The economic transformation of the Soviet Union, 1913–1945
The economic transformation of the Soviet Union, 1913–1945

Edited by
R. W. Davies
Mark Harrison
S. G. Wheatcroft
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Preface

This volume examines the main quantitative features of the economic development of the Russian Empire and the Soviet Union from the eve of the First World War in 1913 to the end of the Second World War in 1945.

It is primarily intended as a textbook for students taking courses in comparative economic history, economic and social history of the Great Powers, and Russian or Soviet history. We hope that it will also prove to be a useful handbook for graduate students and for teachers of economic history, Russian and Soviet history and Communist affairs; the book is accordingly equipped with full references to text and tables, and with an extensive bibliography.

The years from 1913 to 1945 were a crucial period in Russian industrialisation. Between 1913 and 1939 the urban population increased from 26 to 56 million people, rising from 17.5 per cent to nearly 34 per cent of the total population. By 1914, the foundations had already been laid of modern iron and steel, fuel and cotton textile industries; some important branches of engineering had also been established. But these were islands in a sea of peasant agriculture and urban and rural handicrafts; Russia was industrially by far the most backward of the Great Powers. By the time of the German invasion in 1941, these industrial foundations had been greatly enlarged. Major new industries had also been established; these produced tractors, combine harvesters and motor vehicles, most kinds of capital equipment (including machine tools) and a wide range of sophisticated armaments. On the eve of the Second World War, the Soviet Union was already a major industrial power.

Economic developments in the thirty-four years dealt with in this volume were overshadowed by war and revolution. Between 1914 and 1920, world war, revolution and civil war resulted in a catastrophic fall in production from which the economy took some years to recover. By 1927 industrial production was only slightly higher than in 1913; the Soviet period of industrialisation began only in that year. In 1941, the Soviet Union was subjected to the devastating German invasion, during which most of the major industrial areas were occupied by the enemy; and industrial
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production did not exceed the pre-war level until about 1949. The first phase of Soviet industrialisation was thus concentrated in the fourteen years from mid-1927 to mid-1941. These peace-time years will receive particularly close attention in this volume; but it should be borne in mind that even in these ‘peace-time’ years fear of war strongly influenced the pattern of economic development.

The role played by the state in Soviet industrialisation in the 1930s and after was without precedent. In Imperial Germany industrial development was facilitated by import tariffs imposed by the state and by the national banks under the influence of the state, but industrial development was carried out by private capitalists working for the market. In the Tsarist Empire, the state strongly influenced and encouraged industrial development. As a consumer, the state purchased a substantial part of industrial production, mainly for the state railways and the Ministry of War. And import tariffs imposed by the state protected Russian industry. But the Tsarist economy was primarily a market economy, in which individual peasant households and private capitalist firms were responsible for the bulk of agricultural and industrial production. In contrast, in the 1930s the Soviet state owned nearly the whole of industry and trade, and assumed ownership of agriculture, or control over it, by compelling peasants to join collective and state farms, and subjecting these farms to its will. The state endeavoured to plan all production and investment through administrative orders. While markets continued to play a certain role, all economic activity was subordinated to the relentless industrialisation drive organised by the state.

There were some resemblances between the processes of industrialisation in pre-revolutionary and post-revolutionary Russia. In both eras, the state encouraged industrialisation with the political objective of strengthening Russia as a great power. In both eras, industrial production increased more rapidly than agricultural production, and within industry the production of capital goods increased more rapidly than the production of consumer goods. But the pattern of industrialisation differed considerably under the two regimes. Before 1914, agricultural production in the Russian Empire as a whole increased somewhat more rapidly than the size of the population, and food available per head of population increased. In contrast, in the 1930s and 1940s, while the production of capital goods rose much more rapidly than in the Tsarist era, agriculture suffered the twin disasters of forced collectivisation and German invasion. Even by the time of Stalin’s death in 1953, agricultural production per head of population, particularly of foodstuffs, was lower than on the eve of the First World War.

With the dissolution of the Soviet Union at the end of 1991, the Soviet process of industrialisation has proved to be a unique event in world
economic history. The developments analysed in this book were only the first crucial phase of Soviet industrialisation. In the years after the Second World War, Soviet industry greatly expanded. For a period of over forty years after 1945 the Soviet Union was one of the two military super-powers. When Gorbachev assumed office in 1985, 65 per cent of the population, 180 million people, lived in the towns – three times as many as on the eve of the Second World War. But neither Gorbachev nor his predecessors were able to reform the Soviet system. The Soviet economic system discussed in this volume was able, at great human cost, to cope with the first stages of industrialisation in a developing country. But it was unable to cope with the problems of economic growth and technical change in a more advanced industrial society. This was a major factor – perhaps the most important one – in the collapse in 1991 of the Soviet experiment in state socialism launched in 1917, which had been seen by the Soviet leaders as a blueprint or starting point for the establishment of a planned socialist economic order throughout the world.

The economic changes described in this book cannot in themselves explain the collapse of the system which was established in the inter-war period. Political and social factors, and their implications for the morality and the morale of Soviet society, appear only as essential background to the economic factors. And the story of the economy ceases in 1945; during the forty years of economic growth before the launching of perestroika in 1985 the weaknesses of the system became much more profound. But the reader will notice that economic problems characteristic of the mature – and dying – system of the 1970s and 1980s had already appeared in the 1930s. These included a tendency to over-investment, over-taut planning, the inability to innovate, and – perhaps most important of all – the failure of the grandiose efforts to modernise agriculture. The ‘faulty foundations’, diagnosed in the recent study by Hunter and Szymler (see Bibliography), were never repaired.

Although Soviet communism has come to an abrupt end, Soviet industrialisation has exerted a profound and lasting influence on world economic development. The inhumanities and social inequalities of the Stalinist version of socialism antagonised both the elites and the ordinary people in the Western democracies. But the great Soviet industrial advances took place in the 1930s – the years of the Great World Depression. The ability of the Soviet state to produce a dynamic economic system exercised a profound influence on Western economic thinking, and was undoubtedly a factor in the emergence of the mixture of state and private control and ownership that was characteristic of most Western industrial countries in the first thirty years or so after the Second World War. Soviet industrialisation also exercised a major influence on the four-fifths of the world which was not yet industrialised. Soviet success convinced
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many Third World countries that it was possible for a relatively backward country to leap into the twentieth century in a comparatively short time. Some Third World countries endeavoured to develop their economies by adopting a modified form of the Soviet model of state socialism. In spite of the failure of these endeavours, and the shift of the Third World towards capitalism, the pace and scope of Soviet industrialisation remained a yardstick against which the economic success or failure of ex-colonial countries tended to be measured. Soviet industrialisation was a crucial stage in spreading the economic and social transformation which began in England in the middle of the eighteenth century to the thousands of millions of peasants who lived on the borders of starvation.

A careful assessment of the Soviet experience is therefore of great importance. Excellent general studies already exist of Soviet economic policy and the Soviet economic system, such as Alec Nove’s Pelican *An Economic History of the USSR*. The present volume, while devoting some attention to policy and system, sets as its main task an assessment of Soviet economic successes and failures in quantitative terms, by evaluating the available economic and social statistics.

The difficulties in establishing the main quantitative features of economic growth are now familiar to all students of economic history through the painstaking work of Dean, Cole, Feinstein and others on British economic statistics, and of Mitchell on European historical statistics. Paul Gregory has initiated similar work on the national statistics of the tsarist period. (For these titles, see References.)

The statistics of the Soviet period present special difficulties. This is not because of any weakness in the Russian statistical tradition. As we show in chapter 2, pre-revolutionary national and regional statistics were relatively well-developed (they were certainly far fuller and more reliable than the statistics for Britain in the early nineteenth century!). The Russians were pioneers in the collection and analysis of national income statistics, peasant budgets, and even certain branches of industrial statistics. In the 1920s, several important statistical series were the subject of political contention; but detailed and reliable statistics continued to be published until the end of the decade.

The economic statistics of the 1930s, however, confront us with major problems. First, the speed of economic change, particularly in the capital goods industries, led to extremely severe index-number problems, which makes an ‘objective’ statement about the rate of industrial growth in the 1930s extremely problematic (see chapter 7). Secondly, from the end of the 1920s onwards, the quantity and range of published statistics greatly diminished, until by the end of the 1930s no more than a few isolated figures were available for many branches of the economy. These restrictions on
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publication were often designed to prevent knowledge of failures in the Soviet economy. Thirdly, the Soviet authorities in the 1930s deliberately distorted their published statistics in order to present a more favourable view of economic progress: the most famous examples here are the falsification of the grain harvest (see chapter 2), and the concealment and falsification of population data (see chapter 4).

In an endeavour to assess the true magnitude of the Soviet economic achievement, Western economists have struggled valiantly to remove the veil of mystery and falsification from Soviet statistics. In the first decade or so after the Second World War, major efforts were undertaken in the United States by Abram Bergson and his colleagues on national income and its components, by Warren Nutter on industrial production, and by individual scholars such as Naum Jasny. More recently a number of Western scholars, including the authors of the present volume, have undertaken more detailed work on several sectors of the economy, using previously unpublished Soviet data. The results of all this work have been published in numerous monographs, articles and mimeographed papers. In the present volume, we review the two generations of Western work and endeavour to draw conclusions from it.

With the advent of glasnost', the story of the search for objective statistics has taken an unexpected turn. A number of Russian economists and journalists have attacked Soviet official statistics with far more radical criticisms than those of their American and British colleagues, and have made drastic further downward revisions of major statistical series. Much of this fresh criticism of Soviet statistics is made in rather general terms; and most of it is directed against the statistics of the Brezhnev years rather than of the period with which we are dealing on this volume. These recent Russian commentaries are also considered in this volume.

The debate is certainly not at an end. Since 1989, an increasing amount of statistical material has become available in the Soviet archives. The present volume uses this recently available material in several chapters, particularly those on population, employment, agriculture, the defence industries and the Second World War. These data do not substantially change our assessment but they considerably enrich it. More detailed data which are now available in the Soviet archives – for instance on industrial production, capital investment and internal and foreign trade – will require a great deal of work before new findings are available. To this extent the present volume should be regarded as an interim report.

Some of the conventions followed in this volume should be explained at the outset.

Boundary changes. The territory of the former Russian Empire underwent
Preface

Several major changes during the period covered by this volume. By 1920, at the end of the civil war, the Baltic republics, Poland, parts of Ukraine and Belorussia, and Bessarabia, had been lost; in 1939–40, the first year of the Second World War, most of this territory was regained. The inter-war boundary before 17 September 1939, and the boundary on the eve of the German invasion in 1941, are both shown in map 1.

Except where otherwise stated, all statistics in this volume refer to the boundaries during the inter-war period 1922–1939, including statistics for the pre-revolutionary period.

Calendar. Pre-revolutionary Russia used the Julian calendar, which in 1917 was thirteen days behind the Western calendar. Hence the two revolutions of 1917 are known variously as the February or March revolution and the October or November revolution.

Between 1 October 1922 and 30 September 1930, most statistics referred to the economic year; at the end of 1930, a ‘special quarter’, 1 October–31 December intervened; and from 1931 the calendar year and economic year coincided. Crop statistics, however, both before and after the revolution, and before and after 1930, were often presented in terms of the agricultural year 1 July–30 June.

The economic and agricultural year are both denoted by a diagonal line (e.g. 1926/27), a two-year period by a hyphen (e.g. 1926–7).

Weights and measures. Traditional Russian measures (puds, versts, etc.) have been converted into metric tonnes (written as ‘tons’) and kilometres (km) throughout.

Regions. The main agricultural and industrial regions are shown on maps 2 and 3. We have used S. G. Wheatcroft’s agricultural regions (CPR, EPR, NCR, SCR, SPR). These are explained in the Glossary. The statistics have been regrouped accordingly.

To assist non-specialist readers, a list of major events precedes the text, and a Glossary of Russian and specialist terms and abbreviations follows the text, together with tables and notes. Chapter 2 provides a guide to the main English-language sources on Soviet statistics, and each chapter ends with a short list of books and articles in English for further reading. Except for the first background chapter, these are primarily concerned with quantitative aspects of economic and social development.

Individual issues of the ‘SIPS’ (Soviet Industrialisation Project Series) Discussion Papers, when still in print, may be obtained from:

The Secretary,
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Centre for Russian and East European Studies,
University of Birmingham, Birmingham B15 2TT.

RWD, MH, SGW
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### Major events in Russian and Soviet economic development

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<tr>
<td>1933–7</td>
<td>Second five-year plan</td>
</tr>
<tr>
<td>1935</td>
<td>30–1 August Stakhanov establishes coal-cutting record</td>
</tr>
<tr>
<td>1936–8</td>
<td>The ‘Ezhovshchina’ (‘Great Purge’)</td>
</tr>
<tr>
<td>1938</td>
<td>Third five-year plan begins</td>
</tr>
<tr>
<td>1941</td>
<td>22 June Nazi Germany invades USSR</td>
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<tr>
<td>1941</td>
<td>October Moscow under siege</td>
</tr>
<tr>
<td>1942</td>
<td>November Soviet offensive in Stalingrad</td>
</tr>
<tr>
<td>1943</td>
<td>July Soviet victory in Kursk tank battle</td>
</tr>
<tr>
<td>1945</td>
<td>8/9 May Victory over Germany</td>
</tr>
<tr>
<td>1949</td>
<td>Pre-Second World War output of industry and agriculture restored</td>
</tr>
<tr>
<td>1953</td>
<td>March Death of Stalin</td>
</tr>
</tbody>
</table>
Map 1  Republics, major cities and towns of the USSR at the end of the 1930s
Map 3  USSR industrial regions