

BOOK REVIEW

G. R. Hawke, *Railways and Economic Growth in England and Wales*, Oxford: Clarendon Press, 1970, pp. XIV +421. \$21.00. Reviewed by K. W. Studnicki-Gizbert*

This book represents a valuable contribution to the study of the impact of a new transport medium on economic development using the development of railways in 19th century England and Wales as a case study. It can be considered a continuation of similar American studies, notably R. W. Fogel, *Railroads and American Economic Growth, Essays in Econometric History* and A. Fishlow, *American Railroads and the Transformation of the Ante-Bellum Economy*. The questions posed by those studies are similar to those asked today when a major change in transport technology or a significant addition to the transport capacity are considered. These questions are: what was the impact of the innovation on economic growth?, and what were the social returns to investment in a new transport medium (railways in the 19th century)? The related question is what were the indirect effects (linkage effects) of the new industry.

The impact of English railways developed gradually, mostly after 1840 and was quite pronounced by 1865. The author estimates that "dispensing with the railways in 1865 would have required compensation for between 7 and 11 per cent of national income". The social internal rate of return over the 1830-70 period is estimated at between 15 and 20 per cent. These can be compared with similar estimates derived by Fogel and Fishlow for the American economy where social savings were estimated at 4-6 per cent of national income. The difference is ascribed to the lower relative costs of the older, competitive form of transport i.e. water transport. The linkage effects, that is the impact of railway construction on other industries, especially the iron industry were important but by no means crucial to the industrial development. These results are less dramatic than one would expect on the basis of uncritical acceptance of a theory attempting to explain economic development by few, discontinuous major changes, and this is an important finding. On the other hand, one must keep in mind the limitations inherent in this type of investigation. For example, between 1840 and 1870 the size of passenger traffic in Great Britain increased more than twenty fold. The social and economic impact of such an increase in mobility profoundly affected the social outlook, information spread and marketing techniques. The effects on industrial production of the shortening of delivery cycles cannot be measured solely in inventory savings; production techniques, the increase in the range of

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potential suppliers, the breaking of local monopolies must have significantly affected the industrial structure of the country, and the increase of locational choices had an impact on spatial distribution of industry and population. Quantification of these indirect effects does not appear to be possible with the data available. Mr. Hawke is quite aware of these limitations and while being careful not to push quantifications beyond reasonable limits indicates non-quantifiable, quantitative changes induced by the railways, such as the impact on managerial techniques, corporation law etc.

To sum up: an interesting, well-researched contribution to the history of economic change in general and to transport history in particular; a valuable addition to the library of an economic historian or transport economist. Standards of editing, referencing and book production are as high as can be expected from the Oxford University Press, i.e. very high indeed.