

William J. Hausman, Peter Hertner, and Mira Wilkins, *Global Electrification: Multinational Enterprise and International Finance in the History of Light and Power, 1878-2007*. New York: Cambridge University Press, 2008. xxiv + 487 pp. \$80 (hardcover), ISBN: 978-0-521-88035-0.

This is a detailed and comprehensive study of the international history of the electric utilities around the world and the corporate and financial institutions that made the rapid expansion of electricity from the late nineteenth century onward possible. Its scope is impressive, both in time and geography, with its coverage of over one hundred years, not to mention most areas that experienced significant electrification in this time period: North America and Western Europe, followed by Latin America, Australia and New Zealand, Eastern Europe, Russia and Japan. Other parts of Asia and Africa lagged behind and are covered to a lesser degree. Written by a team of researchers, this is an admirable attempt to create a transnational narrative. The authors show that global electrification was dominated by highly international corporate and financial networks that provided capital, especially during the early expansion. Their work addresses a number of gaps in scholarly knowledge when it comes to the extent, forms and function of these international firms.

The greatest contribution of this volume lies in the rich and detailed scholarship that gives it nearly encyclopedic coverage. Especially the table in the first chapter estimating the extent of foreign ownership for a wide range of countries at four points in time is an impressive piece of synthesis, and supported by an eighteen-page long appendix. For a reader looking for an overview and introduction, the first two chapters forming the conceptual first part of the book, are most useful. The first chapter provides an overview of the development of technology and diffusion, as well as the economic dynamics that determined growth in the sector: at the beginning, competing technologies were for a time equally cost effective (gas vs. electric lighting). Building production and distribution facilities required some monopoly rights, as well as large amounts of initial capital. Here the need for multinational finance and expertise became the basis for the early internationalization of the sector. After these initial investments, however, operating costs were low, nevertheless utilities needed to charge significantly higher prices to be able to invest in substantial upgrades to their equipment later on. This of course conflicted with the interests of users of electricity, especially as it was transformed from a luxury to a necessity for many people across the globe in the course of the twentieth century.

In the second chapter, the authors seek to describe and analyze the multiplicity of organizational and financial patterns that evolved over time. Here the issue is not just the variety of networks, but also that place of registration did not necessarily indicate nationality – financial networks were highly international and registered in different domiciles on the basis of their financial, legal, or taxation advantages. Generalizations over such large areas and time periods are difficult, nevertheless the authors describe several types that were commonly found in the industry. In this context they also highlight

the difficulty of distinguishing between portfolio and direct investment, because the degree of control over a minority direct investment is hard to establish – also a common problem for contemporary FDI statistics.

The middle chapters cover the early phase of international expansion from 1880 onwards until 1945 in a dense chronological narrative. Especially in chapter three the amount of companies and transactions could be hard to follow, but the authors provide a helpful glossary at the end. In the next chapter complex financial and corporate networks and business groups such as Sofina continued to dominate until the Great Depression, illustrating how independent of nationality markets for corporate finance and control had become by the early twentieth century. Yet while the authors present a truly transnational account here, they still focus on countries as one of their analytical approaches, and they also seek to include a vast variety of types of electrification (enclaves, manufacturing-based, urban), making this a highly complex narrative. While this works well in chapter five with its account of the unraveling of the international economy and its impact on the industry, this is not as effective in the preceding two chapters. Here, more of the excellent tables employed in the conceptual part would have helped the reader through the much-discussed “labyrinth” of corporate connections, such as business groups, free standing firms, holding companies, and *Unternehmergeschäfte* (entrepreneurial holding companies).

Bringing their narrative to a close, chapter 6 discusses how the private sector was increasingly displaced from electrical utilities, something that the authors refer to as “domestication” rather than expropriation (because the way control was transferred to public authorities differed from country to country). While a range of causes are discussed, the preceding chapters also seem to suggest that there was growing unease about the lack of transparency in these international networks that dominated the electrical industry. After the Financial Crisis, this is a familiar concern. The final chapter concludes by bringing the narrative up to date, highlighting the return of multinationals into the electric utility sector, however with very different corporate structures than in the earlier period.

The authors have presented a wide-ranging and well-documented study of a transnational industry that will provide fertile ground for future research through its insights, new conceptualizations and sheer scope.

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