

The Merchants of Zigong: Industrial Entrepreneurship in Early Modern China. *By Madeleine Zelin*. New York: Columbia University Press, 2005. xxix + 404 pp. Index, notes, bibliography, figures, illustrations, photographs, tables. Cloth, \$45.00. ISBN: 0-231-13596-3.

Reviewed by Christopher A. Reed

Influenced by the writings of early modern American economists, such as Alfred Chandler, Naomi Lamoreaux, and John Langlois, and by accounts of the Chinese salt administration by historians like S. A. M. Adshead and Man Bun Kwan, Madeleine Zelin has written a comprehensive business history of “China’s first privately owned high-capital, high-throughput industrial enterprises” (p. xiii). Through the vicissitudes of the nineteenth-century economy, the Taiping Rebellion (1851–64), and the collapse of the Qing (1644–1912) dynasty, and down through the 1930s, four leading salt-manufacturing families and hundreds of smaller ones are shown to have thrived in a handful of southern Sichuan counties along the upper reaches of the Yangzi River. Located in the area known today as Zigong City, they prospered through technological improvement, an expanding market, and managerial innovation, including vertical integration. Kinship, self-enforcement of contracts, and state-run taxation policies played a prominent role in their history, as they did in the American examples on which most of the comparative discussions are based.

Drawing on three major collections of sources (state-sponsored compilations from the late Qing and Republican eras and from the 1990s; published and unpublished documents, including contracts and lawsuit summaries from the Zigong Municipal Archives for the 1732–1949 period; and memoirs [*wenshi ziliao*] collected in the 1950s and 1960s), Zelin presents the full spectrum of privatized salt production and marketing in Sichuan. She argues that, contrary to the inferences of earlier scholarly accounts of Chinese business history, neither social structure, nor the absence of modern banking, nor supposed Confucian cultural bias against commerce inhibited success at Zigong. Drilling narrow borehole wells (initially three inches in diameter) to depths of more than three thousand feet using home-grown technology (such as iron drills and bamboo pipes with

leather valves) while also depending on natural gas furnaces to boil the brine, by the 1890s Zigong salt manufacturers were working their full-time, specialized employees around the clock to produce as much as eight hundred million pounds of fine-grade granulated (*hua*) salt and coarser, dirtier block (*ba*) salt per year, more than half the salt produced in Sichuan at that time. They also marketed it throughout southwest and central China at a time when Sichuan's population, and that of the rest of the country, was increasing rapidly.

Although the rewards were immense, so too were the risks. Even a successful well could cost more than ten thousand ounces of silver (taels) before it "came in" as long as a decade after it was first drilled. How then did the Zigong salt manufacturers minimize their risks and maximize their profits? Chapters two and three establish the early institutional, legal, and technological context and make clear that mining rights and contracts evolved from land contracts and limited-tenure tenancy agreements that were a vital part of regional customary commercial law. Against the now outmoded view that nineteenth-century Chinese investors opted only for "quick returns," Zelin shows that salt investors typically tied up their capital for long periods of time, hoping for sizable returns. Fragmented investment encouraged flexibility and risk diffusion, even as salt merchants integrated stages of the salt economy, investing in land, wells, power sources (buffalos, mules), transportation (piping), and marketing. In chapter four, the four main entrepreneurial families that led the Furong salt yards between the 1850s and the 1930s are introduced, along with the lineage trusts that became the organizational heart of their investment systems as well as those of the majority of smaller investors. Zelin's discussion of the lineage hall and the charitable estate as the site where China's modern, but non-Western, economy was created, builds successfully on treatments by Hillary Beattie, David Fauré, Elisabeth Köll, and Sherman Cochran. In one of the book's most interesting chapters, the fifth, thousands of Furong salt workers are revealed as "one of the first examples of the genuine proletarianization of the workforce in China" (p. 123) prior to the development of China's more familiar twentieth-century, Western-influenced coastal economy. Chapter six discusses new efforts by the state to control salt distribution, actions that bankrupted many small salt producers in the 1870s and undermined the advantages of vertical integration among large firms, leading one of the

“big four” to close its wholesale operations. Vertical integration and the merger of production and marketing, signature elements of Furong salt merchants, came to an end in the twentieth century. The next chapter shifts the focus away from the black-brine wells that fueled expansion of the nineteenth-century industry toward rock-salt wells. The latter were first opened in 1894, and by the 1930s they supplied 57 percent of Furong’s salt. With rock-salt wells came steam power, leading to a reorganization of the industry and a new emphasis on mechanical engineers. Investment patterns, social organization, and even social origins changed substantially. As chapters eight and nine make clear, the new emphasis extended to politics and the military, both factors that had apparently not concerned the “old guard” of salt manufacturers. Even more important, the property-rights system that had originally made the trusts stable conspired by the 1910s and 1920s to make them increasingly unstable. Clientelism replaced lineage. Although Sichuan’s lineage trusts still invested in wells and land, the integrated kin-based salt empires of the nineteenth century were replaced by a new cohort of managers using insider knowledge to cherry-pick the most productive assets of the old empires.

Zelin’s accounts of the evolving Zigong salt industry, its array of technologies, and its lineage-based organizational principles are fascinating and generally well detailed. However, not all her analytical strategies are equally persuasive. For instance, although her discussions include various examples from the eighteenth and early nineteenth centuries, most of her book’s evidence, and resulting focus, comes from the period spanning 1850 to 1930 (an era typically regarded in the English-speaking world as modern or late modern China, not the “early modern China” of the book’s subtitle, making the reader unsure about the purpose of the “early modern” marker). Also, her initial focus on “theoretical problems” threatens occasionally to submerge the historical substance that, after all, is the justification for the discussion of the theoretical problem. Sustained discussion of historical actors does not actually begin until chapter four. As a result, in the reader’s mind, chapters two and three provide abstract solutions to historical problems that are not fleshed out until chapter four, undermining the early chapters’ importance to all but the most dedicated and theoretically informed readers. Indeed, human agency is minimized throughout the book. Even major figures appear without

biographical dates, creating a sense that they are mere stick figures pinned to a broad tableau with its own inner logic.

However, these criticisms do not destabilize the painstakingly researched empirical foundation of what should become an important crossover work in comparative business history (in the same way that Kenneth Pomeranz's *The Great Divergence* has been for comparative history generally). But where Pomeranz's book is short on credible quantifiable evidence, the wealth of such findings in Zelin's book suggests that comparative business historians will regard this work as both more persuasive and more stimulating than his for some time to come.

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