

# THE DISTRIBUTION OF YUGOSLAVIA'S NATIONAL INCOME BY SOCIAL CLASSES IN 1938

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This paper presents the results of an investigation of the distribution of Yugoslavia's national income by social classes in 1938. The population in mid-1938 was apportioned among social classes as follows: proletariat 34.6 per cent, middle classes 59.2 per cent, bourgeoisie 5.3 per cent, 0.9 per cent unallocated. About three-quarters of the population was rural. The proletariat amounted to 5.2 million persons, of which 3 million were peasants living on dwarf holdings and 2.2 million were rural and urban wage earners. Unemployment in the non-agricultural sector was 10 per cent; if the agricultural sector is added, overall un- and under-employment amounted to 31 per cent. The bourgeoisie consisted of 0.8 million persons, of which two-fifths were rich peasants. Of the 9 million persons in the middle classes, 7 million were peasants with small and medium holdings. The remainder were mainly minor entrepreneurs in the non-agricultural sector. The proletariat accounted for 35 per cent of total population but only 18 per cent of aggregate income, whereas the bourgeoisie with 5 per cent of the population received 26 per cent of aggregate income. The distribution of income among the various groups of the non-agricultural population was more unequal than among the groups of the agricultural population. Estimates are presented of the distribution of income by various types and sources, for agricultural and non-agricultural population, together with income per capita, average earnings per employed worker, labor productivity, and capital intensity, the last by industrial branches as well as social classes.

## I. INTRODUCTION

This paper presents the results of my investigation of the distribution of Yugoslavia's national income by social classes in 1938. In addition, it presents revised data on material product, estimates of non-material product, and adjustments for making peasants' income comparable with the income of the urban population in Yugoslavia in the period envisaged.

In 1938 peace-time development of capitalism in Yugoslavia attained its peak. It continued in 1939 and 1940, indeed, but in that period the Second World War was covering an increasing part of Europe and overseas, and its impact on Yugoslavia was considerable. Though Yugoslavia was not at war in 1939 and 1940 in terms of international law, it does not appear feasible to regard this period as a peace-time one.

The first part of this paper sets out the general approach to this investigation. This is followed by an analysis of findings. The estimates themselves are given in the tables of Appendix I. Appendix II contains a general survey of methods and sources used for the construction of these estimates.

## II. GENERAL APPROACH

Data for the estimates presented in this paper are scarce, as no statistics on the distribution of population and national income by social classes are

available. It was indispensable, therefore, to prepare underlying data for these estimates by various direct and indirect methods.

Total population in Yugoslavia mid-1938 is estimated in this paper at 15,264 thousands. This is 0.8 per cent less than the official estimate of 15,384 thousands<sup>1</sup> due to differences in estimation. The last population census was held in 1931; the next one scheduled for one decade later was cancelled owing to the enemy invasion in April, 1941.

Estimated mid-1938 population of Yugoslavia is apportioned among the proletariat, the bourgeoisie, and the middle classes. A relatively small part of population is not allocated. It consists of persons in custody (prisons, madhouses, etc.) and in military service, excluding the permanent corps. Each class is subdivided into groups—the proletariat into six, the bourgeoisie into five, the middle classes into seven. The breakdown of Yugoslavia's population in terms of social classes and groups is shown in the tables in Appendix I.

The national income of Yugoslavia in 1938 is broken down by distributive shares of social classes and groups. The distributive shares of social classes and groups are computed before tax. Undistributed profits of private corporations are included in incomes of major entrepreneurs and rentiers.

A preliminary estimate of net domestic material product of Yugoslavia in 1938, amounting to 46,814 millions of dinars, was prepared by the prewar Yugoslav Ministry of Finance. It was published in official statistical publications.<sup>2</sup> This estimate has been considered as the last computation of Yugoslavia's domestic product. This assumption has been strongly supported by the fact that the office building of the Ministry of Finance was completely destroyed during the heavy air attacks on Belgrade in April, 1941. The official statistical publications do not provide any methodological explanations concerning this estimate. It is generally assumed that the domestic product estimate for 1938 was set up in line with methods and procedures of estimation applied in the first detailed estimate prepared in the mid-1920s in a semi-official publication.<sup>3</sup>

Thanks to the care of M. Spasić, a former official at the Ministry of Finance, however, the manuscript of the final computation of Yugoslavia's net domestic material product in 1938 was in fact preserved from destruction.<sup>4</sup> In addition to the estimates themselves this manuscript contains methodological comments for each item. According to these documents net domestic material product in 1938 amounted to 48,247 million dinars, while the preliminary estimate published in the official statistical publications, as noted above, totalled 46,814 millions. The difference may be ascribed to the fact that the final computation, laid out in the above manuscript, was prepared after the end of the year 1938

1. *Statistički godišnjak Kraljevine Jugoslavije 1938–1939* (Statistical Yearbook of the Kingdom of Yugoslavia, 1938–1939), p. 111.

2. *Statistički godišnjak Kraljevine Jugoslavije 1938–1939* (Statistical Yearbook of the Kingdom of Yugoslavia, 1938–1939), p. 485.

3. Durišić, V. M.; Tošić, M. B.; Vegner, A.; Rudčenko, P.; Dordević, M. R.; *Naša narodna privreda i nacionalni prihod* (Our National Economy and National Income), Sarajevo, 1927. These estimates refer to average annual output in the period 1923–1925 valued at prices prevailing in the second half of 1925 and the first half of 1926.

4. Copies of that manuscript are now deposited in the Federal Statistical Office in Belgrade and in the Institute of Economics in Zagreb.

when the compilation of underlying data for 1938 was completed, at least for the main items.

Table 13 in Appendix I presents a survey of the final computation of net domestic material product of Yugoslavia in 1938 broken down in branches. It must be emphasized that the estimators in the pre-war Yugoslav Ministry of Finance, in adopting the material product concept, thus a narrower concept of national product, were influenced by the theories and statistical approaches developed by Fr. Fellner which were applied in that period in some other countries of Central Europe, too.

For net product originating from services rendered by public administration (including defense), domestic servants, professions, and the ownership of dwellings, I prepared estimates totalling 11,163 million dinars. Thus, aggregate net domestic product of Yugoslavia in 1938, adjusted for international comparisons, amounted to 59,410 million dinars. Thereof 81 per cent is accounted for by net material product and 19 per cent by net non-material product. It may be stressed in this connection that these proportions are close to those which prevailed in Bulgaria in 1938. This neighbouring country ranked on a slightly lower level of economic development and displayed a similar social organization.<sup>5</sup>

In the national product computation home-grown agricultural products consumed by peasants, cartage, production of firewood, etc. are valued at producers' prices rather than at retail prices. For an analysis of income distribution it appears desirable to adjust these items by imputing the difference between producers' prices and retail prices for these products. Estimated imputed income in 1938 totalled 8,829 million dinars.

The income of Yugoslavia's inhabitants totalled 68,219 million dinars in 1938 (See tables 7 and 8 in Appendix I). Profit of enterprises in public ownership, such as railways, post, telegraph, and telephone, some factories and mines, etc., is estimated at 942 million dinars in 1938, net of losses. Aggregate national income by distributive shares amounted to 69,161 million dinars, while aggregate net domestic product (incl. imputed income) totalled 68,239 million dinars. (See table 13 in Appendix I). The difference on the order of 1.3 per cent is mainly attributable to errors and omissions.

All estimates presented in this paper refer to the territory of Yugoslavia in 1938. Excluded are, therefore, those parts of the present territory of Yugoslavia which in the inter-war period were under Italian sovereignty.

### III. SUMMARY OF FINDINGS

(1) According to this investigation Yugoslavia's mid-1938 population may be apportioned among social classes as follows: proletariat 34.6 per cent, middle classes 59.2 per cent, bourgeoisie 5.3 per cent. The remainder of 0.9 per cent is not allocated.

The proletariat was seven times larger than the bourgeoisie. One third of

5. Estimates for Bulgaria are based on a comprehensive study of A. Čakalov, *Nacionalniat dohod i razhod na Bulgaria 1924-1945* (National Income and Outlay of Bulgaria, 1924-1945), Sofia, 1946 (English summary).

Yugoslavia's population were proletarians, of which the major part were peasants living on dwarf holdings (see paragraph 3). By far the greatest part of Yugoslavia's population were middle classes, forming three fifths of the total.

Though many studies are available on social classes, no investigation has been prepared yet in quantitative terms on changes in the distribution of population by social classes in the course of economic growth of nations. Nor are there available comparative data on the social class structure of countries ranking in various stages of economic development. Though I am not in a position to give a comprehensive interpretation in this sense, the data on the structure of social classes cited above indicate that capitalism did not reach a highly developed stage in Yugoslavia until 1938. In that year income per head was close to 80 dollars (value of 1938).<sup>6</sup>

(2) Yugoslavia in 1938 was a predominately agrarian country. About three quarters of her population depended for its livelihood on agriculture, while one quarter depended on industry, handicrafts and other non-agricultural branches. Table 1 presents the percentage distribution of agricultural and non-agricultural population by social classes.

TABLE 1  
DISTRIBUTION OF POPULATION BY SOCIAL CLASSES, 1938

Social Classes	Population (in thousands)		Percentage distribution	
	Agricultural	Non-Agricultural	Agricultural	Non-Agricultural
TOTAL	11,540	3,581	76	24
Proletariat	4,040	1,236	77	23
Middle Classes	7,190	1,853	80	20
Bourgeoisie	310	492	39	61

From data in Table 1 it can be seen that the agricultural population was more heavily represented in the middle classes, non-agricultural in the bourgeoisie. In this connection it must be mentioned that non-agricultural income distribution was more unequal than agricultural (see paragraph 9). These facts indicate that capitalism in Yugoslavia in 1938 was more advanced in the non-agricultural sector compared with the agricultural, though it must be emphasized that capitalism, generally speaking, penetrated also into the rural economy in the period under consideration.

(3) The proletariat amounted to 5.2 millions (including dependents). Thereof 3 millions were peasants living on dwarf holdings and 2.2 millions were rural and urban wage earners. Table 2 shows the structure of wage earners (excluding dependent persons).

6. Income originating from material and non-material product (excluding imputed income of peasants), computed on the basis of domestic purchasing power rather than at the official exchange rate, according to my preliminary estimates.

TABLE 2  
WAGE EARNERS

Groups	Number of Wage Earners (in thousands)	Percentage Distribution
TOTAL	1,396	100
PEASANTS	680	49
Agricultural labourers and servants	520	37
Peasant-workers employed in the non-agricultural sector	160	12
INDUSTRIAL AND URBAN WORKERS	716	51
Wage earners	453	33
Mainly unemployed workers	130	9
Apprentices	70	5
Domestic servants	63	4

About one half of the total number of wage earners were peasants; the other half consisted of industrial and urban workers. If we exclude from the latter part-time workers such as apprentices and mainly unemployed workers, earners—about eighty per 1,000 active people in Yugoslavia in 1938.

we arrive at something over half a million full-time industrial and urban wage

(4) In the non-agricultural sector 1,121 thousand wage earners, salaried employees in enterprises, and public servants were employed. Unemployment in 1938 is estimated at 130 thousands, excluding peasants. The rate of unemployment in the non-agricultural sector amounted to 10 per cent.

If we include the agricultural sector the rate of unemployment trebles. There were 1.3 million dwarf and small holdings (0.01–5 hectares) with a total area of about 3 million hectares. The economically active population on these categories of holdings amounts to about 3 million (including unpaid family members) of which 2 million may be considered as a surplus of active population. If we include dependents, total surplus population on dwarf and small holdings would be in the vicinity of 4 million.

Thus, the number of unemployed persons in Yugoslavia in 1938 may be estimated at 2.1 million if we include disguised unemployment in agriculture. Applying this figure to total active population (6.9 millions, including open and disguised unemployed persons) we arrive at a rate of unemployment of 31 per cent. In the same year the rate of unemployment in the United Kingdom was 13 per cent, in Sweden 12 per cent, in Austria (1937) 20 per cent.<sup>7</sup> The phenomenon of extensive disguised unemployment in agriculture represents a primordial long-term problem inherent in Yugoslavia's economic and social structure.

(5) The bourgeoisie embraced 802 thousand inhabitants, of which two

7. Sventnilson, I. *Growth and Stagnation in the European Economy*, United Nations Economic Commission for Europe, Geneva, 1954, p. 31.

fifths were rich peasants (holdings over 20 hectares). Within the urban bourgeoisie major entrepreneurs played a predominant role in economic development on capitalist principles. It must be pointed out, however, that a substantial part of manufacturing, commercial and other enterprises still had the character of family-firms, though they may have had the legal status of corporations. The owners in most cases were business managers, even in joint stock companies; their family members were often employed in the enterprises concerned. On the other hand enterprises founded by foreign capital, mainly large scale corporations, were administered by employed managers rather than by their owners.

(6) The middle classes consist of people pertaining neither to the bourgeoisie nor to the proletariat. In fact, in 1938 the middle classes embraced 9 million, i.e. three fifths of Yugoslavia's total population. The basic groups of the middle classes are minor entrepreneurs, the bulk of which were peasants with small holdings (2.01–5 hectares) and medium holdings (5.01–20 hectares). These two agrarian groups numbered over 7 million, nearly one half of Yugoslavia's total population in 1938. Minor entrepreneurs in the non-agricultural sector like artisans, tradesmen, innkeepers, etc., formed 10 per cent of the middle classes, pensioners (mainly retired public servants) 1 per cent.

(7) Aggregate income of Yugoslavia's population amounted to 68,219 millions of dinars. The income distribution by social classes and groups is shown in Table 7 in Appendix I.

The proletariat accounted for 35 per cent of total population but only 18 per cent of aggregate income. The proletariat's share in population was roughly twice as large as its share in income. The respective shares of the bourgeoisie were inverse though the span was wider. The bourgeoisie accounted for 5 per cent of total population and 26 per cent of aggregate income.

The shares of the middle classes, regarded as a whole, displayed only small differences in this respect. They embraced 59 per cent of total population and 56 per cent of aggregate income.

Turning now to social groups we may see that urban wage earners, including apprentices and mainly unemployed workers and excluding peasant-workers, accounted for 8 per cent of total population and 6 per cent of aggregate income; major urban entrepreneurs 2 per cent of total population but 16 per cent of aggregate income.

The share of agricultural labourers in population was 6 per cent and in income 3 per cent, whereas the shares of rich peasants (holdings over 20 hectares) were 2 per cent and 4 per cent, respectively.

In the middle classes the shares of peasants (small and medium holdings) amounted to 47 per cent in total population and 35 per cent in aggregate income. The non-agricultural groups of middle classes, however, had larger shares in aggregate income than in population. Artisans, tradesmen, innkeepers and other minor entrepreneurs accounted for 5 per cent of population and 9 per cent of income.

(8) Tables 11 and 12 in Appendix I present an elaborated survey of incomes by types and sources, separately for the agricultural and the non-agricultural population. From these data we may determine that the distribution of

income among various groups of the non-agricultural population was more unequal than the income distribution of the agricultural population. Table 3 summarizes the income distribution of agricultural and non-agricultural population by social classes.

**TABLE 3**  
**INCOME DISTRIBUTION OF AGRICULTURAL AND NON-AGRICULTURAL POPULATION**  
(In per cent)

Social Classes	Population		Income	
	Agricultural	Non-agricultural	Agricultural	Non-agricultural
TOTAL	100	100	100	100
Proletariat	35	34	24	12
Middle Classes	62	52	68	43
Bourgeoisie	3	14	8	45

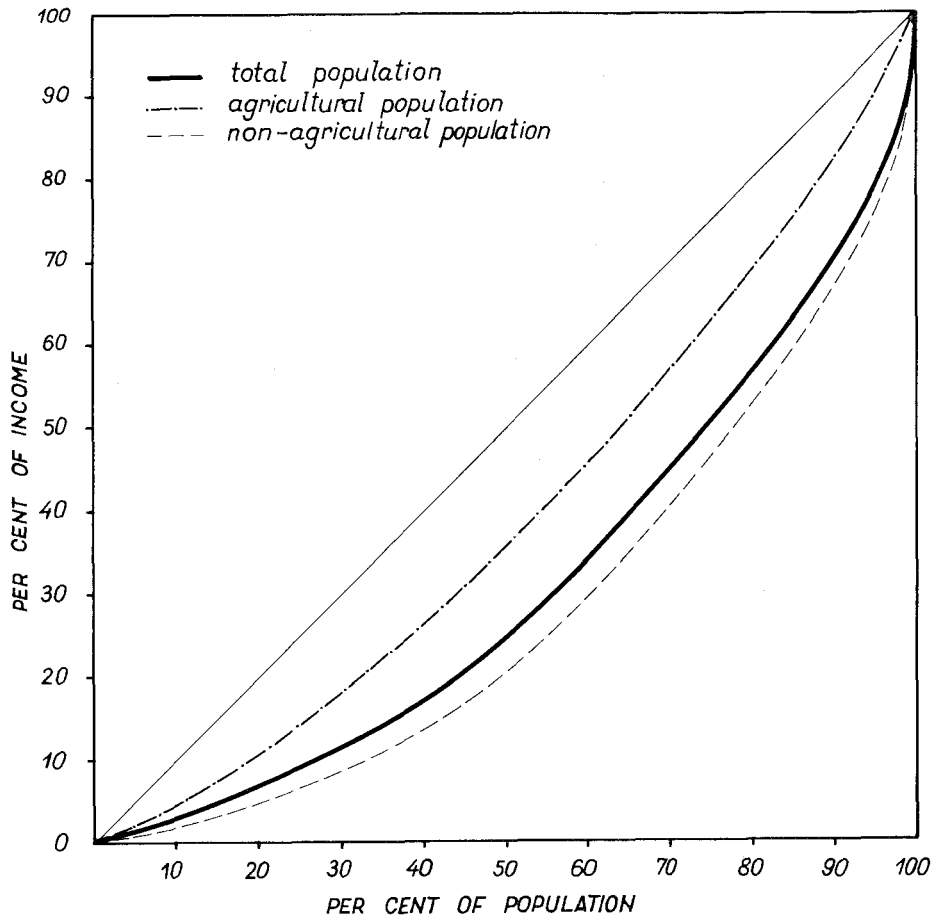
The income distribution within the non-agricultural sector was far more unequal than the income distribution within the agricultural sector. In the non-agricultural sector income was more heavily concentrated in the bourgeoisie in relation to the proletariat and middle classes as compared with the agricultural sector.

(9) The distribution of income may be illustrated by Lorenz curves. (See Chart 1.) The Gini coefficient of concentration for income of the total population amounts to 0.37 (1.00 being the maximum concentration possible). The Lorenz curve for the income of the total population shows that inequality in income distribution increases cumulatively up to about 80 per cent of the total population. From data in Table 7 in Appendix I it appears that all groups of the proletariat and two agricultural groups of the middle classes (peasants with holdings from 2.01 to 20 hectares), embracing 82 per cent of Yugoslavia's total population, had larger shares in total population than in aggregate income. From that point onwards the Lorenz curve displays cumulatively decreasing inequality in the distribution of income. This movement is particularly accentuated in the last interval embracing major urban entrepreneurs (including rentiers), who accounted for 16.8 per cent of aggregate income and only 2.4 per cent of total population.

The Lorenz curve for income of agricultural population deviates substantially from the Lorenz curve of income of the total population. It displays a shape which indicates that income distribution within the agricultural population is less unequal than the income distribution of the total population. The Gini coefficient of concentration for the income of agricultural population is 0.19. For non-agricultural population the Lorenz curve shows a much higher degree of inequality of income distribution. The Gini coefficient is 0.45. The difference between the Lorenz curves of income of the agricultural and non-agricultural population is determined by the economic and social structure of Yugoslavia

CHART 1

LORENZ CURVES OF INCOME  
IN YUGOSLAVIA, 1938



in the inter-war period. In fact, in that period the agricultural and non-agricultural sectors were two separate spheres, economically and socially not integrated, linked only tenuously. Economic performance and social organization in the former ranked on a considerably lower level. Labour productivity in the latter is four-and-a-half times higher than in the former (see Table 5 in paragraph 12). This was one of the fundamental factors leading to a more unequal income distribution within the non-agricultural sector.

(10) Income per head, including dependent population, amounted to 4.5 thousand dinars. Table 9 in Appendix I presents a survey of income levels for social classes and groups.

The income level of the proletariat was one half that of the national average. The level of income of the bourgeoisie was five times higher than the national



average and ten times higher than the proletariat's level. Income per head of middle classes was slightly below the national average.

Reviewing social groups we may note that the highest income level was enjoyed by major urban entrepreneurs, including rentiers. Their income level surpassed by eight times the income level of wage earners, mainly employed in enterprises of those very entrepreneurs.

It must be pointed out that income levels of agricultural population groups in each social class were lower than the income levels of non-agricultural population groups within that class. The income level of some non-agricultural population groups even exceeded the level of income of some agricultural population groups in the higher class. This phenomenon is attributable to the fact that the agricultural and non-agricultural sector were scarcely integrated within Yugoslavia's national economy in the inter-war period (see paragraph 9).

(11) In the preceding paragraph comparative per capita incomes of total population were discussed. In this paragraph we review earnings<sup>8</sup> per head of the economically active population, shown in Table 10 in Appendix I.

Average earnings per head of major urban entrepreneurs, excluding rentiers, were six times higher than average earnings of minor urban entrepreneurs, and sixteen times more than the level of earnings of non-agricultural wage earners.

Average earnings, including income in cash and kind of rich peasants (holdings over 20 hectares) were two-and-a-half times higher than average earnings of peasants with medium holdings (5.01–20 hectares), and six times more than average earnings of agricultural labourers and servants. Table 4 presents a comparison of average earnings between the agricultural and non-agricultural economically active population.

TABLE 4  
COMPARATIVE LEVEL OF EARNINGS  
OF AGRICULTURAL AND NON-AGRICULTURAL ACTIVE POPULATION

Social Classes	Average Annual Earnings of Active People (thousands of dinars)		
	Non- agricultural	Agricultural	Ratio
Proletariat	7.2 <sup>9</sup>	3.8	1.9
Middle Classes	19.3	7.1	2.7
Bourgeoisie	96.2	21.5	4.5

The ratio of average earnings between non-agricultural and agricultural population, shown in the third column of Table 4, displays a marked rise toward the upper social classes.

8. In this context the term earnings includes wages, salaries, and entrepreneurial income. It excludes income accruing from the ownership of dwellings and from other property, pensions, and unemployment benefits.

9. Excluding apprentices and mainly unemployed persons.

Average earnings in the non-agricultural sector were twice earnings in the agricultural sector in the proletarian class, somewhat under three times in the middle classes and four-and-a-half times in the bourgeoisie. This tendency of increasing earning differentials in the upper social classes may be ascribed to a considerable extent to substantial differences in labour productivity between the agricultural and non-agricultural sector.

(12) The estimate of labour productivity in this paper is confined to the computation of the ratio of net material product to employed persons.<sup>10</sup>

Table 5 presents a survey of labour productivity in the large-scale and in the small-scale sector in Yugoslavia in 1938. Labour force in the former consisted mainly of wage earners and salaried employees, in the latter of self-employed entrepreneurs and family workers.

TABLE 5  
LABOUR PRODUCTIVITY

Sectors and Groups	Net Material Product Per Employed Person	
	Thousands of dinars	Indices
TOTAL	7.7	100
Large-scale sector	17.6	230
Large holdings (over 20 hectares)	6.5	84
Manufacturing and other large-scale non-agricultural enterprises	29.4	383
Small-scale sector	5.2	67
Dwarf holdings (0.01–2 hectares)	2.4	31
Small holdings (2.01–5 hectares)	3.7	48
Medium holdings (5.01–20 hectares)	6.6	87
Small crafts	13.1	171

The level of labour productivity in the large-scale sector was three-and-a-half times higher than in the small-scale sector. But within both sectors the level of labour productivity varied greatly. This phenomenon is mainly due to substantial differences in the productivity of labour in agriculture, on the one hand, and in non-agricultural branches, on the other.

In manufacturing and other large-scale non-agricultural enterprises net product per employed person was four-and-a-half times higher than in large agricultural holdings. Similar proportions are discernible in the small-scale sector between small crafts, on the one side, and dwarf and small agricultural holdings, on the other.

Net product per person employed in manufacturing and other large-scale non-agricultural enterprises was somewhat more than twice the net product level in small crafts. Similar proportions prevailed between labour productivity

10. In this paragraph the term employed persons is used to represent economically active population.

in large and medium agricultural holdings, on the one hand, and small and dwarf holdings, on the other.

(13) In the preceding paragraph labour productivity was discussed by sectors. Table 6 in this paragraph presents estimates of capital intensity and labour productivity by branches, computed on a gross rather than net basis, as the former is a more realistic measure for capital in terms of capacity. In the third column of this table the resulting average capital coefficients are shown.

The capital coefficient for agriculture, rural domestic industries, etc., was one third lower than the capital coefficient in all branches combined. A rather low capital coefficient for agriculture may be explained by the fact that a substantial part of Yugoslavia's agricultural output in 1938 was accomplished by the bare hands of peasants and some primitive tools.

The capital coefficient for manufacturing, etc., is slightly lower than for agriculture. This fact, however, is not due to a low level of technology, as is the case in agriculture. Capital intensity in manufacturing, etc., is nearly three times as high as capital intensity for all branches combined; labour productivity, on the other hand, is four times as high. This phenomenon is mainly attributable to the introduction of more advanced technology and business organization in manufacturing, etc., as compared with traditional performances in agriculture, rural domestic industries, etc.

**TABLE 6**  
CAPITAL INTENSITY, LABOUR PRODUCTIVITY, AND CAPITAL COEFFICIENTS

Branch	Undepreciated Fixed Assets per Person Employed (thousand dinars)	Gross Product per Person Employed (thousand dinars)	Average Capital Coefficient (gross basis)
TOTAL	25.2	8.2	3.1
Agriculture, including cartage, firewood production, rural domestic industries, etc.	10.1	4.9	2.1
Manufacturing, mining, and electricity	70.6	35.0	2.0
Transport and communications	621.0	34.6	17.9
Other branches <sup>11</sup>	12.5	16.0	0.8

A very high capital coefficient in the transport and communication branch was conditioned by its marked capital intensity, which is characteristic for this branch. Moreover, it must be kept in mind that in the national income computation by conventional methods no income is imputed to public assets such as roads, quays, bridges, etc. By introducing appropriate adjustments for the imputation of income to these assets the capital coefficient for the transportation

11. Excluding public administration, ownership of dwellings, domestic services, and professional services.

and communication branch would be decreased by one third. It would amount to 11.3—still a fairly high coefficient as compared with other branches.

The capital coefficient for the combined group “Other branches” amounted to 0.8. Such a low coefficient was caused mainly by the fact that commerce constituted the major part of the combined group in question. Capital in commerce, however, consists to a considerable extent of stocks. Due to lack of data, stocks are not included in the construction of capital coefficients shown in Table 6.

## APPENDIX I

TABLE 7  
THE DISTRIBUTION OF YUGOSLAVIA'S POPULATION  
AND NATIONAL INCOME BY SOCIAL CLASSES IN 1938

Social classes and groups	Population		National Income, including Imputed Income	
	(thousands)	(per cent)	(millions of dinars, value 1938)	(per cent)
<b>TOTAL</b>	15,264	100.0	68,219	100.0
<b>PROLETARIAT</b>	5,276	34.6	12,381	18.2
Agricultural labourers and servants	940	6.2	1,960	2.9
Peasants, holdings 0.01–2 hectares	3,100	20.3	6,309	9.2
Non-agricultural wage earners, excluding peasant-workers	913	6.0	3,585	5.3
Apprentices	70	0.5	112	0.2
Domestic servants	63	0.4	220	0.3
Mainly unemployed persons other than peasants	190	1.2	195	0.3
<b>MIDDLE CLASSES</b>	9,043	59.2	37,904	55.6
Peasants, holdings 2.01–5 hectares	3,590	23.5	9,605	14.1
Peasants, holdings 5.01–20 hectares	3,600	23.6	14,076	20.7
Salaried employees in enterprises	286	1.9	2,434	3.6
Public servants, including ecclesiastical	581	3.8	4,645	6.8
Artisans	506	3.3	3,126	4.5
Other minor entrepreneurs	343	2.2	2,920	4.3
Pensioners, mainly retired public servants	137	0.9	1,098	1.6
<b>BOURGEOISIE</b>	802	5.3	17,505	25.6
Peasants, holdings over 20 hectares	310	2.1	2,797	4.1
Senior government officials, including high clergy and royal court	49	0.3	1,352	2.0
Managerial staff in enterprises	31	0.2	816	1.2
Professions	48	0.3	1,025	1.5
Major entrepreneurs and rentiers	364	2.4	11,515	16.8
<b>NOT ALLOCATED</b>	143	0.9	429	0.6
Persons in custody (prisons, madhouses, etc.) and in military service, excluding permanent corps.	143	0.9	429	0.6

**TABLE 8**  
**THE DISTRIBUTION OF INCOME FROM MATERIAL AND NON-MATERIAL PRODUCT**  
**AND IMPUTED INCOME BY SOCIAL CLASSES**  
 Millions of dinars (value 1938)

Social Classes and Groups	Income from Material Product	Income from Non-Material Product	Imputed Income	TOTAL
<b>TOTAL</b>	48,227	11,163	8,829	68,219
<b>PROLETARIAT</b>	9,788	583	2,010	12,381
Agricultural labourers and servants	1,800	—	160	1,960
Peasants, holdings 0.01–2 hectares	4,193	266	1,850	6,309
Non-agricultural wage earners, excluding peasant-workers	3,488	97	—	3,585
Apprentices	112	—	—	112
Domestic servants	—	220	—	220
Mainly unemployed persons other than peasants	195	—	—	195
<b>MIDDLE CLASSES</b>	24,543	7,271	6,090	37,904
Peasants, holdings 2.01–5 hectares	6,095	420	3,090	9,605
Peasants, holdings 5.01–20 hectares	10,346	730	3,000	14,076
Salaried employees in enterprises	2,376	58	—	2,434
Public servants, including ecclesiastical	—	4,645	—	4,645
Artisans	2,976	150	—	3,126
Other minor entrepreneurs	2,750	170	—	2,920
Pensioners, mainly retired public servants	—	1,098	—	1,098
<b>BOURGEOISIE</b>	13,896	3,309	300	17,505
Peasants, holdings over 20 hectares	2,371	126	300	2,797
Senior government officials, including high clergy and royal court	80	1,272	—	1,352
Managerial staff in enterprises	780	36	—	816
Professions	20	1,005	—	1,025
Major entrepreneurs and rentiers	10,645	870	—	11,515
<b>NOT ALLOCATED</b>	—	—	429	429
Persons in custody (prisons, madhouses, etc.) and in military service, excluding permanent corps	—	—	429	429

TABLE 9  
INCOME LEVELS

Social Classes and Groups	National Income including Imputed Income (value 1938)	Population in thousands	Income per Head	
			Dinars (value 1938)	Indices (Average income of total population = 100)
TOTAL	68,219	15,264	4,469	100
PROLETARIAT	12,381	5,276	2,346	52
Agricultural labourers and servants	1,960	940	2,085	47
Peasants, holdings 0.01–2 hectares	6,309	3,100	2,035	45
Non-agricultural wage earners, excluding peasant-workers	3,585	913	3,926	87
Apprentices	112	70	1,600	36
Domestic servants	220	63	3,500	78
Mainly unemployed persons other than peasants	195	190	1,026	23
273 MIDDLE CLASSES	37,904	9,043	4,191	94
Peasants, holdings 2.01–5 hectares	9,605	3,590	2,675	60
Peasants, holdings 5.01–20 hectares	14,076	3,600	3,910	87
Salaried employees in enterprises	2,434	286	8,510	190
Public servants, including ecclesiastical	4,645	581	7,994	179
Artisans	3,126	506	6,177	138
Other minor entrepreneurs	2,920	343	8,513	191
Pensioners, mainly retired public servants	1,098	137	8,014	179
BOURGEOISIE	17,505	802	21,820	488
Peasants, holdings over 20 hectares	2,797	310	9,022	202
Senior government officials, including high clergy and royal court	1,352	49	27,592	617
Managerial staff in enterprises	816	31	26,322	589
Professions	1,025	48	21,350	478
Major entrepreneurs and rentiers	11,515	364	31,635	708
NOT ALLOCATED	429	143	3,000	67
Persons in custody (prisons, madhouses, etc.) and in military service, excluding permanent corps	429	143	3,000	67

TABLE 10  
LEVEL OF EARNINGS OF THE ECONOMICALLY ACTIVE POPULATION

Social Classes and Groups	Wages, Salaries, Entrepreneurial Income <sup>1</sup> (Millions of dinars, value 1938)	Economically Active Population <sup>2</sup> (thousands)	Earnings per Head of Economically Active Persons	
			Dinars (value 1938)	Indices (Average earning total active population = 100)
TOTAL	62,281	6,927	8,991	100
PROLETARIAT	11,990	2,829	4,238	47
Agricultural labourers and servants	1,960	520	3,770	42
Peasants, holdings 0.01–2 hectares	6,043	1,593	3,793	42
Non-agricultural wage earners, excluding peasant-workers	3,488	453	7,700	86
Apprentices	112	70	1,600	18
Domestic servants	220	63	3,500	39
Mainly unemployed persons other than peasants <sup>3</sup>	167	130	1,285	14
MIDDLE CLASSES	35,115	3,844	9,135	102
Peasants, holdings 2.01–5 hectares	9,185	1,631	5,631	63
Peasants, holdings 5.01–20 hectares	13,346	1,560	8,555	95
Salaried employees in enterprises	2,376	108	22,000	244
Public servants, including ecclesiastical	4,482	249	18,000	200
Artisans	2,976	186	16,000	178
Other minor entrepreneurs	2,750	110	25,000	278
BOURGEOISIE	15,176	254	59,740	664
Peasants, holdings over 20 hectares	2,671	124	21,540	240
Senior government officials, including high clergy and royal court	1,120	19	58,950	656
Managerial staff in enterprises	760	12	63,333	704
Professions	980	20	49,000	545
Major entrepreneurs, excluding rentiers	9,645	79	122,080	1,358

NOTES:

<sup>1</sup>Excludes income originating from the ownership of dwellings, owner-occupied or not, and other income of rentiers.

<sup>2</sup>Excludes pensioners and rentiers and all groups of dependent people.

<sup>3</sup>Includes earnings of casual jobs and excludes unemployment benefits.



TABLE 11  
INCOME OF AGRICULTURAL POPULATION

Social Classes and Groups	Agricultural Population		Net Pro- duct of Agricul- ture at Producers' Prices	Peasants' Consump- tion of Home- Produced Food	Difference between Producers' and Retail Prices Peasants' Sales on the Retail Market	Cartage, Firewood Produc- tion, Rural Domestic Industries, etc., at Retail Prices	Owner- ship of Dwellings	Wages of Peasant- workers Employed in the Non-Agri- cultural Sector	Total
	Active	Total							
	Thousands of persons		Millions of dinars (value 1938)						
TOTAL	5,428	11,540	21,005	5,000	800	5,500	1,542	900	34,747
PROLETARIAT	2,113	4,040	3,983	900	80	2,390	266	650	8,269
Agricultural labourers and servants	520	940	1,800	160	—	—	—	—	1,960
Peasants, holdings 0.01-2 hectares	1,593	3,100	2,183	740	80	2,390	266	650	6,309
MIDDLE CLASSES	3,191	7,190	14,681	3,880	690	3,030	1,150	250	23,681
Peasants, holdings 2.01-5 hectares	1,631	3,590	4,935	1,670	420	1,910	420	250	9,605
Peasants, holdings 5.01-20 hectares	1,560	3,600	9,746	2,210	270	1,120	730	0	14,076
BOURGEOISIE	124	310	2,341	220	30	80	126	—	2,797
Peasants, holdings over 20 hectares	124	310	2,341	220	30	80	126	—	2,797

NOTES:

Peasant-workers employed in the non-agricultural sector are included in corresponding groups of agricultural population.

Wages of peasant-workers are shown in column 8.

Wages in cash and kind of agricultural labourers and servants (line 3) are subtracted from the net product of agriculture of large holdings employing that labour force.

TABLE 12  
INCOME OF NON-AGRICULTURAL POPULATION

Social Classes and Groups	Non-Agricultural Population		Wages, Salaries, and other Remuneration	Entrepreneurial Income	Income from Property			Total
	Active	Total			Ownership of Dwellings	Other <sup>1</sup>	Pensions	
	Thousands of persons		Millions of dinars (value 1938)					
TOTAL	1,499	3,581	12,753	16,351	1,109	1,780	1,050	33,043
PROLETARIAT	716	1,236	4,015	—	97	—	—	4,112
Wage earners <sup>2</sup>	583	1,103	3,683	—	97	—	—	3,780
Apprentices	70	70	112	—	—	—	—	112
Domestic servants	63	63	220	—	—	—	—	220
276 MIDDLE CLASSES	653	1,853	6,858	5,726	589	—	1,050	14,223
Salaried employees in enterprises	108	286	2,376	—	58	—	—	2,434
Public servants and pensioners <sup>3</sup>	249	718	4,482	—	211	—	1,050	5,743
Minor entrepreneurs	296	849	—	5,726	320	—	—	6,046
BOURGEOISIE	130	492	1,880	10,625	423	1,780	—	14,708
Senior government officials and managerial staff in enterprises <sup>4</sup>	31	80	1,880	—	138	150	—	2,168
Professions	20	48	—	980	15	30	—	1,025
Major entrepreneurs and rentiers	79	364	—	9,645	270	1,600 <sup>5</sup>	—	11,515

NOTES:

<sup>1</sup>Consists of income of rentiers other than income accruing from the ownership of dwellings. Income of foreign stockholders and other types of owners from capital invested in Yugoslavia is included in this item rather than in "Entrepreneurial income."

<sup>2</sup>Including mainly unemployed persons other than peasants and excluding peasant-workers employed in the non-agricultural sector.

<sup>3</sup>Including ecclesiastical.

<sup>4</sup>Including high clergy and royal court.

<sup>5</sup>Of which 800 million dinars is profits of foreign capital in Yugoslavia. This capital amounted to 7 billion dinars in 1938, excluding capital invested in railways prior to the First World War (2 billion dinars) leased by the state under special terms.

TABLE 13  
NET DOMESTIC PRODUCT OF YUGOSLAVIA IN 1938

Branch	Millions of Dinars (value 1938)
TOTAL	68,239
NET MATERIAL PRODUCT <sup>1</sup>	48,247
Crop production	12,576
Animal husbandry	8,355
Ancillary agricultural activities	129
Fishing and hunting	94
Forestry	2,500
Mining	1,351
Manufacturing, including electricity	7,490
Handicrafts	3,725
Rural domestic industry	2,402
Construction	763
Transportation	2,786
Communication	293
Commerce and miscellaneous	5,783
NET NON-MATERIAL PRODUCT <sup>2</sup>	11,163
Public administration and defence <sup>3</sup>	6,652
Ownership of dwellings	3,311
Domestic services	220
Professional services	980
IMPUTED INCOME <sup>2</sup>	8,829
Difference between producers' and retail prices:	
(a) Peasants' consumption of home-produced food	5,000
(b) Peasants' sales on the retail market	800
(c) Cartage, firewood production, rural domestic industry, etc.	2,600
Subsistence of persons in custody (prisons, mad-houses, etc.) and in military service, excluding permanent corps	429

NOTES:

<sup>1</sup>According to the unpublished final computation of Yugoslavia's net domestic material product in 1938 prepared by the pre-war Yugoslav Ministry of Finance.

<sup>2</sup>According to estimates prepared by the author of this paper.

<sup>3</sup>This item consists of salaries and pensions of public servants and ex-servicemen, including military permanent corps and clergy.

## APPENDIX II

### METHODS AND SOURCES

#### *Population*

Non-agricultural population at midyear 1938 was estimated by direct procedures on the basis of various official statistics and reports.

The number of wage earners and salaried employees in enterprises is given in social security statistics.<sup>12</sup> I added to this item persons employed in public transport and communication and in mining enrolled in special social insurance agencies.<sup>13</sup> The share of salaried employees in the total number of persons enrolled in social insurance agencies was ascertained on the basis of a sample survey for some groups of enterprises.

For public servants a survey by categories, including permanent military corps, compiled by Benko Grado is available for 1933.<sup>14</sup> I adjusted these figures for changes in number of public servants to 1938 in collaboration with experts of the pre-war Ministry of Finance. In the same way I estimated the number of pensioners. For unemployed persons an estimate is available for 1937, excluding disguised unemployment in agriculture.<sup>15</sup> I adjusted these figures for changes in unemployment which occurred in 1938.

The number of entrepreneurs in 1938 is given in the manuscript of the final computation of Yugoslavia's national income in 1938.<sup>16</sup> The apportionment of major and minor entrepreneurs is based on estimates of pre-war experts of the Chamber of Commerce, Ministry of Finance, and other institutions. The number of house owners, professions, and rentiers is estimated on the basis of records of various associations.

The starting-point for ascertaining the agricultural population by categories of holdings was the population census of 1931<sup>17</sup> and the census of agricultural holdings of that year.<sup>18</sup> As the latter does not provide data on the number of

12. *Radnička zaštita* (Workers' Security), official gazette of the Central Workers' Insurance Office, Yearbooks, 1938, 1939.

13. *Statistički godišnjak Kraljevine Jugoslavije 1938–1939* (Statistical Yearbook of the Kingdom of Yugoslavia, 1938–1939), pp. 432–433.

14. These data are published in the review *Indeks* (Index), Zagreb, No. 3, 1935. (See footnote 22 below.)

15. Published in the periodical *Radnik* (Worker). Quoted from Dimitrijević, S., *Karakteristike industrije i rudarstva bivše Jugoslavije* (Characteristics of Manufacturing and Mining in Pre-War Yugoslavia), Biblioteka društva ekonomista Srbije, Beograd, 1949.

16. See section *General Approach* above.

17. *Definitivni rezultati popisa stanovništva od 31. marta 1931* (Final results of the population census of the 31st March, 1931), vol. XIV, Opšta državna statistika Kraljevine Jugoslavije, Sarajevo, 1940.

18. *Statistički godišnjak Kraljevine Jugoslavije za 1937* (Statistical Yearbook of the Kingdom of Yugoslavia, 1937).

persons in agricultural holdings by size I applied corresponding ratios of persons per holding resulting from the post-war census in 1949.<sup>19</sup>

Agricultural labourers and servants are not included in social insurance statistics of the inter-war period, as they were not subject to social insurance. They were recorded, however, as a separate category in the 1931 population census. I adjusted these data for the estimated increase of this group of peasants in the period 1931–1938.

In order to ascertain the number of dependent population in 1938 by social classes and groups I applied ratios of active to dependent people resulting from the 1931 census for corresponding or related population groups.

### *National Income*

The estimates of net domestic product by industrial origin, shown in Table 13 in Appendix I, represent results of the final computation of Yugoslavia's national income by the value added approach prepared in an unpublished document by estimators of the pre-war Ministry of Finance.<sup>20</sup>

As data on Yugoslavia's national income in 1938 by distributive shares are not available, I prepared a set of estimates on income of various population groups. The source for wages and salaries of persons employed in enterprises are statistics prepared by social security agencies cited above<sup>21</sup> and data compiled by Benko Grado.<sup>22</sup> Salaries of public servants were compiled and published by Benko Grado.<sup>23</sup> In order to arrive at realistic income figures for top government officials and top managers in enterprises I introduced allowances for various supplementary income sources in addition to their regular salaries. As data on entrepreneurial income are scanty I derived these items as residuals from net product of the private sector. Profit of enterprises owned by foreign subjects is regarded in this paper as income from property accruing to rentiers. I computed this item as a convenient proportion of the volume of foreign capital in Yugoslavia in 1938. The estimate of foreign capital in Yugoslavia in 1938 (7 billion dinars) is based on a comprehensive investigation prepared by Dimitrijević.<sup>24</sup> From the total of foreign capital given in that study, I subtracted capital invested in railways before the First World War, leased by the state under special terms, and other minor items.

The figures shown as income of professions were estimated in collaboration with experts. For income accruing from the ownership of dwellings, owner-

19. Marković, P. J., *Strukturne promene na selu kao rezultat ekonomskog razvika-Period 1900–1960* (Structural changes in the village as a result of economic development in the period 1900–1960), Zadržna knjiga, Beograd, 1963. (English Summary.)

20. See section *General Approach* above.

21. For source see footnote 12.

22. Published in *Indeks, socijalno-statistička revija na srpsko-hrvatskom, francuskom, engleskom i njemačkom jeziku* (Index, socio-statistical review in Serbo-Croat, French, English and German), trimestrial review, issued in Zagreb, 1929–1941. The owner and editor and even the main author is Arthur Benko Grado, a distinguished scholar and enthusiast introducing modern methods of economic analysis in the 1930s.

23. *Indeks* (Index), Zagreb, No. 3/1935, and 1/1939.

24. Dimitrijević, S., *Strani kapital u privredi bivše Jugoslavije* (Foreign Capital in Pre-War Yugoslavia), Nolit, Beograd, 1958. (English summary.)

occupied or not, I prepared special estimates assuming that net income of urban dwellings accounted for 4 per cent of the value of urban residential buildings (including land under residential buildings and courtyards). For rural dwellings I imputed a net income amounting to 3.25 per cent of the value of rural dwellings. The difference in the percentages applied is due to the fact that land under rural dwellings forms a very low part of the real estate (land and building) and may be neglected, therefore, for purposes of estimating imputed income accruing from rural dwellings. The percentages mentioned above were obtained from expert estimates. Estimates of the value of urban and rural dwellings result from underlying data I prepared for my long-term estimates of national product and fixed assets in the territory of Yugoslavia.<sup>25</sup>

Imputed income of peasants consists of the difference between producers' and retail prices for home-grown food consumed by peasants, for direct sales of agricultural products on the retail markets, and for cartage, production of firewood, rural domestic industries, etc. In national income estimation by conventional methods the above mentioned items are valued in general at producers' prices. In order to bring incomes of peasants up to the price level applied for the valuation of incomes of the urban population I introduced income imputations for the items mentioned above. These adjustments were carried out by the same methods as in my study of the estimate of Yugoslavia's national expenditure in 1953–1954.<sup>26</sup> In setting up these adjustments I used estimates of the pre-war Ministry of Finance concerning the evaluation of income in kind of peasants,<sup>27</sup> and data on price statistics compiled by the National Bank,<sup>28</sup> comprehensively elaborated in a report prepared in 1940 by A. Bončić and incorporated in his manuscript completed in 1955.<sup>29</sup>

Imputed incomes, consisting of subsistence rendered free to persons in custody and in the armed forces (excluding permanent corps) were estimated in collaboration with experts, both civilian and military.

The undepreciated value of Yugoslavia's stock of fixed assets at the beginning of 1938, shown in Table 6 on a per capita basis, was derived from underlying data prepared for my study on investment in Yugoslavia in the inter-war period.<sup>30</sup>

25. "National Product and Fixed Assets in the Territory of Yugoslavia, 1909–1959," *Income and Wealth Series IX*, Bowes and Bowes, London, 1961.

26. *Upotreba narodnog dohotka Jugoslavije 1953–1954* (National Expenditure of Yugoslavia, 1953–1954). Ekonomski pregled, Zagreb, No. 5, 1956 (English Summary).

27. *Zbirka ekspozea ministra finansija o predlozima budžeta za razne budžetske godine* (Series of Budgets submitted by the Minister of Finance to Parliament), Department of Budget, Ministry of Finance of the Kingdom of Yugoslavia.

28. *Narodna privreda* (The National Economy), trimestrial journal issued by the Research Department of the National Bank of the Kingdom of Yugoslavia, No. 1–4, 1938.

29. Bončić, *Metodološke osnove indeksa cena na veliko Narodne banke FNRI, baza 1937/1938 = 100* (Methodological basis for the construction of wholesale price indices prepared by the Yugoslav National Bank on the price basis, 1937–1938 = 100). Manuscript, originally conceived as a report in 1940 for the National Bank of the Kingdom of Yugoslavia and extended in 1955. The manuscript is deposited in the Institute of Economics, Zagreb.

30. *Investicije na području Jugoslavije u razdoblju između dva svjetska rata* (Investment in Yugoslavia in the Inter-War Period), Ekonomski pregled, Zagreb, No. 8–9, 1959 (English summary).

Cet article présente les résultats de recherches sur la répartition par classes sociales du revenu national de la Yougoslavie en 1938. La population à la fin de juin 1938 était répartie parmi les classes sociales comme suit: prolétariat, 34.6 pour cent, classe moyenne, 59.2 pour cent, bourgeoisie, 5.3 pour cent, 0.9 pour cent non-répartis. Environ les trois-quarts de la population était rurale. Le prolétariat s'élevait à 5.2 millions de personnes, desquelles trois millions étaient représentés par des paysans vivant sur des parcelles de terre minuscules, et 2.2 millions étaient des salariés urbains et ruraux. On évalue le chômage dans le secteur non-agricole à 10 pour cent; si l'on y ajoute le secteur agricole, le sous-emploi et le chômage s'élevaient à 31 pour cent. La bourgeoisie comprenait 0.8 million de personnes, desquelles un cinquième étaient des paysans riches. Des 9 millions de personnes dans les classes moyennes, 7 millions étaient des paysans possédant des fermes petites et moyennes, le reste comprenait surtout des entrepreneurs modestes dans le secteur non-agricole. Le prolétariat représentait 35 pour cent de la population totale mais recevait seulement 18 pour cent du revenu global, tandis que la bourgeoisie ne représentant que 5 pour cent recevait 26 pour cent du revenu global. La répartition des revenus entre les différents groupes de la population non-agricole était plus inégale que celle entre les groupes de la population agricole. L'article présente des estimations de la répartition des revenus par catégorie et par origine, pour la population agricole et non-agricole. Il contient aussi des données sur les revenus par tête, les gains moyens par salarié, la productivité de la main d'œuvre, le rapport entre le capital et la main d'œuvre, ce dernier par branches industrielles aussi bien que par classes sociales.

## NEWS OF STATISTICAL ACTIVITIES

### *Belgium*

*Provincial input-output tables.* Input-output tables for the province of Limburg have been constructed for the years 1963 and 1964, through the initiative of VENEX and the Economic Council of Limburg province. These tables have been used to examine the impact of the closing down of coal mines on the economy of this mining province.

### *Kenya*

*New national accounts calculations.* Revised national accounts calculations for Kenya were published for the first time in the Economic Survey 1967 prepared by the Statistics Division of the Ministry of Economic Planning and Development. The main differences between the old and new calculations are described as follows:

"Firstly . . . new economic data have been incorporated. Secondly, numerous changes have been made in the classification and sub-classification of enterprises in order to provide greater consistency in this and a more accurate assessment of the size of particular sectors. This has involved splitting a number of organizations, notably, perhaps, the East African Railways and Harbours, East African Posts and Telecommunications, and East African Airways among different industries rather than allocating their activities entirely to one. Thirdly, efforts have been made to obtain a more comprehensive estimate of the non-monetary sector. Finally, the opportunity has been taken to introduce greater consistency in methods and classifications on an international basis."

The comparison of the old and new calculations using the provisional figures for 1966 is shown in the following table. A separate publication giving a detailed description of the methods used in the new calculations has been promised.

KENYA NATIONAL ACCOUNTS: COMPARISON OF OLD AND NEW CALCULATIONS  
OF GROSS DOMESTIC PRODUCT AT FACTOR COST, 1966

	Old		New	
	K £ Million	Per cent	K £ Million	Per cent
Outside Monetary Economy	75.32	23.6	91.12	24.7
Agriculture etc.	75.32	23.6	77.71	21.1
Building, housing etc.	—	—	13.41	3.6
Monetary Economy	243.52	76.4	277.12	75.3
Agriculture etc.	50.89	16.0	57.46	15.6
Manufacturing & repairing	34.60	10.9	39.64	10.8
Transport, storage & communications	33.14	10.4	31.84	8.6
Wholesale & retail trade	38.17	12.0	38.99	10.6
Banking, insurance & real estate	5.23	1.6	14.59	4.0
Ownership of dwellings	10.49	3.3	14.62	4.0
Government	40.72	12.8	46.35	12.6
Other	30.29	9.5	33.63	9.1
Total G.D.P. at factor cost	318.84	100.0	368.24	100.0
Outside Monetary Economy	75.32	23.6	91.12	24.7
Monetary Economy	243.52	76.4	277.12	75.3
Remuneration of employees	130.81	41.0	145.35	39.5
Operating surplus	102.20	32.1	117.15	31.8
Rental surplus	10.49	3.3	14.62	4.0
Total G.D.P. at factor cost	318.84	100.0	368.24	100.0

SOURCE: Economic Survey, 1967: Statistics Division, Ministry of Economic Planning & Development, Nairobi, 1967.



### *Mexico*

*Projections of the supply and demand of agricultural products.* Projections of the supply and demand of agricultural products in Mexico for 1970 and 1975 have been made through the cooperation of the Ministry of Agriculture, the Bank of Mexico, and the U.S. Department of Agriculture. This study forms part of a program of evaluation of long term agricultural development in more than 40 countries. At the same time it fills a need which has been felt in Mexico for a projection model useful for the formulation of agricultural development programs.

In order to project demand for specific agricultural products, a sample survey of family income and expenditures was carried out. This survey made it possible to estimate, among other things, probable variations in the consumption of the urban and rural population as a function of the future increase in their incomes; to consumption thus estimated was added probable intermediate consumption for industrial purposes and in agriculture itself. A projection of external demand for the principal agricultural products which Mexico normally exports was also made.

The supply of 44 crops and 13 animal products was projected on the basis of the analysis of statistical series on the volume of harvests, area harvested, and yields, taking into account also the information available on general factors which influence Mexican agricultural development including availability of land, possibility of irrigation, trends in agricultural investment and its application, use of improved inputs, and price policy.

These reference projections do not constitute forecasts, but rather express probabilities in the light of known data, that is, they do not take into account either possible new programs which clearly could alter the trends studied, or abnormal changes in demand.

### *Puerto Rico*

*Input-output statistics.* Input-output work has advanced to the point where the matrix for agricultural industrial groups and the manufactures related to these is almost completed. This part of the research is being carried out under the sponsorship of the Social Science Research Center with the guidance of Alfred P. Thorne. The main part of the manufacturing matrix will be estimated jointly by the Planning Board of Puerto Rico and David Moreale Arroyo of the University of Puerto Rico. The overall matrix and the demand parts of the table were designed by Thorne two years ago, to take into account some of the principal peculiarities of the Puerto Rican economy. Amendments of some of the manufacturing groupings for comparability with the U.S. were made by Miguel Echenique, Director of the Economics Bureau of the Planning Board. It is expected that preliminary results will have been published by the time of this publication.

In May 1967 a four-day seminar on input-output research in the Caribbean was held under the auspices of Puerto Rico's Public Corporation for the Development of the Caribbean and the Planning Board.

### *Turkey*

The Second Five Year Development Plan for Turkey, covering the period 1968-72, is now available in Turkish, and will soon be published in English. It is in seven volumes, and includes data on achievements of the first five year plan, present structure of the economy, and targets for 1972. The seven volumes are:

Vol. I. Overall targets for the Second Five Year Plan period; structural maladjustments and obstacles curtailing growth rate; outstanding characteristics of the demographic and social structure.

Vol. II. Economic targets, general equilibrium conditions, and basic policy issues of the Second Five Year Plan.

Vol. III. Human wealth; employment and labor force; education, cultural, and research activities; social security and social welfare, including measures for birth control; the village and peasants; regional disparities and regional growth; urbanization.

Vol. IV. Summary of sectoral development programs; agriculture, land and water use, mining.

Vol. VA. Manufacturing: food and tobacco, textiles, paper, leather, plastics, cement, glass, chemicals.

Vol. VB. Iron and steel, transport vehicles, metal and machine industries, small industry and handicraft.

Vol. VI. Transportation and communication, energy, tourism, other services.

Two input-output tables are now available for the Turkish economy, one for 1959 on

which the First Five Year Plan was based, and one for 1963 on which the Second Five Year Plan is based. The 1959 table was not published, and is available only in Turkish. The 1963 table is available in English, and contains extensive information on methodology. It was published by the State Planning Organization: "Structural Interdependence of the Turkish Economy, 1963", May 1967.

The State Institute of Statistics has published a statistical volume (in Turkish and French) covering the period 1946-65: "Annuaire statistique de la Turquie: 1946-65", publication no. 510, Ankara. This volume includes extensive material on the 1965 population census, the 1960 village inquiry, the 1963 agricultural census, the 1963 industrial census, and the 1963 state employee census.