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National Income and Outlay  
in Czechoslovakia,  
Poland and Yugoslavia

JAROSLAV KREJČÍ

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## NATIONAL INCOME AND OUTLAY IN CZECHOSLOVAKIA POLAND AND YUGOSLAVIA

Social economies have been studied from different angles but rarely from the point of view of the labour theory of value which is the cornerstone of Marxan economics. This book attempts to shed some light on this dark corner of economy in three countries – Czechoslovakia, Poland and Yugoslavia – each of which represents a particular type of socialism on a different level of socio-economic development.

Czechoslovakia has a fully fledged state socialism built on a comparatively well-developed technological basis. Its performance is evaluated against this background. In Poland barely three-quarters of the work force are employed in the socialised sector and the technological basis is considerably less developed. Structural problems have here produced a crisis unprecedented in the communist world. Yugoslavia's socialism lays the main stress on institutions of self-management (associated labour) which in principle operate with a market conditions. Yet this most flexible type of socialism has to grapple with the least-developed technical basis and with regional inequalities not experienced in the other two countries.

The achievements and failures of these three countries are demonstrated mainly in the relationship between efforts and rewards of the working population. In these terms the Marxan concept of surplus can be better made operational. The analyses and conclusions are based on a wide range of data: national accounts, official and recalculated according to the standardised concept, productivity and real wage series, income differentials, living standards in real terms, foreign trade and regional differences. As all underlying data are quoted in full, the reader may draw his own conclusions from the statistical evidence collected and analysed in this study.

**Jaroslav Krejčí** is Professor in the School of European Studies at the University of Lancaster. He was born in Czechoslovakia in 1916 and studied law and economics. After the Second World War he worked in the State Planning Office, first as secretary to the Chairman and later as Head of the National Income Department, and taught macroeconomics at the Economic Faculty in Prague. During an enforced break in his academic and professional career (1954–67) he turned to the broader field of sociology with particular interest in the interrelationships between ideology, politics and economics. After a brief return to economics during the Prague Spring (an advisory capacity for national accounting) he moved to Vienna when the Soviet armies occupied Czechoslovakia in August 1968. Since 1969 he has lived in Lancaster.

He is the author of *Income Distribution, Social Change and Strife in Postwar Czechoslovakia*, *Social Structure in Divided Germany* and (with V. Velimsky) *Economic and Political Nations in Europe*.

# Acknowledgements

This book was conceived within the context of a broader but differently focused project, team research work on the economic history of Eastern Europe, 1919–75, in which the author has been involved since 1970. This collective project, directed by M. C. Kaser, Reader in Economics at the University of Oxford, and sponsored by the Social Science Research Council (London), the Ford Foundation and the Shell Grant Committee, has covered all the European socialist countries except the USSR. The results are to be published in four volumes under the title: *Economic History of Eastern Europe since 1919*; the first two volumes, edited by M. C. Kaser and E. A. Radice, will appear shortly from the Oxford University Press.

Whilst working on his contribution to the fourth volume at St Antony's College, Oxford, during Michaelmas term 1975, the author realised that statistical material on some countries allows more detailed analysis of structural aspects of the different types of socialism. A digression from the general line of research seemed attractive, especially since one issue involved, the applicability of Marx's concept of surplus value, has been neglected by students of socio-economic systems. Statistical material for such an enquiry, as well as material for international comparisons in terms of GNP (standardised concept) was available for three countries, Czechoslovakia, Poland and Yugoslavia. The author was therefore in a position to undertake his own research, for which he bears sole responsibility, the results of which are presented here. He is indebted to Mr M. C. Kaser, director of the research team, for his kind understanding of this separate undertaking.

The author would like to use this opportunity to express his gratitude to the late Professor Karel Maywald of Prague who taught him how to use statistics for analytical purposes. During the preparation of this study the author profited greatly from discussion with his academic colleagues, J. C. Asselain (Paris), W. Brus (Oxford) and R. W. Daniels (Lancaster). The latter together with Dr A. Krejčová gave him most invaluable editorial assistance. The author would also like to thank Professor Anton Kausel of the Austrian Central Statistical Office for the supplementary data on Austria. Last but not least, he thanks Mrs Kay Roberts and Mrs Janet Howarth for their most conscientious typing of the manuscript.

*By the same author*

SOCIAL CHANGE AND STRATIFICATION IN POSTWAR  
CZECHOSLOVAKIA

SOCIAL STRUCTURE IN DIVIDED GERMANY

SOZIALDEMOKRATIE UND SYSTEMWANDEL (*editor*)

ETHNIC AND POLITICAL NATIONS IN EUROPE (*with*  
*V. Velimsky*)

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### *Orthographic note*

Diacritical marks in Slavic words are preserved with one exception: the Polish hard l, written *ł*. As it can be easily mistaken for the letter t, a simple l has been used instead. This affects mainly the name of the Polish currency unit – zloty.

# Introduction

This book is a contribution to the comparative analysis of socio-economic systems based on extensive use of statistical data. Unlike my previous study with a similar aim (*Social Structure in Divided Germany*, Croom Helm, London, 1976), where I compared the economic, sociological and political aspects of life, in this book only the socio-economic field is covered. The focus is on those aspects which, as far as I know, have not yet received the attention they deserve: namely the comparative analysis of the GNP accounts with particular reference to the 'functional' division of national income and living standards. Further, whereas my study on Germany dealt with one nation divided into two states with contrasting socio-economic systems and political regimes, the subject matter of this book concerns three countries – Czechoslovakia, Poland and Yugoslavia – all of which are supposed to be either socialist or at least pretty far on the road towards socialism. (Czechoslovakia and Yugoslavia have the label 'socialist' in their official titles, whereas Poland is styled a 'people's republic'.) The ruling élite in all these countries claim that their respective societies are implementing socialist principles as conceived by Karl Marx, the founder of 'scientific socialism', and two other widely recognised authorities on the doctrine, F. Engels and V. I. Lenin.

Yet even within an ideological framework defined as closely as the *corpus canonicum* of Marxism-Leninism, the differences in interpretation and, consequently, in institutions and human relationships, are substantial. This is especially the case between Yugoslavia on the one hand, and Czechoslovakia and Poland on the other. Yet even these two countries show significant dissimilarities at some important points.

A comparative analysis of socio-economic systems can be approached on different lines. The most usual alternative approaches are either the institutional/procedural or the theoretical. This book intends to use the least usual approach, namely quantitative analysis, in which the available statistical material is not taken in the form of its presentation but rearranged and, possibly, checked by consistency tests. In particular, national aggregates are recalculated according to the stan-

standardised Western concepts and for inter-state comparisons purchasing power equivalents are assessed. The functional division of national income and national expenditure, together with other indicators, serves as a basis for a socio-political evaluation of the three economies. In this way this study may provide a missing link in the literature on the topic.

Statistics are sometimes considered correct additions of incorrect figures; this may be in many instances true, but it is the author's firm conviction that a careful reading, checking and comparison of different sets of data may eventually bring us nearer the truth than that provided by either a minute description of institutions and their functioning, or any sophisticated computer models using unchecked figures.

As the aim is to give a comprehensive picture which would allow some evaluative conclusions, macro-economic data organised in national aggregates seem to be the most convenient starting point. The focus on macro-economic data has a twofold advantage. Firstly, the global aggregates are all-embracing; even if some important items or features are not explicit, they are included implicitly in the totals. It is for further investigation to discover their relevance and assess their magnitude. Secondly, the three different angles from which the national aggregates are viewed and calculated, that is by kind of economic activity, by type of income (cost) and by type of final expenditure, provide an ample opportunity for mutual statistical checks. This makes the results often more reliable than simpler, seemingly less problematic data would.

As has already been said, the focus is on the structural aspects of the economic system and its development. The rates of growth and connected analysis of the factors of production will be dealt with in the fourth volume of the *Economic History in Eastern Europe Since 1919* referred to in the acknowledgements.

This book consists of seven chapters, each of which deals with one particular cluster of data and their interpretation. In the first chapter, the countries under study are evaluated according to the level of their economic development and according to the apparent features of their socio-economic system (i.e. type of ownership and type of management). This assessment, based mainly on institutional factors, should serve as a preliminary orientation of some basic differences concerning the socio-economic system of the respective countries. In order to facilitate further the distinction between what may be considered the genuine systemic and the rather non-systemic factors, some additional circumstances concerning the human factors are reviewed.

The second chapter is devoted to a comparative juxtaposition of the

aggregate data for Czechoslovakia, Poland and Yugoslavia. Presented according to the standardised concept recommended by the United Nations' Statistical Office, and used in all non-communist countries, the GNP is calculated in two ways: as the sum of distributive shares or cost, and alternatively as a sum of expenditure. The analysis of these two totals and their constituent items is completed with an estimate of GNP broken into kinds of economic activity. The method of the calculation, and the sources, of these data can be seen from the tables in the Appendix.

The third chapter focuses on one special aspect which appears to be particularly relevant to the systemic differences, namely the effort-reward relationship. This issue is of paramount importance for ethical and/or ideological evaluation of politico-economic systems in general, and of a would-be socialist system in particular. In this context, an attempt is being made to make operational a key concept of Marxian theory, namely the concept of surplus value. For that purpose the cost and expenditure structure of national aggregates, productivity/real wage ratio and income differentials are the main approaches tested. The analysis of aggregate data is completed by information obtained from scattered publications and periodicals.

The fourth chapter completes the analysis with some data in real terms. Because the official exchange rates are not too meaningful as a common denominator, an attempt is being made to assess the purchasing power equivalents of individual national currencies. Unfortunately, this can be done only for private consumption (in the household sector) and effectively here only with respect to food and housing. Consequently, comparisons in this section mainly refer to real personal income or consumption in the respective countries.

In the fifth chapter, two rather obscure items of national accounts (obscure, that is, as far as Czechoslovakia and Poland are concerned) namely exports and imports, are subject to a more detailed scrutiny. An attempt is made to relate Czechoslovak and Polish data on foreign trade (which, as a matter of principle, are not given in domestic prices) with the GNP totals, and thus to make them comparable with those of Yugoslavia. Particular reference is made to the geopolitical division of the foreign trade.

The sixth chapter deals with regional differences. These are particularly important in Yugoslavia, whose federal structure on the one hand helps the coexistence of very different traditions and levels of development, and on the other makes it more difficult to achieve the programmed socio-economic levelling. Selected socio-economic indi-

cators illustrate the extent of regional differences in, and their impact on, the three countries.

The seventh and final chapter summarises the main results and puts them into a wider perspective of economic growth and social climate. The evaluation of the socio-economic performance in individual countries is completed by a comparison with Austria; that country had an intimate relationship with substantial parts of our three countries until 1918.

In individual chapters, the statistical data are usually presented in a processed form (as percentages or indices). Only exceptionally, where the method of calculation may not seem obvious, are the absolute data given in the text. Otherwise such data, with an indication of their sources and methods of calculation or recalculation, are relegated to the Appendix (Tables A-1 to A-25). Statistical Yearbooks of the respective countries: *Statistická ročenka Československé Socialistické Republiky* (Prague), *Rocznik statystyczny* (Warsaw) and *Statistički godišnjak Jugoslavije* (Belgrade) are quoted as CS, Polish or Yugoslav SYB (Statistical Yearbook) respectively.

# 1 The General Setting

As has already been said in the Introduction, the variations between individual countries under study cannot be explained by systemic differences only. The three countries embarked on their respective roads towards socialism from a very different level of economic and technological development and also – something that cannot be discussed in this context – under different conditions because of their socio-cultural and ethno-religious backgrounds. Understandably, the different level of economic and technological maturity could not be without influence on the development and structure revealed in our figures.

Although the rank of the three countries on the scales of economic and technological maturity may seem obvious, it may be useful to illustrate the magnitude of the respective differences with a few indicators (Table 1.1).

For easier evaluation of the ranges of data between individual countries, the indicators are recalculated as indices relative to Yugoslavia which equals 1.00 (Tables 1.2).

With respect to the share of non-agricultural employment, and capital coefficients, the ratios are quite close. Poland appears to be by about a fifth and Czechoslovakia by almost a half more 'economically developed' than Yugoslavia. Here, however, an allowance has to be made with respect to the large number of 'field and factory' workers, that is, those who work only part-time in agriculture and part-time in other industries. According to an official Yugoslav source,<sup>1</sup> in 1974 half of the total peasant income (in money and kind) originated outside agriculture. If only money receipts are counted, this share goes up to 64 per cent. Even if social insurance benefits and remittances from abroad are taken into account,<sup>2</sup> the high percentage of people nominally employed in agriculture does not reflect the percentage of the real labour force in agriculture. Similar allowance has to be made also for Poland, though on a lesser scale. Of the total peasant population with private holdings, only a third are maintained solely by work on their holdings, whereas the other two-thirds have to draw their livelihood also from other activities or resources, one half of them (a third of the total) to a

TABLE 1.1 Level of Socio-economic Development in 1977

	<i>Czechoslovakia</i>	<i>Poland</i>	<i>Yugoslavia</i>
Non-agricultural employment <sup>a</sup> (employment outside agriculture, forestry and fishing)	85.0	68.3	56.9
Capital coefficient <sup>b</sup>	5.2	4.4	3.6
Per capita energy consumption <sup>c</sup>	7.4	5.3	2.0
Doctors per 10,000 population <sup>d</sup>	25.3	17.7	13.1

<sup>a</sup> In per cent of total labour force; in Yugoslavia, excluding 825,000 employed abroad – if these were included, the percentage would be 60.3. According to the official Pamphlet, *Yugoslavia in Figures '79* (published by the Federal Statistical Office, Belgrade, 1979), the agricultural population as percentage of the total population was estimated at 30.3 per cent in 1978; this is a much lower figure than the people working in agriculture as percentage of the total labour force.

<sup>b</sup> Ratio of total fixed assets (national reproducible wealth) to net material product.

<sup>c</sup> In tons of coal equivalent (1976).

<sup>d</sup> Not including dentists.

*Sources:* Statistical Yearbooks of the respective countries (in further text referred to as SYBs) and OECD Economic Survey on Yugoslavia, 1980, p. 15. Fixed assets in Yugoslavia: official data on productive assets completed by an estimate of other fixed assets on the basis of the comparative fixed investment flow between 1952 and 1977 (both in 1972 prices – Yugoslav SYB, 1979, p. 85). Per capita energy consumption in the three countries from the Yugoslav SYB, 1979, p. 739.

TABLE 1.2 Ratios of Development Indicators

	<i>Czechoslovakia</i>	<i>Poland</i>	<i>Yugoslavia</i>
Share of the non-agricultural employment	1.49	1.20	1.00
Capital coefficient	1.44	1.22	1.00
Per capita energy consumption	3.66	2.60	1.00
Doctors per 10,000 population	1.94	1.36	1.00

lesser degree, the other half (third) substantially.<sup>3</sup> In Czechoslovakia, a much higher percentage (69 per cent) of co-operative farmers' income (in money and kind) from a sample taken in 1976 originated from agriculture. Also, in Czechoslovakia the needs of collectivised agriculture have to be taken into account, namely the temporary help (at harvest time on a massive scale) from town-dwellers and schoolchildren ('voluntary brigades'). In terms of working hours, even if allowance is made for the less busy winter days, the agricultural employment might be higher than the 15 per cent revealed by the statistics. Consequently, in 'real' terms, that is taking into account the time spent in agricultural

work, the gap in the intersectoral division of labour between Czechoslovakia and the other two countries would not be as great.

The other two indicators show a still wider gap. This is especially the case with the per capita energy consumption. Even if allowance is made for a warmer climate in Yugoslavia,<sup>4</sup> the difference would still be well above the range of the other figures.

Summing up, we may rightly say that towards the end of the 1970s Yugoslavia was, as far as her technico-economic development was concerned, well behind the other two countries – just as she was before starting out on socialist development. Since the beginning of socialisation, her gap with Czechoslovakia seems to have narrowed, but not that with Poland. According to official figures, per capita national income (net material product) of Yugoslavia increased between 1950 and 1977 more than four times (index 412), whereas that of Czechoslovakia increased less than four times (index 375) and that of Poland more than four and a half times (index 478).

Compared to Czechoslovakia, Yugoslavia managed a 10 per cent, and Poland a 27 per cent, faster production growth. Later in the text we shall see how much these growth differentials were reflected in the living standard. This might have some bearing on the content of the respective types of socialism. Meanwhile, we shall point to those obvious differences which characterise the institutional in contrast to the achievement aspects of the three types of socialism. Here, above all, it is the extent of the private sector in the economy which matters. This is shown in Table 1.3.

TABLE 1.3 Extent of the Private Sector in 1977/78

	<i>Czechoslovakia</i>	<i>Poland</i>	<i>Yugoslavia</i>
(a) People working in the private sector as percentage of the total work force (1977):			
Self-employed	0.5	26.5	39.9
Employees	–	1.0	1.0
Total	0.5	27.5	40.9
of which in agriculture	0.3	24.6	37.1
(b) Percentage of the total agricultural land in (1978):			
Private ownership	4.7	68.4	84.1
Private plots of co-operative farmers	1.9	n.a.	n.a.

Sources: CS SYB 1978, pp. 182 and 276; Polish SYB 1979, pp. 45 and 217; OECD Economic Surveys, Yugoslavia 1980, p. 15 and Yugoslav SYB 1979, pp. 82 and 474.



In the light of these figures, of the three countries Czechoslovakia is the only one which socialised virtually all means of production. This indeed was the main reason why, in the Constitution of 1960, she adopted as second to the USSR the designation 'socialist republic'. Poland, whose Communist party adheres to the same 'definition of socialism', has, because of having left agriculture in private ownership, still to be satisfied with the official label 'people's republic'. On the other hand, Yugoslavia, whose League of Communists upholds another concept of socialism, added the title 'socialist' to her label in 1963 for other reasons. For the Yugoslav communists, the constituent features of socialism are (i) socialisation of those means of production with which the work is being performed in a collective way, and (ii) where the decision-making is being carried out by people elected by the whole work force in the enterprise (self-management). As the first condition was already fulfilled in 1948 and the second in 1963, the Yugoslav Federation could style itself 'socialist' by that time.

The ideological differences concerning definition have far-reaching consequences, both in the structure and in the running of the economy. The market performs the main regulative role in the Yugoslav economy, unlike the situation in Czechoslovakia and Poland. Convertible currency, considerable price fluctuations (under present conditions a continuous overt inflation) and vast underdeveloped areas with a high birthrate, and high structural unemployment – these are the most conspicuous features which make Yugoslavia's conditions distinct from those in the two other countries.

This book, however, is not supposed to repeat what is well-known or what has already been better described and analysed elsewhere. Our intention is to show, by macro-economic data and other indicators, the impact of the respective types of 'institutional socialism' on what may be called 'achievement socialism'. For the latter, the crucial question is how much the different types of institutional socialism became reflected in the effort-reward relationship. In other words, how these types of socialism have affected the issue of surplus value, both in terms of its magnitude and its final use.

Before turning to these key issues, we would like to consider other independent variables that may have some additional influence, positive or negative, on the achievements of the system. Of these, only one would be of a socio-economic nature, namely the dependence on foreign trade. The others could be classified as basically demographic but with cultural or political connotations.