



BOOK REVIEW

Global Electrification: Multinational Enterprise and International Finance in the History of Light and Power, 1878-2007, by WILLIAM J. HAUSMAN, PETER HERNER and MIRA WILKINS. (New York: Cambridge University Press, 2008) 487 pages, ISBN 978-0-521-88035-0, Hardback, \$80.

Global Electrification by three distinguished professors is by any description an academic tome whose scholarship is unparalleled, with its nearly 170 pages of footnotes and bibliography. As set out in its early chapters, the book makes a vital contribution to the literature in documenting in extensive detail the role that multinational enterprise and international finance played in the expansion of global electrification. The authors' thesis that the involvement of these diverse actors played a major role in the process of global electrification by making available modern infrastructure more "widely, sooner and more efficiently than would otherwise been the case" is supported with a vast array of archival records and other manuscripts that are truly dazzling in the depth of their intellectual ardor and expertise. As a reference work, this book belongs in any serious energy library, providing valuable insights to the specialist and student alike.

Nonetheless, despite its prodigious scholarship, the book has some analytical shortcomings which predominantly center on the authors' all-too-frequent tendency to make broad generalizations about so-called "trends" in the history of the industry, which the authors themselves then acknowledge are sometimes manifest differently in different cultural, sociological, and institutional environments, thus making their earlier attempts at creating certain typologies less useful. Chapter 1 does break some interesting new ground on the way the extraordinary capital-intensiveness of the industry mandated that the industry would be directed and controlled in its early years by large-scale multinational enterprise and finance. Yet, this discussion is followed by an unclear description of what constitutes "foreign ownership", leaving the reader bewildered whether there are any firm conclusions that can be drawn from the analysis of whether one form of "foreign ownership" was more successful than another in promoting the expansion of the industry.

Chapter 2 draws on new literature on corporate governance to show that, while earlier writings focused on the role of electric operating companies in the expansion of the industry, it was really multinational and financial enterprises – through diverse mechanisms of portfolio and direct investment – that were principally responsible for the electric power industry's rapid growth, especially overseas. Unfortunately the chapter is often far too abstract for the general reader, and even specialists will find sections rough going owing to the lack of any central analytical construct from which firm conclusions can be drawn.

Chapter 3 is the most difficult in the book since the reader is thrown a dizzying array of corporate mergers, affiliations, takeovers, changing corporate names, etc., that leave the reader confused about the real point of the analysis except to show that the authors have done an exceptional amount of research. Claims that these varying corporate amalgamations shed new light never before noted in scholarly journals on how and why the sector evolved were not supported in the eyes of this reviewer.

Chapter 4 presents a good historical overview of the growth of the industry from 1914-1929, especially vis-à-vis the role that foreign-owned industrial enclaves played in bringing electrification to many countries throughout the developing world. Yet here, too, by the end of the chapter, the reader gains little from the authors' conclusion that the "forms and role of multinational enterprises became extremely complicated, with overlapping international business groups crisscrossing national frontiers." Left unaddressed is insight as to whether one structural form of enterprise was more successful than another and what lessons could be learned for the future expansion of the industry.

Chapter 5 does a commendable job covering the period 1929-1945 and showing how the depression and the events leading to WWII affected the industry – especially the growth of transmission and distribution (T&D) networks and the growth of new US financial players. However the authors also show how the drift to war and its aftermath led to growing government involvement in the sector.

Chapter 6 shows that, in the immediate aftermath of WWII until the late 1970s, the role of multinational enterprise in the power sector began to shrink as a result of rising nationalism in many countries, as well as the emergence of multilateral financing institutions such as the World Bank and other development institutions that provided another avenue for public financing of large-scale hydroelectric and ancillary T&D projects. With the need to rebuild the world, many enterprises drifted back into their home countries or closer regional marketplaces.

Chapter 7 is perhaps the most cogent chapter of the book, showing how, by the late 1970s, rapid expansion in the demand for electric power and the financial inability of many governments to keep up both generation and T&D supply led to the emergence of so-called Independent Power Producers, following the passage of PURPA in the United States and by the subsequent decontrol of the electricity industry in the United Kingdom. By the late 1990s, the authors chronicle how these developments led to a sizeable resurgence in foreign direct investment in the electric-power sector, only to come under nationalistic assault and a major reassessment of the premise of deregulation following the Californian and Italian electric power crises, the dismantling of Enron, and the Northeast Blackout.

With all due respect to the authors for putting together this amazing compendium of information, Chapter 8 – the authors' concluding chapter – is disappointing. Instead of breaking new ground based on their monumental research, the reader is told that: (1) in today's world electricity is now a necessity, especially for

the people who do not have it or for those that lose it; (2) the industry continues to need ever-expanding volumes of capital; (3) both foreign and domestic capital will remain indispensable to the industry; (4) there is little reason to believe that liberalization, privatization, and deregulation where it has occurred will be permanent; (5) while new technology allows the development of smaller and more efficient generating plants, they must nonetheless be connected to the T&D system. The authors here respectfully note that the development of distributed generation, on-site renewables, smart grids, and smart meters may transform the industry far more than they envisaged; (6) the electric power industry will remain vulnerable to historic risks and new ones arising from climate change and terrorism; (9) the era of globalization may be fleeting.

While not disagreeing with most of their conclusions, they seem pedestrian in light of the brilliant research that went into this magnum opus.

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