

the twenty-first century. Particular attention is devoted to the growth of knowledge-intensive production and the structural transformations that are necessary to deal more adequately with the use and growth of knowledge. Much is made out of the employment relation, which is seen as the true hallmark of capitalism. However, the increasing reliance on specialist skills means that the traditional employment relation may become increasingly obsolete. Society may become truly "post-capitalist" and manifest what Hodgson, with a bow to Hayek, calls "market knowledgism," characterized by self-management under market relations. Hodgson also ponders the possibility that although contractarian relations within capitalism are (allegedly) stretched to their limits by the growth of information technology and the multiplication of specialist knowledge, there may still be a sort of counter-movement to preserve the capitalist core. Anticipated by the New Right governments of the U.S. and the UK in the 1980s, this reaction will, however, lead only to stagnation.

In a highly intelligent way, this book adds substance to a number of contemporary and so far rather undisciplined discussions of "the learning economy," "the information society," and the like, providing a unique perspective that borrows from, in particular, Veblen and Hayek. (Indeed, in spite of his critiques of Hayek, "Hayekian social democrat" is perhaps the most fitting characterization of Hodgson's politico-economic stance). Hodgson is to be congratulated for the depth of the scholarship demonstrated in this book, and the rigor with which he adds substance to a very fuzzy discussion.

However, the book also contains claims with which it is hard to agree. Least convincing, at least to this reviewer, is the critique of "market individualism." Classical liberals and libertarians are criticized for outright inconsistency, for example, in endorsing family values (which supposedly run counter to the values of the market society), and for neglecting the possible co-existence of alternative lifestyles in a market society. To anyone who has read the final chapter in Robert Nozick's 1974, *Anarchy, State and Utopia* (Oxford: Basil Blackwell), "A Framework for Utopia" (!)

or is familiar with classical liberal political philosophy, these claims are not convincing. Moreover, classical liberals are said to be claiming that no planning is useful or viable (p. 92). Rather, what they have emphasized is that the key issue is *who* shall do the planning, not whether there shall be planning or not. Finally, although the emphasis on general upgrading of skills is surely high on the rhetorical agenda of European social democrats, it is not clear why Hodgson's preferred scenarios require welfare statism of the traditional Western European type. In fact, to the extent that the state is destructive of much of the trust-based fabric of society, what Hodgson calls "market individualism" may be more likely to realize his preferred scenario.

The history of economics and the history of utopianism are closely woven together. Geoff Hodgson has provided an impressive lead toward a more rigorous and modest type of utopian discourse. The hope must be entertained that more economists will join this endeavor, lest it be left to the demagogues.

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The Japanese Economic System and Its Historical Origins. Edited by Tetsuji Okazaki and Masahiro Okuno-Fujiwara. Oxford and New York: Oxford University Press, 1999. Pp. x, 294. \$78.00. ISBN 0-19-828901-4

This thought-provoking collection of nine essays by noted Japanese economists presents a rare collaboration of micro theorist, macro empiricist, and economic and business historians focused on a united theme: to explore the origins of Japan's economic institutions. The book assembles an impressive amount of quantitative data as well as rich institutional details, most of which were hitherto inaccessible to English-speaking readers. Its comparative and analytical approach will appeal not only to specialists in Japanese economic history but also to economists and political scientists interested in institutions in general.

As stated powerfully in the opening chapter, the main claim of this book is that the prototype of many distinctively Japanese institutions can be found in the wartime planned economy during the Sino-Japanese

War and WWII (1937–45). After summarizing characteristics of the Japanese economy today that differ markedly from the Anglo-Saxon market economy, Okazaki and Okuno-Fujiwara review the far-reaching impact of wartime regulation, which transformed the economy from a market-based, relatively competitive system to a more regulated one that persisted beyond postwar occupational reforms and into the period of high economic growth. The claim is substantiated both empirically and theoretically in subsequent chapters.

In Chapter 2, Kazuo Ueda presents a regulatory history of Japanese financial institutions and examines the origins of long-term capital provision and indirect financing. Chapter 3, by Juro Teranishi, explores how the main bank system—corporate monitoring by a large bank based on long-term business relations—arose, together with other complementary institutions like banking regulation and cross-shareholdings. In Chapter 4, Okazaki comprehensively documents a dramatic shift in the corporate governance structure between pre- to postwar periods and examines the impact of wartime corporate reforms in detail. In Chapter 5, Konosuke Odaka traces the gradual formation of Japanese-style labor relations characterized by long-term employment, seniority-based pay, and corporate-wide unions. In Chapter 6, identifying the distinctive role of Japanese industry associations in assisting both the formulation and implementation of government industrial policies, Seiichiro Yonekura provides a case study that shows strong continuity between wartime control associations and postwar industry associations. In Chapter 7, Naohiko Jinno compares the pre- and postwar fiscal systems and explores the origins of tax reform established in 1940. In Chapter 8, Toshihiko Kawagoe presents legislative history of agricultural controls and shows how the food-control system created during the war has persisted to the present day.

Pulling all the historical studies together in Chapter 9, Okuno-Fujiwara introduces a game-theoretic framework emphasizing complementarity among different economic institutions. The theory indicates that an

economy-wide shock, such as war, may move an economic system from one equilibrium to another by initiating concurrent changes in a set of complementary institutions. When these institutions, as a whole, form a stable system, a temporary shock can have a permanent impact in changing the structure of an economy.

A principal strength is the book's combination of rich historical studies and clear theoretical framework. In particular, Chapters 2, 3, 4, and 6 together reveal the simultaneous changes in financial markets, corporate governance, and government-business relations during the war, making a compelling case that complementarity was important. On the other hand, although the historical analyses in Chapters 5, 7, and 8 are fascinating in their own right, how the nature and timing of changes in employment, fiscal, and agricultural institutions fit with the rest of the economic system is not immediately clear. Unfortunately, other equally relevant (and distinctively Japanese) institutions, such as buyer-supplier relations, distribution network, and social insurance systems, are not covered.

In evaluating the claim that wartime was the “defining moment” for Japan's present-day system, I shall raise two issues: the effectiveness of wartime regulation and its irreversibility after the war. First, why did wartime legislation matter in changing private agents' behavior? Enacting a formal law is different from implementing it. Even though the military government exercised formidable coercive power, historical observations suggest that the regulatory agency faced problems familiar to economists—asymmetric information and incentive incompatibility—that made enforcement difficult. The book provides examples wherein a particular regulation failed to achieve a stated goal but produced an unintended result, or was modified subsequently to take public opinions into account. In other words, the legislation itself was an outcome of complex interactions among wartime objectives, patriotic ideology, informal institutions, and private information. Does this imply that effective regulation tended to “institutionalize” private practices already in existence? Did

government intervention play a major role in reinforcing, rather than initiating, institutional changes?

Second, some (but not all) institutions established to cope with extraordinary yet temporary wartime circumstances have lasted for more than half a century. Why were they irreversible? What made some institutions persist and others not? Historical observations again offer valuable insights. The authors suggest that in some cases, e.g., the main bank system and long-term employment relations, resulting institutions—whether intended or not—provided an alternative mechanism that was at least as efficient as the one based on competitive markets. By contrast, in cases such as agricultural control and banking regulation, the authors imply that although resulting institutions were not socially efficient, once in place they persisted throughout the postwar period, as they created powerful special interest groups. To protect private benefits accruing from regulation, these groups subsequently blocked attempts to reverse the measures. In other words, there were multiple mechanisms—with different efficiency implications—that made wartime legislation persistent, calling for a richer theory that evaluates the irreversibility of institutional changes induced by the government intervention.

Overall, I expect readers to be inspired by the theoretical framework and empirical findings offered here. As stimulating as it is, the book will encourage further intellectual inquiry into the institutional foundations and historical origins of modern economies.

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Q Agricultural and Natural Resource Economics

Paying for Agricultural Productivity. Edited by Julian M. Alston, Philip G. Pardey, and Vincent H. Smith. Baltimore and London: Johns Hopkins University Press, 1999. Pp. xix, 315. \$21.50. ISBN 0-8018-6278-7, pbk.

Rapid and sustained growth of agricultural production over the twentieth century has been driven primarily by technological

change. In turn, positive robust relationships have been established between expenditure on agricultural R&D and multifactor productivity growth. Most studies find rates of return on agricultural R&D exceeding 20 percent, well above the opportunity costs of the funds invested. *Paying for Agricultural Productivity* evaluates the evolution of agricultural science policy in developed countries from the 1950s to the present. It focuses on policy in the U.S., Australia, the U.K., the Netherlands, and New Zealand; on the forces behind changes over the last 20 years; and on whether the changes have improved the net economic benefits obtained from investment in agricultural R&D.

Alston, Pardey, and Vincent bring together in a cohesive, integrated, and highly readable volume the views of a diverse group of economists actively involved in the analysis of agricultural science policy. The major contribution lies in the detailed case studies of the five countries describing policy, its evolution over the past 50 years, explanations for the substantial changes in the 1980s and 1990s, and tentative assessments of the changes. These chapters contain some new data, which the authors bring together with older data and descriptions of institutional structures to provide a detailed and comprehensive picture for each country, and the authors analyze why agricultural science policy in each country took its respective path. Each of the country chapters addresses a common set of questions, but has not been constrained by a rigid template. A set of introductory chapters provides an economic perspective on the role of R&D, principally to achieve productivity growth, and the arguments for government intervention associated with the public good characteristics of some R&D spending. Different forms of governmental intervention are described, including establishing intellectual property rights, public funding and supply, public funding with contestable supply of R & D, increasing private incentives via subsidies and tax breaks, and special institutional arrangements to internalize some spillovers via commodity checkoffs. A final summary chapter compares and contrasts the evolution of policy in the five countries. Together, these countries account for over 40 percent