

important were limits placed on the exchange of ideas and information by language barriers. By 1960, according to Watkins, market integration, the penetration of the state into local affairs, and the creation of national culture by newspapers and migration had led to national communities of shared values. Demographic change was a mass movement, “with a shift from social control by a smaller group to social control by a larger group,” rather than, “a shift from social control to individual control” (178). Interestingly, the effects of previous language differences within countries remain visible in 1960, even though economic variables no longer have much predictive value regarding demographic patterns.

Watkins is obviously familiar with the data and their limits. She points out regularly that her information is highly aggregated, and that some statistical conclusions are based on less than perfect measures. She is aware that she has no firsthand evidence for her speculations about the importance of women’s gossiping as a means for establishing social standards and spreading information. Nor can she point to a specific case where demographic patterns within a community changed as links to the wider world became stronger. She readily admits that her conclusions rest on the fact that demographic and other social changes were parallel in time, and are at least logically connected. She is convinced that there was no necessity for demographic patterns to converge, which in turn points to the importance of shared values, along with economic circumstances, as determinants of the demographic transition.

Watkins believes that the future of demographic trends in Europe is one in which national borders will, once again, become less important, as the integration of the continent continues. These speculations point out what is one of the most obvious limits of the study—namely that she could usefully have added data since 1960 instead of relying on the time limits of the Princeton project. Her emphasis on culture is clearly speculative, although convincing, but will need additional studies on the local level. It is, however, an important contribution in that it offers a telling critique of those who would explain demographic behavior with an exclusively rational, economic model.

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Transport and the Development of the European Economy, 1750–1918. By Simon P. Ville (New York, St. Martin’s Press, 1990) 252 pp. \$59.95

Attempting to survey in scarcely 200 pages almost two centuries of transport development across the European continent, not to mention the effects it had on the wider economy, is no easy task. It is too easy for a reviewer to criticize a small book for what it does not do. Historical comparisons of transport systems are virtually unknown, and this book fills a notable gap in the literature. Moreover, a survey such as this one

can only be as good as the literature on which it draws. As Ville points out, that literature is dominated by an antiquarian tradition of case studies which shuns the use of the tools of the social sciences and has little concern for the effects of transport improvements. A smattering of national studies exists but many are out of date. Whereas a vast literature is thus available, its descriptive nature renders international comparisons difficult.

I have long argued that differential rates of development of transport infrastructure were a major factor in determining the differential growth rates of European national economies. Transport systems have effects far beyond the strictly economic sphere; they affect the relationship between town and country, the forging of national identities, labor mobility, and a host of other factors. It is amazing, then, that a comparative survey of this sort has never before been available.

Ville often mentions the choice between private and public finance faced by different countries at different times, but provides only a brief discussion in the railway chapter of the advantages or disadvantages of the two approaches. Yet the fact that such a choice existed, and that it had important effects, goes a long way toward overcoming the naive view that transport systems are naturally developed as a byproduct of economic growth. Roads, river improvements, canals, and railroads were among the most expensive investment projects of their respective eras. (Ville notes that railway investment could easily comprise over half of the aggregate capital formation.) Access to land along routes (generally through the exercise of eminent domain) was critical, and depended on legal structures and landowner power. The subject of Ville's book is important precisely because transport infrastructure does not just happen, and delays in its creation do have important effects on economic and social development.

It is regrettable that more explicit comparisons could not be drawn. In the later chapters, tables are provided on such variables as ship ownership, railway mileage, and freight carried. One might quibble with them; weighting trackage by area and reporting freight in ton-miles rather than tons might have been preferable. Still, such figures provide a firm basis for discerning which countries were ahead and by how much. For the earlier chapters on roads and waterways, the accounts are descriptive, with countries surveyed in turn in a paragraph or two (only seventeen pages each are devoted to roads and waterways, but sixty-five are lavished on shipping). Readers should be wary of forming firm impressions from the fragments of information presented (for example, Ville gives a much too negative impression of the pre-1750 transport system, at least in Britain). The emphasis on northwestern Europe also limits the range of comparison.

Ville notes that one cannot discuss the length of either roads or waterways without first discussing quality. Roads might be anything from a path through the wilderness to an all-weather road suitable for

wheeled traffic. Waterways could, although nominally navigable, suffer from a host of difficulties: rocks, rapids, drought, ice, and sandbars. Where national estimates of road and waterway length exist, one cannot be sure that the same standards of quality have been used in every country. Delving more deeply into the national literatures can, however, provide a basis for detailed comparisons. I have compared the French and English transport systems in the late eighteenth century and found the latter superior in all respects.¹ To perform such a comparison on a continental scale is a Herculean task not to be expected of one researcher, especially as the secondary literature becomes thinner as we move east. One can hope that Ville's book invites further comparative study.

Ville is justifiably critical of attempts since the 1960s to estimate "social savings"—the cost to various nineteenth-century national economies of producing the same value of transport services in the absence of railways. Whereas such calculations were a useful antidote to exaggerated claims of the revolutionary role of railways, their authors have recognized that they could not capture the potential dynamic effects of transport improvements on such variables as industrial location and technological change. Ville also notes that the assumption that the same volume of services would have been supplied is unrealistic, and that by focusing on costs the effects of improved reliability, speed, and comfort were ignored.

In both the opening chapter and the closing sections of the individual chapters on particular transport modes, Ville discusses a wide range of potential effects of transport on economic development: access to markets, access to raw materials, regional specialization, lower inventory holdings in industry, better information flows, and standardization of tastes. Some of these issues receive scant attention relative to the more readily measured backward linkages: the use of coal, steel, engineering talent, and of financial institutions by the transport system itself. Ville makes the important point that transport improvement could help local production compete successfully against imports. More attention could have been devoted to the various ways in which transport improvements aided the conception and diffusion of new technology.

The book is well written and readily accessible to those with no background in economics, although readers may at times feel drowned in descriptive detail. It brings together in one place for the first time information on various transport modes across numerous European countries. I am hopeful that it will stimulate further interest in both the dimensions and effects of cross-country differentials in transport infrastructure. Much elucidation of the former is necessary before either the causes or effects of transport improvements can be fully comprehended.

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1 Szostak, *The Role of Transportation in the Industrial Revolution* (Montreal, 1991).