New Left, just as his impatience with most other forms of mental blindness has made him one of the most stimulating of contemporary Marxists and a leader in the evolution of modern dependency theory.

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Late Capitalism. By Ernest Mandel. Translated by Joris De Pres. London: NLB (Verso Edition), 1978; distributed in the USA and Canada by Schocken Books. Pp. 618. $9.95.

This volume seeks to explain in unadulterated Marxist terms the main features of modern economic history. It especially focusses on the post-1945 boom in the advanced industrial countries of the non-communist world, and the reasons "it would be followed by another long wave of increasing social and economic crisis for world capitalism, characterized by a far lower rate of overall growth" (p. 7).

In deploying the cumbersome Marxist apparatus, the heart of Mandel's analysis is his interpretation of the Kondratieff cycle—a variation on Schumpeter's hypothesis in *Business Cycles.* Capitalism is seen as having evolved on the basis of four technological revolutions: textiles, based on handicraft machines, coming to a close about 1848; the railroad, steel, and machine tool revolution, based on the production of machines by machines, coming to a close in the 1890s; the electricity and internal combustion engine revolution, coming to a close in the 1930s; and the electronic and nuclear power revolution whose deceleration marks the end of the fourth Kondratieff upswing in the second half of the 1960s. As in Schumpeter, each cycle has a phase of increased profits "when production sites have first to be created" (p. 121); and then a phase of rapid diffusion, when profit rates fall and the overall growth rate slows down. These phases of deceleration are dated 1824–1847, 1874–1893, 1914–1939, and 1966–.

The bulk of the analysis, however, is devoted to the evolution of the world economy since the 1930s; that is, the emergence of late capitalism. Mandel argues that multiple forces are tending to reduce the rate of profit; these are compounded by the pressure of wage demands in excess of productivity increases which can only be contained by incomes policies which he counsels labor to resist. He further argues that the inner contradictions of late capitalism will force the bourgeoisie into armed violence to protect surplus-value. To emancipate world society from these contradictions requires "the conquest of political power and the demolition of the bourgeois State apparatus, by the associated producers" (p. 499). A socialist world state will then emerge; for, true to his Trotskyite heritage, Mandel is as profoundly opposed to socialism in one country as he is to capitalism in one country (pp. 514 ff.).

Putting aside Mandel's political pamphleteering, the structural weakness of his system is that it is a two-sector model which (like neoclassical growth models) fails to take into account flucuations in the relative abundance or scarcity, relative prices and profitability of investment in agricultural products, raw materials, and energy. They are embedded in Mandell's system somewhere in Department 1 (capital goods). He misses, therefore, a good deal that is central to his long cycle upswings; misses the dynamics of the 1830s and the late 1880s which run counter to his first and second downswings; misses the role of the shift in relative prices from the 1930s to 1951; misses the critical role of declining relative prices for basic commodities in the boom of the 1950s and 1960s; fails to introduce adequately in this 1978 edition the meaning of the price revolution of 1972–1978.

This failure bears significantly on his assessment of the prospects for democratic capitalist societies. There are ample opportunities and need for productive investment in the generation ahead in resource-related fields; e.g., energy production and conservation, the control of pollution, agricultural output to match the population bulge in the developing regions, raw material development, research and development over a wide front. For our times, investments of this kind are the equivalent, say, of those required to open up the American West in the third quarter of the nineteenth century, and Canada, Australia, and

Argentina in the pre-1914 generation. Although, as in other such periods, the rate of growth of urban real income may be less than in the 1950s and 1960s (when the terms of trade shifted favorably by about 25 percent for the OECD world), it need be neither a period of stagnating real income nor of chronic unemployment.

Mandel's thesis falls, then, in the general category of those of Shuman and Rosenau, Forrester, Heilbroner and the other pessimists who echo the secular stagnation hypothesis of the 1930s. The text is heavy going and somewhat turgid; but the main lines of Mandel's argument are clear enough.

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The New Economic History of the Railways. By Patrick O'Brien. New York: St. Martin's Press, 1977. Pp. 121. $13.95.

Patrick O'Brien has done a comprehensive, workman-like job of examining one of the major controversies in economic history a decade or so ago along with subsequent works that have evolved from it. The results of the survey are frequently inconclusive, a characteristic that O'Brien readily acknowledges. Scholars who have followed the major developments in this area will not find much that is new and newcomers may be discouraged by the numerous loose ends. Most of the blame for that, however, lies with the complexity and methodological limitations inherent in the issues rather than with O'Brien's treatment of them.

The role of the railroads in economic growth became a major issue in the 1960s, in part in response to the provocative works of W. W. Rostow and R. W. Fogel. The discussion frequently generated more heat than light because the issue was often treated as a symbol of major methodological divisions that were becoming evident in economic history. Once the methodological controversy subsided, interest in the contribution of railroads to economic development fell off rapidly and a large number of questions of a more technical nature were left unresolved. In effect, scholars lost interest in solving the mundane but necessary "nuts and bolts" aspects of the problem.

Even if economic historians somehow were to continue large-scale work on this complex of problems, many would remain beyond resolution at the present. As O'Brien recognizes, economic analysis has not yet reached the point where all scholars would agree on its implications in every application. So, for example, there is an extensive—and inconclusive—survey in the book of the backward and forward linkages of the railroad. O'Brien notes that there has been some dispute over the extent to which these benefits of the railroad are included in the calculations of direct gains. In this regard he is somewhat of a traditionalist, tending to come down on the side of those who believe there were significant side effects. And that is symptomatic of much of the treatment of the issue. Where scholarship does not provide conclusive implications, the heart is free to shape the answers.

Perhaps this is the main reason that railroads received such intense, but short-lived attention from new economic historians. The question was broad enough that major alternative interpretations could be reasonably advocated. For example, O'Brien expends a good deal of space exploring the conflicting judgments about the net contribution of the railroad that in effect resulted from differing presumptions about the range of likely substitutes in the absence of the railroad. Each side could advocate its position without fear of telling criticism. At the same time, however, the debate soon took on an inconclusive and frustrating tone, and therefore interest was bound to wane.

For anyone who wishes to make the long trek and review old battles, Patrick O'Brien is a good tour guide.

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