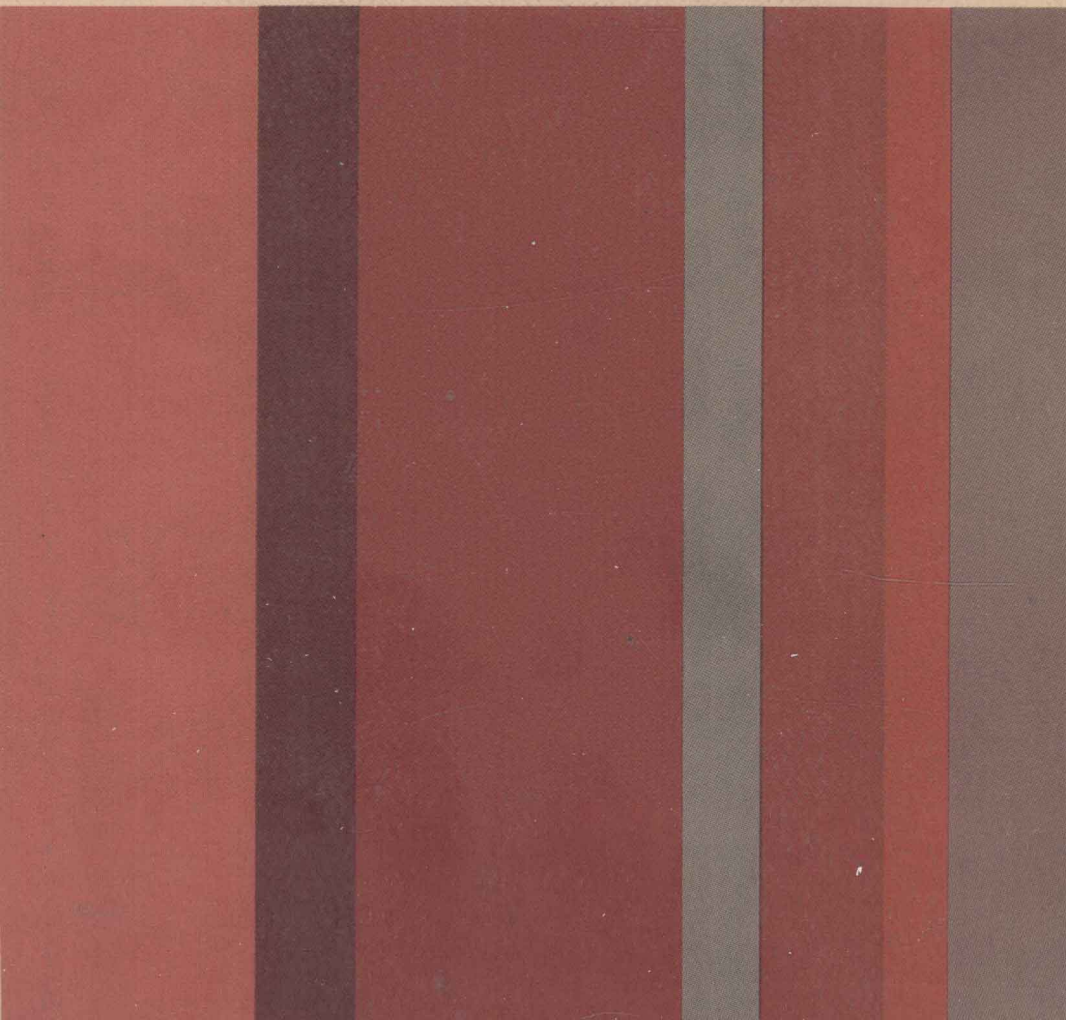


# British Economic Growth 1856-1973

R. C. O. Matthews, C. H. Feinstein, and J. C. Odling-Smee



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## Preface

This book owes its origin to the initiative of the Social Science Research Council, which, through the agency of Moses Abramovitz and Simon Kuznets, launched in the early 1960's a series of parallel historical studies of growth in seven industrial countries. Like our colleagues in the other countries, we have found that the task has taken us very much longer than we expected, and the work has been set aside from time to time as each of the three of us became drawn into other duties. The delay has had some offsetting advantages. It has enabled us to include within our compass the whole of the period of rapid postwar growth, setting a clear terminus to our story in 1973. It has also enabled us to take advantage of major revisions to the statistics relating to investment and the capital stock before 1914 undertaken by Charles Feinstein since the publication of his *National Income, Expenditure and Output of the United Kingdom, 1855-1964*. The core of our statistical data comes from that book, and it may be regarded as a statistical companion volume to the present one.

We have incorporated—with many changes—some material from earlier articles by one or other of us, listed in the references. What is said in this book should be taken to replace our earlier treatments in any places where they are discrepant.

All three authors have participated fully in the successive stages of the work, but two of us would like to put on record that it was the third, Robin Matthews, who made by far the most significant contributions to the design of the investigation, the analysis of the material, and the writing of the final text.

In the course of our work, we have incurred obligations to more people than we can here mention. Our particular thanks are due to Moses Abramovitz and Simon Kuznets for their encouragement, patience, and kind but discriminating comments on the draft; to those

who helped us at various stages as research assistants, particularly Pat Yudkin and Ann Duncan, and also Rosemary Braddon, Keith Norris, Jennifer Phillips, Stephen Powell, and Joy Selby-Smith; to official statisticians and others who supplied us with material; to Belinda Powell, who bore the largest part of the heavy secretarial burden, and also to Hazel Griffin and Jo Hall; to the computing staff, typists, and librarians of the Oxford University Institute of Economics and Statistics and the Cambridge Department of Applied Economics; to Alan Harris, who drew the charts; and to Barbara Mnookin, as editor for Stanford University Press.

Financial assistance is gratefully acknowledged from the (American) Social Science Research Council and the Ford Foundation, who initiated the project, and from the (British) Social Science Research Council for a grant to help in its completion. We are indebted to the Oxford University Institute of Economics and Statistics, for allowing us to draw heavily on its facilities, and we also had much help from the Cambridge Department of Applied Economics.

In the matter of arrangement, we have tried to be mindful of the needs of different classes of readers. This is a long book, and our path will traverse some dense statistical thickets. Our hope, naturally, is that readers will accompany us throughout the journey. But realism teaches us that many will prefer to be selective. Accordingly, each of the central chapters (3–15) is prefaced by a synopsis, to enable the reader to pass lightly over topics that he is not especially interested in and is willing to take on trust. Readers whose interest is in the general picture rather than in the parts that make it up may find it most convenient to turn straight from Chapter 1 to the concluding chapters, 16 and 17. Those chapters are not a complete summary of the book, but they have been written so as to be self-contained.

R. C. O. MATTHEWS  
C. H. FEINSTEIN  
J. C. ODLING-SMEE

## A Note on Conventions and Abbreviations

*Footnotes* contain material necessary for the understanding of the text; *back-notes* (numbered) contain additional or supporting material.

The *geographical coverage* is, unless otherwise indicated, the United Kingdom of Great Britain (England, Wales, and Scotland) and Ireland until 1920 and the United Kingdom of Great Britain and Northern Ireland after 1920. Series relating to the two areas are spliced at 1920 for the calculation of growth rates.

Successive *phases* are defined as follows:

Pre-1914 period	1856-1913
Trans-World War I period	1913-1924
Interwar period	1924-1937
Trans-World War II period	1937-1951
Postwar period	1951-1973

When *averages of annual data* are calculated for overlapping periods, the bridge year is included in the earlier period only; thus averages for 1937-51 and 1951-73 are the averages of the observations for 1938 through 1951 and for 1952 through 1973, respectively.

A circumflex (ˆ) over a variable denotes its *growth rate*. Growth rates are annual compound-interest percentage rates of growth between end-years of a period.

*Rounding of data in tables.* Where totals and their components were calculated from unrounded data, they were rounded separately. An adjustment was then made if necessary, sometimes in a component and sometimes in the total, to ensure that the components added to the total. The adjustment was chosen so as to minimize the percentage error in the adjusted figures.

*Parentheses* around figures in tables means that the figures are not reliable.

A dash (-) in a table means not available or not applicable.

*Data sources.* A consistent set of basic statistical series was prepared for this study. Their sources are described in Appendix N. Where additional data were used in tables and figures, their sources are noted. Adjustments were often made to the published data, to bring them into line with the required concepts or to link them to other series. The data shown here are therefore not necessarily identical to those shown in the sources quoted.

*Capital* is gross domestic reproducible capital stock, unless otherwise indicated.

*Commerce* is used for the sector comprising the distributive trades, banking, insurance, and finance, and miscellaneous services.

The following *abbreviations* are used, in addition to familiar ones:

TFI (or  $f$  in algebraic expressions): Total factor input

TFP (or  $x$  in algebraic expressions): Total factor productivity

TF<sub>r</sub>I, TF<sub>h</sub>I, TF<sub>q</sub>I: Alternative measures of TFI, in which labor input is measured respectively in man-years, man-hours, and man-hours adjusted for quality

TF<sub>r</sub>P, TF<sub>h</sub>P, TF<sub>q</sub>P: Corresponding alternative measures of TFP

AYS: Average number of years of schooling

MEI: Marginal efficiency of investment

SPOF: Supply price of finance

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