
REVIEW ARTICLES

*The Economic History of Britain since 1700**

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Few plots have been tilled so intensively by new economic historians as the field of British economic development since 1700. Only the North American experience from colonial times to the present has been scrutinized so thoroughly by historians committed to the use of economic models and statistical methods. This two-volume collection brings together previously unpublished studies by leading British, Irish and North American exponents of this approach that survey the ground covered to date.

The contents are organized into five overlapping chronological sections, covering the periods 1700-1800, 1780-1860, 1860-1914, 1900-1945 and 1945 to the present. Each section opens with an overview of the period, and each but the last continues with several chapters devoted to principal themes and current controversies in British economic history. The typical section includes chapters on agriculture and industry, on the role of supply and demand in the economy's growth and cyclical fluctuation, on Britain's links with overseas markets, and on income distribution, the labour market, or British social history. The editors have devoted considerable effort to coordinating the work of their authors, to beneficial effect: repetition has been kept to a minimum, and where similar questions are considered in more than one chapter, each includes useful cross-references to the others. Contributors appear to have been instructed to address their articles to the widest possible audience. Footnotes have been minimized, and citations have been incorporated into the text. Several authors have appended suggestions for further reading, and each volume comes complete with a serviceable index and a glossary of economic terms.

* Roderick Floud and Donald McCloskey, editors.

In commissioning contributions to these volumes, the editors seem to have been guided by the desire to include scholars expert in the adaptation and application of models drawn from the social sciences. While many chapters are marked by the liberal use of statistics and an emphasis on the quantitative dimension of economic change, it is the utilization of explicit, precisely formulated and mathematically couched analytical models that distinguishes this economic history. In a certain sense, of course, any historian who attempts to generalize on the basis of a particular episode or who relies on inference when the historical record is incomplete appeals implicitly to an analytical model. A willingness to present one's analytical framework in the form of a behavioural model necessarily implies no particular perspective on economic and social history; indeed, scholars writing history from a Marxian perspective (unrepresented here) are certainly distinguished by their heavy reliance on an explicit analytical framework. Thus, it is not simply the use of models, but the use of models drawn from the mainstream of neoclassical economic theory, complete with its mathematical and diagrammatic trappings, that lends this volume its distinctive flavour. Nearly every important neoclassical model that has been applied to the study of British economic history makes an appearance in these pages.

These two volumes therefore provide an opportunity to assess the extent to which the application of neoclassical models has enriched our understanding of modern Britain's industrial growth and development. A review written from this perspective, and especially a review of such a massive compendium of research, can discuss the content of these volumes in only the most selective fashion. It is with regret that I mention some contributions only in passing and others not at all.

N.F.R. Crafts' survey of the XVIIIth century provides an appropriate introduction to Volume I. In many respects, the methodological approach taken by Crafts is representative of the majority of the surveys to follow. Crafts treats the British economy in a highly aggregated fashion, distinguishing only industry and commerce on the one hand and agriculture on the other. To characterize the timing and magnitude of XVIIIth century growth, Crafts utilizes national income identities as developed by Kuznets and applied so influentially to the British experience by Deane and Cole. While they are better viewed as an accounting framework rather than a behavioural model *per se*, the use of national income accounts focuses historical analysis in much the same manner as a model: it promotes an emphasis on market activity and a comparative neglect of the less tangible (dis)amenities and structural changes associated with economic growth. After modifying Deane and Cole's early estimates of GNP per capita to take into account Lee's upward revision of XVIIIth century population growth (discussed further in Lee and Schofield's chapter on British population) and his own upward revision of the growth of agricultural production, Crafts turns to the role of supply in XVIIIth century

growth. The sources of the economy's expansion are distinguished through the application of that familiar and ever-controversial tool: the aggregate Cobb-Douglas production function. Subject to the assumptions implicit in his framework — efficient utilization, constant returns to scale and stability of the relationship between inputs and outputs up to a Hicks-neutral technological shift — Crafts calculates that the share of British output growth accounted for by the increase in factor inputs falls strikingly from 70-75 percent in the period 1710-1780 to a mere 20 percent in the final two decades of the century. This is typical of the findings that recur throughout these volumes: those quantifiable variables that are readily incorporated into simple neoclassical models consistently fail to account for the major portion of significant changes in the British macroeconomy.

The final three chapters of the first section — by W.A. Cole on aggregate demand, by E.L. Jones on agriculture, and by R.P. Thomas and D.N. McCloskey on overseas trade — along with the first three chapters of the section on the years 1780-1860 — McCloskey's survey of the Industrial Revolution, C.H. Feinstein's discussion of capital accumulation, and G.N. Von Tunzelmann's review of technical progress — all are concerned with the relative importance of supply and demand before and during industrialization. For many years now, the literature on supply and demand as factors in the Industrial Revolution has been a source of confusion for the casual reader and historian alike. These articles, with their emphasis on formal economic analysis, make clear the nature of the confusion. W.A. Cole first marshals the case for demand as a factor in the XVIIIth century. Following Gilboy, whose 1932 article predates Keynes' *General Theory* but may well have been stimulated by the same macroeconomic events, Cole appeals implicitly to a Keynesian paradigm of underutilized resources. He maintains that disturbances to aggregate demand, whether external in origin as in 1702-13, 1739-48, and 1775-83, or internal in origin, as those associated with the long run of good harvests in the 1730s and 1740s, played an important role in XVIIIth century cyclical fluctuations, but he hedges any claim that demand was a driving force in the economy's secular expansion. Thomas and McCloskey on the XVIIIth century and McCloskey on the XIXth display no such ambivalence. They find little evidence of underutilized resources for any portion of the XVIIIth or XIXth centuries, and argue in any case that unemployment would have had to reach staggering levels before demand could rival supply as a factor in the economy's expansion. The authors appeal implicitly to a Walrasian market-clearing model to demonstrate that demand could have played no independent role in the process of British growth, which was constrained in fact by developments on the supply side. Many readers will be struck by the static nature of the argument, in which fluctuations in export demand; for example, are simply matched by the domestic reallocation of resources and corresponding fluctuations in imports. There is little opportunity for a change in export demand that alters the terms of trade between

imports and exports, a fluctuation in home demand that alters the terms of trade between agriculture and industry, or a temporary disturbance to financial markets that alters the terms of trade between current and future consumption to influence aggregate supply through its impact on savings and investment. A full dynamic model of saving and investment that brings the intertemporal nature of the growth process to the fore would shift the focus from the relative importance of supply and demand at any moment to the interaction of the two over time. For some authors, their de-emphasis of savings and investment follows directly from choice of model. McCloskey, for example, argues that these effects are all of the second order. Appealing to essentially the same aggregate production function framework used by Crafts, he finds that the physical capital accumulation accounts for little of the output growth enjoyed by Britain in the first half of the XIXth century, and concludes that further investment would have accelerated economic growth only slightly. Industrialization remains a function of technical change, the unexplained residual in the authors' neoclassical models. As Crafts and McCloskey rightly point out, and as Von Tunzelmann's survey of technology painstakingly documents, so long as the economics of technical change remains at a rudimentary stage, the root causes of the Industrial Revolution will remain uncertain. The neoclassical models marshalled here have little to say about technical change other than "challenge and response" about the diffusion of new technology beyond references to the logistic function, or about the factor-bias of innovation beyond general arguments concerning factor scarcity and cost.

Volume I is rounded out by several changes of pace. O'Brien and Engerman survey the standard of living controversy, mercifully omitting a blow-by-blow account of the debate and concentrating on evidence. They analyze both real wage data, assembled from the work of Bowley and Gayer-Rostow-Schwartz as well as Soltow's income distribution studies, taking care to specify probable margins of error. Hueckel's survey of agricultural improvement in the first half of the XIXth century is a testament to economic rationality: English farmers are portrayed as "willing and able to quickly alter their crops and methods in the face of changing market conditions." Compelling evidence of rationality is assembled, but it cannot be said that alternatives are seriously entertained. N.L. Trantner's analysis of XIXth century labour supply relies heavily on Gary Becker's model of investment in human capital. Trantner concentrates on measuring the magnitude and implications of human capital formation, choosing to neglect the intriguing but difficult question of the determinants of its accumulation. G.R. Hawke and J.P.P. Higgins consider the formation of social overhead capital with special reference to improvements in transport. As in Hawke's earlier work, the concept of "social savings," inspired by Fogel and Fishlow's studies of U.S. railways, provides the analytical framework. The important arguments con-

cerning externalities, backward and forward linkages and so forth all are given their due, but as with industrial capital, human capital, overseas trade, and fluctuations in home demand, social overhead capital in and of itself appears to have contributed little to XIXth century growth.

In Volume II, the focus shifts to late Victorian Britain. The enduring (some would say endless) controversy over economic performance and entrepreneurial failure is addressed in Floud's survey of the period, in Harley and McCloskey's chapter on foreign trade and the expanding economy, and in Sandberg's piece on the Victorian entrepreneur. Sandberg reviews his previous analyses of entrepreneurial response, examining in some detail entrepreneurial decisions in selected British industries. His behavioural model is one of profit maximization subject to the constraints of technology, demand and factor cost. Harley and McCloskey's article on foreign trade and British growth leans heavily on McCloskey's model of a fully employed Victorian economy in which fluctuations in export demand affect only the terms of trade and the allocation of resources but not their rates of utilization or accumulation. Static calculations reveal that changes in the terms of trade could not have changed real incomes by much. Using what might be called the "principle of iterated fractions," the authors show that the percentage change in real incomes must have been small because it was the product of several fractions all of which lay between zero and one. Thus, the effect on national income of a change in the terms of trade equals the hypothetical terms of trade improvement (10 per cent) times the share of trade in British income (12 per cent): multiplication reveals that national income rises by a mere 1.2 per cent. There is no room here for Cairncross and Saul's arguments about the impact of fluctuations in export demand on savings and on home and foreign investment, or for Kennedy's arguments about the welfare effects of such fluctuations when private and social returns to investment diverge. As Harley and McCloskey insist, the burden of proof remains; such influences, and in particular the existence of significant divergences between private and social returns, have not been convincingly documented.

A.G. Ford's article on the trade cycle in the XIX century is particularly noteworthy, for it paints a radically different picture of the late Victorian economy. Implicitly employing a Keynesian model of the multiplier-accelerator variety, Ford examines cyclical fluctuations in output and employment. Predicating his analysis upon the existence of underutilized resources, he considers the impact of shocks from abroad, investment fluctuations, and monetary disturbances, all of which appear to have had standard Keynesian multiplier effects in the half-century before the Great War. The contrast with the other contributions to this section, in which the economy typically is portrayed as fully employed and responding to shocks by reallocating resources rather than altering the level of resource utilization, could not be more striking. Readers will judge for themselves the persuasiveness of these two interpretations; but

few will come away from the discussion confident that the evidence marshalled to date is capable of discriminating between these two views of the XIXth century experience.

At the centre of these debates can be found the Victorian capital market, any study of which is absent. M. Edelstein's valuable survey of British foreign investment and the Empire does touch on aspects of the capital market's operation. Most of Edelstein's analysis is couched in terms of an efficient capital market model, with funds flowing internationally in search of the highest risk-adjusted return. At one point, there is a speculative passage on capital market imperfections. Edelstein explores the implications for British economic development of the absence of large investment banks, and assesses the influence of such institutional factors as restrictions on purchases of assets by trustees and the Colonial Stock Act of 1900. After considering the evidence, Edelstein rejects the hypothesis that there existed any substantial unsatisfied demand for funds in late Victorian Britain, thus lending little support to the view that capital market imperfections were of particular economic significance.

The penultimate section, on the years 1900-1945, is concerned primarily with the interwar period and, to a lesser extent, the two world wars. The contributors to this section utilize a variety of models. In his survey of the period, Von Tunzelmann considers both the supply and demand sides of the macroeconomic equation (finding once more that a substantial fraction of the economy's growth — in this case 40 percent — is not accounted for by the growth of inputs). He surveys the "Treasury view" of fiscal policy, the Bank of England's conception of monetary policy, the opinions of Keynes and his colleagues at the time, and the quite distinct Keynesian interpretations that emerged subsequently. Several of these issues are elaborated upon in S. Howson's article on interwar unemployment, in which explanations focusing on demand failure and on the geographical and occupational maldistribution of labour, as well as search theories that suggest a significant role for the dole, are discussed in turn. Only when analyzing the employment effects of interwar fiscal policies — actual and hypothetical — are Howson's preferences revealed. She applies a Keynesian model, inflating employment on public works by an aggregate demand multiplier to derive an upper bound estimate of the impact of such programmes. Clearly, advocates of the structural and search explanations would arrive at very different assessments. In an analysis in much the same spirit as Howson's, T. Thomas considers interwar macroeconomic fluctuations by fitting a variant of the Klein-Goldberger model to data for the period 1918-1945. This chapter is less than illuminating, for the author has chosen to extract from a useful dissertation a large number of regression equations but rather little economic analysis. Ian Drummond's chapter on Britain's international trade and payments, while rich in historical detail, differs from its counterparts in that no explicit model is offered. Rather, Drum-

mond employs balance of payments statistics as an organizing framework in much the same manner that Crafts and Cole rely on national income accounts. Volume II concludes with surveys of XXth century social history by Asa Briggs and of postwar macroeconomic policy by Sir Alec Cairncross.

There is no disputing the value of this two volume economic history of modern Britain as a summary of recent research. Yet it leaves this reviewer, and may leave many readers, certainly unsettled, if not provoked. This may reflect more directly on the body of research that the editors and authors have chosen to survey than on the particular contributions assembled here. We learn that no single factor was indispensable to British growth, given a vision of an economy sufficiently flexible to respond almost costlessly to changes in economic circumstance. We find that the social costs of market imperfections could not have been particularly large, since, as welfare economists have known for years, Harberger triangles are always small. Given a framework in which no single factor is indispensable and no single distortion is costly, it is not surprising to learn that the largest share of Britain's economic growth and cyclical fluctuation remains unexplained. By process of elimination, it seems that dynamic effects and changes in social organization, technical knowledge and economic structure matter the most. In other words, the factors that emerge as crucial in the development of the British economy are precisely those about which the neoclassical models employed in these volumes have least to say and to which relatively little attention consequently is paid in the surveys assembled here.

Other readers may find the contents of these volumes more reassuring. But whatever their impression, they should agree on the importance of the contribution. The editors are to be heartily commended for the industry and enterprise with which they assembled this anthology and for the quality of the articles commissioned. For years to come, this new economic history will remain a standard introduction for students of the period and a useful reference work for researchers in the field.

