89482753
4. 5 per cent redemptions	...	3491883	4506158	6022455	37459194	62404716
5. Net income, BGN (3 - 4)	**122578148****	**66345780**	**85616996**	**114426646**	**711724689**	**1185689600**

Source: see the text and Table A.

*The date for 1924 is from Chakalov (Chakalov, pp. 39–41).

**Author's estimate based on the next years.

Table P

INCOME FROM FISHING AND HUNTING, 1892–1924

	1892	1899	1905	1911	1921	1924
Fish draught, kg	2000000	1413639	1800000	1900000	1859879	4134039
Average fish price, BGN/kg reduced by 25 per cent	0.7285	0.6300	0.7725	0.8625	15.4675	25.4200
Income, BGN	**1457000**	**890593**	**1390500**	**1638750**	**28767678**	**105087271**
Exports of furs, BGN	143801	154997	332995	226128	8524297	23519486
Income of hunting, BGN (author's estimate)	**190000**	**200000**	**400000**	**300000**	**10000000**	**30000000**

Source: see the text and Table A.

Table Q

INCOME FROM SERVANTS, 1892–1924

	1892	1899	1905	1911	1921	1924
Servants, number	47959	42132	31943	22076	18953	19374
Average annual salary of labourer and mason, BGN	141.56	95.00	1067.50	1477.50	26642.50	47097.50
Servant's annual salary, BGN	140.00	95.00	105.00	145.00	2500.00	3600.00
Income, BGN	**6714260**	**4002540**	**3354015**	**3201020**	**47382500**	**69746400**

Source: see the text and Table A.

Table R

INTEREST ON AGRICULTURAL CREDITS, 1892–1924

	1892	1899	1905	1911	1921	1924
Total bank credits, BGN	78917268	185186240	159557508	435590066	3995739164	7972003992
Agricultural credits, BGN	44197513	85584816	71283913	150377216	1096493204	2678123255
Interest on agricultural credits, BGN	3744577	7233975	5872282	11352942	86339610	269023385
Money lender's share in agricultural credits, per cent	45	42	40	40	33	33
Interest paid to money lenders, BGN	1533188	2621853	2060559	3842993	26084224	79592782
Total interest on agricultural credits, BGN	**5429636**	**10272245**	**8221195**	**15894118**	**114831682**	**357801102**

Source: see the text and Table A.

Table S

INCOMES AND EXPENSES OF GARDENERS AND EMIGRANTS, 1892–1924

	1892	1899	1905	1911	1921	1924
Gardeners, number*	5000	10000	20000	40000	40000	40000
Emigrants sending remittance, number**	7000	10689	16195	17000	9000	8000
Annual savings/remittances (BGN)						
Gardners	750	700	800	1000	1400	1600
Emigrants	380	350	400	500	700	800
1. Total remitances, BGN	6410000	10741150	22478000	48500000	62300000	70400000
2. Total expences of gardeners and emigrants, BGN	1923000	3222345	6743400	14550000	18690000	21120000
Net income (1-2)	**4487000**	**7518805**	**15734600**	**33950000**	**43610000**	**49280000**

Source: see the text and Table A.

*After World War 1 the information about gardeners disappeared. This, however, should not be understood as an end of the seasonal migrations but probably as a decrease in its numbers.

**When calculating the number of emigrants during 1920s I include remittances sent to the new emigrants (30,000 people) plus roughly 10,000 from the pre-World War 1 emigration.

Table T

TOTAL NET INCOME FROM AGRICULTURE, 1892–1924

	1892	1899	1905	1911	1921	1924
Cereals	181783959	126437155	188341286	294038941	3963189417	6036493119
Industrial crops	4315657	6774321	12891654	17879463	3630720108	2276435345
Vineyards	1525401	2838150	7806910	18291748	165491216	448882919
Fruit and brandy	5612739	8923952	7593928	13933181	139744021	191819631
Legumen	4500	5360	546494	1685957	1054366	25314866
Vegetables	2574974	2679460	6358988	4153613	151290928	174137724
Melon fields	68757141	80965041	38750865	23620091	427950857	699386631
Rose gardens	1865181	1986627	2996454	5641690	23940010	56212303
Fodder	2832000	3113415	4418774	6895161	120370023	212223971
Milk	85281840	83744089	144797706	169226307	2832285642	5149636290
Meat	35136368	35117025	51431591	81334520	2117526683	2784971366
Eggs	1900000	2100000	6660000	13600000	190000000	750000000
Wool	8219301	7743313	11701147	14704963	305364558	501388500
Hair	399858	408812	542194	616214	11373131	18794012
Apiculture	2540114	2550874	2365300	6900600	149839658	202932707
Cocoons	1950000	1514473	3467964	3465390	31500000	120000000
Forestry	26640045	30388414	27094294	59961720	2080383238	292279987
Home industry	124442892	85815915	110033840	152140520	2924961600	4016000000
Rural dwellings	122578148	66345780	85616996	114426646	711724689	1185689600
Fishing	1457000	890593	1390500	1638750	28767678	105087271
Hunting	190000	200000	400000	300000	10000000	30000000
Servants	6714260	4002540	3354015	3201020	47382500	69746400
Gardeners and emigrants	4487000	7518805	15734600	33950000	43610000	49280000
Interest paid	5429636	10272245	8221195	15894118	114831682	357801102
Total income, BGN	**685778742**	**551791870**	**726074306**	**1025712377**	**19993638643**	**25038911540**

Source: see the text.

Table U

INCOME FROM HANDCRAFTS, 1892–1924

	1892	1899	1905	1911	1921	1924
Craftsmen, number						
Masters	75000	67450	53450	53100	60700	62150
Journeymen	21000	18700	20000	16000	22000	22800
Apprentices	25000	20980	31680	19745	24025	24050
Annual Income, BGN						
Masters	858	727	817	1168	20758	25341
Journeymen	273	225	253	206	6135	23500
Apprentices	188	156	175	143	4243	16250
Income, BGN						
Masters	64360426	49009133	43691333	62031236	1260022418	1574943150
Journeymen	5724205	4214501	5055696	3302491	134977946	535800000
Apprentices	4712175	3269607	5537601	2818151	101926951	390812500
Total	**74796806**	**56493241**	**54284630**	**68151878**	**1496927316**	**2501555650**

Source: see the text and Table A.

Table V

INCOME FROM MINING AND QUARRYING, 1892–1924

	1892*	1899	1905	1911	1921	1924
1. State mines						
1.a. Wages and salaries, BGN	170000	347684	491840	1278760	30258990	88000000
1.b. Net profits, BGN	67900	75236	351287	830000	27000000	95000000
1.c. Income, BGN	**237900**	***422920***	***843127***	***2108760***	***57258990***	***183000000***
2. Private mines						
2.a. State mines' output, kg	...	102555000	171182000	251605000	871793000	1085935000
2.b. Private mines' output, kg	...	2593000	1817000	17000000	39871000	128905000
2.c. Correlation 2.a/2.b	2.5	2.53	1.06	6.76	4.57	11.87
2.d. Income, BGN (1.c x 2.c per cent)	**5948**	**10693**	**8949**	**142481**	**2618710**	**21722861**
3. Metal mines						
3.a. Ore exports, BGN	14137	218966	44430	639245	20736358	20800000
3.b. Income, BGN (3.a x 71.2 per cent)	**4071**	**63062**	**12796**	**184103**	**5972071**	**6000000**
Total	**247919**	**496675**	**864872**	**2435343**	**65849771**	**210722861**

Source: see the text and Table A.

*Due to the lack of any statistical information for the mining industry in 1892, the income is estimated on the basis of the ratio between the incomes from public property and those from mining in 1899 (approx, 2 per cent). Cf. SYBBK, 1912, p. 377).

Table W

INDUSTRIAL OUTPUT, 1892–1909

	1892	1899	1905	1909
1. Coal output, BGN (state and private)	1783837	4353127	6745231	10727645
2. Coal and coke imports, BGN	452263	725316	988424	2777196
3. Total consumption, BGN (1 + 2)	2236100	5078443	7733655	13504841
4. Coal fuel for industry as per cent of row 3*	0.0825	0.1021	0.1264	16.9783
5. Consumption of coal fuel for industry (3 x 4)	184478	518509	977534	2292892
6. Coal fuel/industrial output correlation**	38.00	36.00	34.00	32.43
7. Industrial output, BGN (5 x 6)	**7010173**	**18666326**	**33236156**	**74364497**

Source: see the text and Table A.

* Protected industry's share in the coal and coke consumption is taken from the 1909 industrial census and is decreased backwards on an arbitrary basis taking into account the growth rate in the number of the protected factories.

**This correlation is determined by the ratio between the consumed coal and coke (row 5) and the total output (row 7) in 1909. This ratio is then back-casted on an arbitrary basis taking into account the rate of technological development.

Table X

INCOME FROM PROTECTED LARGE INDUSTRY, 1892–1924

	1892	1899	1905	1911	1921	1924
1. Protected industry output, BGN	7010173	18666326	33236156	111070721	2053429203	
2. Tobacco industry output, BGN	9178400	15113923	16269090	25500118	953548758	
3. Total large industry output, BGN	16188573	33780249	49505246	136570839	3006977961	5458000000
Deductions, BGN						
Total expenses	...	14533064	25359889	67139710	1347630119	3664000000
Paid interest	...	1980520	2902470	8007085	120391599	320000000
Redemptions	...	1794373	2164842	5744267	171782802	260000000
Income transferred abroad		242200	284522	735000	133608846	200000000
	1942629*	18550157	30711723	81626062	1773413366	4444000000
Total Income	**7102995**	**15230092**	**18793524**	**54944777**	**1233564596**	**1014000000**

Source: see the text and Table A.

*Due to the lack of any information for 1892, I was compelled to resort to the ratio between the total value of deductions and the value of protected industry.

Table Y

INCOME FROM PETTY INDUSTRY, 1892–1924

	1892	1899	1905	1911	1921	1924
Factory owners, number	10000	12550	14050	15550	14000	13150
Average daily income, BGN	5.37	4.44	4.98	6.54	120.87	194.40
Average annual income, BGN	1288.8	1065.60	1195.20	1569.60	29008.80	46656.00
Total income, BGN	12888000	13373280	16792560	24407280	406123200	613526400
Workers, number	9680	12020	13320	14580	13000	12300
Average daily income, BGN	1.79	1.48	1.66	2.18	40.29	64.80
Average annual income, BGN	429.60	355.20	398.40	523.20	9669.60	15552
Total income, BGN	4158528	4269504	5306688	7628256	125704800	191289600
Total Income	**17046528**	**17642784**	**22099248**	**32035536**	**531828000**	**804816000**

Source: see the text and Table A.

Table Z

INCOME FROM CONSTRUCTION, 1892–1924

	1892	1899	1905	1911	1921	1924
1. State construction (regular and extraordinary budgets), BGN*	4226300	4053307	3773000	30216460	137001300	240000000
2. Municipal construction, BGN	7000000	9229919	7020612	5490649	43807928	124000000
3. Total public construction	11226300	13283226	10793612	35707109	180809228	364000000
4. Private construction						
4.a. Newly built buildings, number	...	4656	4656	13346	47870	47870
4.b. Average building price**	...	1263.60	1563.78	2403.49	56708.20	71809.93
4.c. Private construction, BGN	3704679***	5883332	7280945	32076971	2714621497	3437541277
5. Total construction, BGN	14930979	19166558	18074556	67784081	2895430725	3801541277
6. Income of constructors (10–15 per cent)	1493098	1916656	2711183	10167612	289543072	380154128
7. Builders (workers), number	2500	2700	2900	2900	2800	4000
8. Mason's wage, BGN	2.74	2.32	2.61	3.73	66.28	123.59
9. Average annual wage, BGN	477	406	457	653	11599	21628
10. Builders' income, BGN	1191900	1096200	1324575	1892975	32477200	86512000
Total income (6 + 10)	**2684998**	**3012856**	**4035758**	**12060587**	**322020272**	**466666128**

Source: see the text and Table A.

*Extra ordinary credits for railways construction are also included.

**The average price of a newly built house for 1892–1911 is taken from Popov. For 1921 and 1924 it is extrapolated on the basis of the construction price index fluctuations (average prices of bricks, lime, tiles, boards and beams).

***Due to the lack of data on the private constructions in 1892, they are assumed to be 28 per cent from the public ones. It is retropolated from those of the period between 1899 and 1911 (30.7 per cent, 40.3 per cent and 47.3 per cent respectively).

Table AA

TOTAL INCOME FROM INDUSTRY AND CRAFTS, 1892–1924

	1892	1899	1905	1911	1921	1924
Crafts	74796806	56493241	54284630	68151878	1496927316	2501555650
Mining	247919	496675	864872	2435343	65849771	210722861
Large industry	7102995	15230092	18793524	54944777	1233564596	1014000000
Petty industry	17046528	17642784	22099248	32035536	531828000	804816000
Construction	2684998	3012856	4035758	12060587	322020272	466666128
Total	**101879246**	**92875648**	**100078032**	**169628122**	**3650189955**	**4997760639**

Source: see the text and Table A.

Table AB

INCOME FROM RAILWAY TRANSPORT, 1892–1924

	1892	1899	1905	1911	1921	1924
1. Incomes	3500000	5118021	11124398	27674597	384555337	892131508
2. Working expenses	1706480	4275902	7565940	17774109	309834488	580314876
3. Salaries	2695450	1700629	4601482	10302147	165286635	366802403*
4. Gross income (1 - 2)	1793520	842119	3558458	9900488	74720849	311816632
5. Net income, BGN (4 + 3)	**4488970**	**2542748**	**8159940**	**20202635**	**240007484**	**678619035**

Source: see the text and Table A.

*There is a small discrepancy between the values of the salaries as published by Chakalov, p. 82 (303 m. levs), and in the budget (367 m. levs).

Table AC

INCOME FROM POSTS, TELEGRAPHS AND TELEPHONES, 1892–1924

	1892	1899	1905	1911	1921	1924
1. Incomes	1456400	2101542	3476683	5964588	54703564	235000000
2. Working expenses	932900	917210	1075696	2046668	36970000	179000000
3. Salaries	1623720	2297696	2378226	8067140	48425970	136000000
4. Gross income (1 - 2)	523500	1184332	2400987	3917920	17733564	56000000
5. Net income, BGN (4 + 3)	**2147220**	**3482028**	**4779213**	**11985060**	**66159534**	**192000000**

Source: see the text and Table A.

Table AD

INCOME FROM WATER TRANSPORTATION, 1892–1924

	1892	1899	1905	1911	1921	1924
1. Incomes	...	484241	935300	1203425	28774325	40091123
2. Working expenses	...	339140	676551	793151	28400985	38797298
3. Salaries	...	81279	146591	344153	7384256	10000000
4. Gross income (1 - 2)	...	145101	258749	410274	373340	1293825
5. Net income, BGN (4 + 3)	**0***	**226380**	**405340**	**754427**	**7757596**	**11293825**

Source: see the text and Table A.

*Bulgarian Commercial Shipping Company was founded in 1892 and I assume that there was no income for that year.

Table AE

INCOME FROM TRANSPORT SERVICES AND COMPANIES, 1892–1924

	1892	1899	1905	1911	1921	1924
Carters and cabmen, number	6000	6000	7000	6000	9000	10000
Daily wage, BGN	2.506	2.08	2.32	3.05	56.41	93.00
Annual salary, BGN	627	518	581	763	14102	23250
Income, BGN	3759000	3108000	4067000	4578000	126913500	232000000
Porters, number	30	31	120	860	6049	5607*
Daily wage, BGN	1.79	1.45	1.66	2.18	40.29	64.80
Annual salary, BGN	465	385	432	567	10475	16848
Income, BGN	13962	11929	51792	487448	63365695	94466736
Total income, BGN	**3772962**	**3119929**	**4118792**	**5065448**	**190279195**	**326466736**
Transportation companies	**0**	**0**	**0**	**0**	**20000000**	**10000000**

Source: see the text and Table A.

*For 1924 Chakalov reckons 5 times more porters (1450 people). I am not inclined to accept this data since it is contradictory to the occupational census data.

Table AF

TOTAL INCOME FROM TRANSPORT AND COMMUNICATIONS, 1892–1924

	1892	1899	1905	1911	1921	1924
Railways	4488970	2542748	8159940	20202635	240007484	678619035
Postal services	2147220	3482028	4779213	11985060	66159534	192000000
Water transportation	0	226380	405340	754427	7757596	11293825
Transport services (carts)	3772962	3119929	4118792	5065448	190279195	326466736
Transportation companies	0	0	0	0	10000000	20000000
Car companies	0	0	0	0	0	35000000
Total	**10409152**	**9371085**	**17463285**	**38007570**	**514203809**	**1263379596**

Source: see the text and Table A.

INCOME FROM COMMERCE, 1892–1924

	1892	1899	1905	1911	1921	1924
Circulation of goods						
1. Agriculture	229442696	195989594	277744852	423536121	9517216227	11015453892
Cereals	77898842	48024172	116854485	202224660	1381179280	3717065090
Industrial crops	3856850	6266148	12357942	17046361	3541671910	2199418530
Vineyards	49917685	58008611	27031824	16222671	293813163	498425291
Fruit	1287487	1339730	3001469	1940013	74900915	86883111
Vegetables	82192	120870	243499	1114929	47313168	56447544
Legumen	71569	133161	3184893	9243986	86488609	330901060
Fodder	4500	4556	464520	1433063	896211	21517636
Roses	1865181	1986627	2996454	5641690	23940010	56212303
Melon fields	0	0	446753	803306	3344611	1044140
Meat	29078153	12293042	17907393	27206115	703169414	911203950
Milk	29848644	29310431	50679197	59229207	991299975	1802372702
Eggs	1520000	1680000	5328000	10880000	152000000	600000000
Wool	4100000	3900000	5100000	4250000	85500000	86000000
Apiculture	1442078	1448186	1150380	3932346	85067207	115209277
Cocoons	1514472	1514473	3467964	3465390	31500000	120000000
Forestry	25308043	28868994	25739579	56963634	1976364076	277665987
Fishing	1457000	890593	1390500	1638750	28767678	105087271
Hunting	190000	200000	400000	300000	10000000	30000000
2. Industry	19676851	25989778	37260701	78040864	2016055673	2373963791
Protected industry's output, BGN	7010173	18666326	33236156	111070721	2053429203	2947320000
Excises and taxes, BGN	900000	1053368	1576275	9274806	8189733	74946209
Local raw materials (tobacco excl.)	3479850	9265964	16498428	55790587	561011797	1303226000
Trade with protected industry's commodities	2630323	8346994	15161453	46005328	384347228	1569147791
Trade with petty industry's commodities	17046528	17642784	22099248	32035536	531828000	804816000
*3. Tobacco**	2500000	3000000	1500000	3500000	685000000	679000000
Output	9178400	15113923	16269090	25500118	953548758	2510680000
Expenses (excises, taxes, raw materials)	6308832	12180404	15104001	22213773	268087011	636844687
4. Mining	247919	496675	864872	2435343	65849771	210722861
5. Import less raw materials	61842406	55255900	96548849	227778037	2492138569	4473417101
Total imports	77303007	68140556	122219938	267663501	2921092269	5557311404
Imported raw materials	15460601	12884656	25671089	39885464	428953700	1083894303
6. Import duties and excises	500000	494923	864517	2430229	95224952	210722861
7. Municipal taxes	13700000	13746513	16795426	24228266	150911565	339245672
8. Transport expenses	2380000	3480254	7564591	18818726	261497629	604000000
Total goods in circulation, BGN	**330289872**	**298453638**	**439143809**	**780767587**	**15283894387**	**19906526178**
Gross income, 15 per cent	49543481	44768046	65871571	117115138	2292584158	2985978927
Deducted income, transferred abroad**	495435	447680	658716	1171151	22925842	34000000
Net income	**49048046**	**44320365**	**65212856**	**115943987**	**2269658317**	**2951978927**

Source: see the text and Table A.

*Author's estimates.

**Income from commerce transferred abroad as dividends, tantiems or profits. Due to the lack of data I assume this transfers were 1 per cent of the total turnover as in 1924.

INCOME FROM FINANCIAL SERVICES, 1892–1924

	1892	1899	1905	1911	1921	1924
1. Private banks	1200000	2990886	2640660	4788041	138228783	172745201
Salaries	1000000	2394816	2157471	3398741	102626561	107688268
Profits	200000	596070	483189	2547553	44210371	78128521
Dividends and bonuses transferred abroad	0	0	0	1158253	8608149	13071588
2. Raiffeisen banks	0	0	14108	59959	1019788	1602488
Salaries			3656	15538	334788	1068017
Profits			10452	44421	685000	534471
3. Cooperative credit societies (salaries)	0	0	332764	1663821	16638212	26163088
4. Public banks	3473908	5691970	8072121	14491966	286928400	235935763
Salaries	271810	2410324	2749825	4749746	29527386	96849393
Profits	1031687	3281646	5322296	9742220	257401014	139086370
5. Deposits and securities	1931620	7065956	12026287	22426925	313362924	593403132
Interest paid by private banks	477960**	1194900	1657627	11365477	169140485	295541113
Interest paid by Raiffeisen banks	0	0	13184	56032	129232	1393236
Interest paid by cooperative societies	0	0	342005	1710023	17100228	70980961
Interest paid by public banks	1723367	6596845	11307814	24776097	355402262	690210438
Interest, transferred abroad	0	0	0	2863729	44676778	100825564
Securities	1723367	469111	718473	514557	2637440	4018258
*6. Insurance**	730000***	3639439	14067911	28974259	79716695	277535479
Salaries*	20000	100000	200000	300000	10700000	22000000
Commissions	200000	1000000	6000000	10000000	20000000	50000000
Insurances paid	500000	1839439	6867911	17174259	40016695	194535479
Profits	10000	700000	1000000	1500000	9000000	11000000
Total, BGN	**7335528**	**19388251**	**37153851**	**72404971**	**835894802**	**1307385151**

Source: see the text and Table A.

*Dividends, tantiems and profits excluded.

**Due to the lack of data I apply the ratio between the different types of expenses of the private banks 1892–1999 (40 per cent).

***There are no domestic insurance companies in 1892. The only two functioning in Bulgaria that year were the Romanian 'Nationala' and 'Dacia Romana'; however, there is no information about any of them. That is why the income is estimated by the author.

Table AI

INCOME FROM FREELANCE PROFESSIONALS AND SERVICES, 1892–1924

	1892	1899	1905	1911	1921	1924
1. Free lance professionals						
Number	18600	21677	12899	13674	15470	17501
Annual salary, BGN	997.36	844.48	950.04	1357.72	24125.92	44536.89
Income, BGN	18550896	18305793	12254566	18565463	373227982	779440154
2. Hotels and restaurants						
Owners, number	10000	11399	12342	13198	14391	14989
Staff, number	5500	6512	8983	10195	8681	9367
Owners' annual salary	674.17	570.83	642.19	917.76	16308.13	30900.00
Staff's annual salary	445	380	425	555	10150	16300
Owners' income	6741744	6506868	7925933.66	12112596	234690328	463160100
Staff's income	2447253	2474560	3817775	5658225	88112150	152682100
Total income of hotels and restaurants	9188996	8981428	11743709	17770821	322802478	615842200
Total income	**27739892**	**27287221**	**23998275**	**36336285**	**696030460**	**1395282354**

Source: see the text and Table A.

Table AJ

INCOME FROM URBAN DWELLINGS, 1892–1924

	1892	1899	1905	1911	1921	1924
Lodgings, number	129159	143128	155090	15682	179629	201351
Shops, number	34860	38016	44928	33162	37159	41041
Annual lodging rent	275.00	265.00	315.00	390.00	2135.00	3365.00
Annual shops' rent*	1512.5	1457.5	1732.50	2145.00	11742.50	18507.50
Income from lodgings	35518725	37929026	48853350	61159722	383507559	677547237
Income from shops	52725750	55408320	77837760	71133134	436339558	759566308
Total income, BGN	88244475	93337346	126691110	132292856	819847117	1437113544
10 per cent redemptions	8824448	9333735	12669111	13229286	81984712	143711354
Net income, BGN	**79420028**	**84003611**	**114021999**	**119063570**	**737862405**	**1293402190**

Source: see the text and Table A.

*Shops' rent is 5.5 times higher that the one from lodgings. The same ratio was applied by Chakalov.

Table AK

INCOME FROM CIVIL SERVANTS AND PENSIONS, 1892–1924

	1892	1899	1905	1911	1921	1924
State civil servants	32114376	34562865	41398902	54065392	654617417	2673000000
Municipal civil servants	9000000	9512836	9037735	15516946	80940237	520000000
Servants in public institutions	0	0	211180	496440	9395344	120618759
Pensioners	1621114	1228400	1356561	2126400	196694500	324000000
Public undertakings	3442614	4091419.4	4650437.3	8295374	100000000	182000000
Total income	**46178104**	**49395520**	**56654815**	**80500552**	**1041647498**	**3819618759**

Source: see the text and Table A.

Table AL

GROSS NATIONAL PRODUCT AT CURRENT PRICES, 1892–1924

	1892	1899	1905	1911	1921	1924
Agriculture	685778742	551791870	726074306	1025712377	19993638643	25038911540
Industry and crafts	101879246	92875648	100078032	169628122	2696641197	4997760639
Transport and communications	10409152	9371085	17463285	38007570	514203809	1263379596
Commerce	49048046	44320365	65212856	115943987	2269658317	2951978927
Financial services	7335528	19388251	37153851	72404971	835894802	1307385151
Freelance professionals	27739892	27287221	23998275	36336285	696030460	1395282354
Urban dwellings	79420028	84003611	114021999	119063570	737862405	1293402190
Civil servants	46178104	49395520	56654815	80500552	1041647498	3819618759
GNP	**1007788738**	**878433572**	**1140657419**	**1657597433**	**28785577130**	**42067719154**

Source: see the text.

Table AM

IVANOV'S VS. POPOV'S GNP ESTIMATES (1892 AND 1911) AND VS. CHAKALOV'S (1924) IN NOMINAL TERMS

Branches	Ivanov's estimate	Previous estimate	Ivanov's estimate as per cent of other
1892 K. G. Popov			
Agriculture	685778742	645000000	106.32
Industry	101879246	50000000	203.76
Commerce	49048046	60000000	81.75
Securities	7335528	4000000	183.39
Dwellings	79420028	50000000	158.84
Wages (freelance and civil servants)	73917996	200000000	36.96
Transport and communications	10409152		
Total national income	1007788738	1009000000	99.88
Total difference, per cent			**0.12**

1911 K. G. Popov			
Agriculture	1025712377	936800000	109.49
Industry	169628122	200000000	84.81
Commerce	115943987	80000000	144.93
Securities	72404971	15000000	482.70
Dwellings	119063570	115000000	103.53
Wages (free lance and civil servants)	116836837	300000000	38.95
Transport and communications	38007570		
Total national income	1657597433	1646800000	100.66
Total difference, per cent			**-0.66**
1924 A. Chakalov			
Agriculture	25038911540	26196000000	95.58
Industry and crafts	4997760639	5551000000	90.03
Transport and communications	1263379596	1155000000	109.38
Commerce	2951978927	3301000000	89.43
Finance	1307385151	1152000000	113.49
Freelance	1395282354	1066000000	130.89
City dwellings	1293402190	1522000000	84.98
Civil servants and pensions	3819618759	3735000000	102.27
Total national income	42067719154	43678000000	96.31
Total difference, per cent			**3.69**

Source: see the text.

Table AN

BULGARIAN GNP 1892–1945 AT CONSTANT PRICES (AS OF 1911) AND TERRITORY (AS OF 1920s)

Year	GNP, levs	GNP per capita, levs
1892	1162346298	354.48
1899	1122036857	309.02
1905	1344819931	338.23
1911	1544778927	356.10
1921	1523099951	313.33
1924	1656872564	321.41
1925	2017370630	383.09
1926	2088041491	388.69
1927	2030140511	370.26
1928	2108489984	379.91
1929	2161090587	384.40
1930	2273489655	399.14
1931	2323874400	402.68
1932	2232487389	381.88
1933	2417636666	408.25
1934	2211495966	368.58
1935	2379353010	391.47
1936	2672497240	434.06
1937	2954751253	473.67
1938	2967183421	469.57
1939	3294603613	525.20
1940	3325771922	527.23
1941	3130638361	468.94
1942	3042663428	451.84
1943	3135036349	461.24
1944	2810976254	409.94
1945	2323545436	336.06

Source: see the text.

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