

Market and Network Capitalism: Yongli Chemical Co., Ltd. and Imperial Chemical Industries, Ltd., 1917-1937*

Kwan Man Bun**

Abstract

The Yongli Chemical Co., Ltd., founded by Fan Xudong and his associates in 1917, has been lauded as a “model” enterprise representing economic nationalism. Based on archival sources scattered in China and abroad, this paper analyses the company’s establishment and how it became embedded in a complex of relationships with leading politicians, as well as its rivalry and collaboration with the British multi-national conglomerate Imperial Chemical Industries. In an age of worldwide cartels, Republican China was not a time when entrepreneurs could achieve success through mere patriotism or even scrupulous adherence to the principles of “modern” management, free competition, accounting, science, and technology. Yongli survived by drawing on the support of family and friends, lobbying, insider information, and other much maligned practices of network

* The author would like to thank the Chiang Ching-kuo Foundation, Committee for Scholarly Communication with China, American Council of Learned Societies, National Endowment for the Humanities, Stanford University East Asia Study Center, and the Charles P. Taft Memorial Fund for their support of this project. The critical comments of the *Bulletin's* two anonymous readers in improving this article are deeply appreciated. Above all, archival guidance by the late Professor Guo Shihao is gratefully acknowledged. All errors, of course, are mine. Received April 11, 2005; accepted July 26, 2005.

** Associate Professor, Department of History, University of Cincinnati.

capitalism. Instead of a free market, competition was “regulated” through price-fixing, market-sharing, and production quota agreements.

Keywords: Fan Xudong, Yongli, chemical industry, network capitalism, cartel

On May 12 1937, after years of negotiations, the Yung Lee Soda Company, Ltd. (also known as the Pacific Alkali Co., Ltd., reorganized and renamed as a division of the Yongli Chemical Industries Co., Ltd. in 1934, hereafter Yongli) and the China subsidiary of the Imperial Chemical Industries (known as Buneimen, after its alkali division, Brunner, Mond and Co., Ltd., hereafter ICI) finally agreed to divide the China market. Over the agreement’s three year term, Yongli would command 55% and ICI the remainder, with the contracting parties observing the ratio using a variety of measures, including, but not confined to, coordinated pricing and delivery, as well as retail price maintenance. Should one party oversell, the other would be compensated to the extent of its quota ratio at a mutually acceptable price.¹ Thereafter, the price for soda ash jumped by almost 6 percent from 6.8 to 7.2 yuan per dan.²

How did Yongli, a company launched in 1917 by Fan Xudong, his relatives and colleagues with an initial capital of only 5,000 yuan (approximately £1,000) and little, if any, experience in industrial soda ash manufacturing, manage to turn the tables on ICI? An international multi-divisional conglomerate with a paid-up capital at the time of over £20 million, ICI was a leading member of the world-wide Solvay cartel controlling the ammonia-soda ash process. Since its arrival in China in 1899, ICI’s goals were clear. Besides “taking everything possible out of China,” it would strive to “deter such consumers from becoming producers of alkaline by the ammonia soda

¹ 余嘯秋，〈旭東先生掌握中之永利營業政策〉(1951)，天津鹼廠檔案室。This ratio differs from Zhang Zhizhong’s version of 51% for Yongli，章執中，〈我所知道的愛國實業家范旭東〉，《湖南文史資料選輯》，輯 17 (1983)，頁 31。

² 〈上海區營業報告〉4/22/1938，天津鹼廠檔案室。

process, and to induce consumers...to replace natural products by the manufactured article.”³ The company, having “always overcome any opposition...to (its) expansion and progress,” supplied almost 90 percent of China’s soda ash import and reaped the extra-economic profit of an “over-price” system before Fan’s company broke its virtual monopoly.

In a company meeting, Fan Xudong attributed Yongli’s success to a favorable exchange rate and government protection.⁴ In contrast, Yongli’s historians have traced the company’s success to Fan’s fervent patriotism, although his detractors portrayed him as “mentally troubled” because of his fanatic devotion to China’s industrialization.⁵ Supported by his relatives and friends, he pursued national salvation through industrialization, science, and technology (*shiye jiuguo* 實業救國 and *keji jianguo* 科技建國) while constructing with great care a corporate image of patriotism and service to the country. Under his guidance, Yongli cultivated engineers and technicians who internalized such ideals. Elaborate regulations, a multi-divisional and hierarchical corporate structure coordinated through a central office served Yongli and Fan’s group, including the Jiuda Salt Refinery, well.⁶ But were patriotism, or for that matter, technology and “scientific management” enough to

³ W. J. Reader, *Imperial Chemical Industries*, 2 vols. (London: Oxford University Press, 1975), I: p. 339; Percy Fowler to J. G. Nicholson, dated 4/22/1925 in W45/6/101; and agreement among Brunner, Mond and Co., Ltd., Castner Kellner Alkali Co., Ltd., and United Alkali Co., Ltd., dated 10/30/1919, in the papers of Brunner, Mond & Co., Ltd., DIC/BM/4686/13 held at the Cheshire Record Office, Chester, England (hereafter BM).

⁴ 《海王旬刊》，卷 6 期 27(1934)，頁 417。

⁵ 天津鹼廠志編修委員會編，《天津鹼廠志》（天津：天津人民出版社，1992），頁 8；譚傑等編，《紅三角的輝煌》（天津：新華通訊社，1997），頁 2；John E. S. Han, “Yung Lee (Yongli) Soda Works,” dated 5/9/1925 in BM; and Patrick Brodie, *Crescent over Cathay* (Oxford: Oxford University Press, 1990), p. 132. For a recent reassessment of the role of nationalism in economic development, see Liah Greenfeld, *The Spirit of Capitalism* (Cambridge: Harvard University Press, 2001), *passim*.

⁶ 陳德元（調甫），《引玉集》（出版資料不詳，1946），*passim*；李運華，〈談愛國實業家范旭東的創業思想〉，《南開學報》，1994 年第 5 期，頁 76-80；李德芳，〈范旭東與永利化學公司，1917-1937〉，《中國經濟史研究》，1998 年第 1 期，頁 135-144；趙津、關文斌等編，《久大鹽業有限公司檔案史料選編》（天津：天津人民出版社，即將出版）。

ensure the success of Yongli? Even some of Fan's closest colleagues remained skeptical, and reports of an impending ICI takeover circulated as late as 1934.⁷

From the perspective of modern Chinese economic history, the experience of Yongli and ICI highlights the problematic nature of China's chemical market. Despite an environment of "generally unrestricted competition from manufactured imports and China-based foreign enterprise," how did Chinese and foreign businesses address the problems of raising capital, investment, technological transfer, production, sales, and economic imperialism in an industry dominated by world-wide cartels, a time when price-fixing and market-sharing were seen as "rationalizations" of an otherwise "lawless" market?⁸ How did they manage the rhetoric of competition, the public good, and patriotism while negotiating the political institutions of Republican China with an economy hitherto conceived as "stagnant," "dualistic," or "a golden age"?⁹ How could Yongli rely on personal relationships and yet not succumb to "a paradigm of failure" that plagued Chinese businesses?¹⁰

This article focuses on several pivotal junctures of the Yongli and ICI saga: Yongli's launch and survival through astute management of its relationships with

⁷ 景韜白,《永利製鹼公司創立史》(北京:鹽政雜誌社,1948);石鳳濤,〈中國酸鹼工業的展望〉,收入中國經濟情報社編,《中國經濟論文集》(上海:生活書店,1936),第1集,頁66。

⁸ Thomas Rawski, *Economic Growth in Prewar China* (Berkeley: University of California Press, 1989), p. 116. On a variety of international cartels in this period, see George W. Stocking and Myron W. Watkins, et. al., *Cartels in Action: Case Studies in International Business Diplomacy* (N. Y.: Twentieth Century Fund, 1946), passim, especially chapters 9-11 on chemicals.

⁹ See Hou Chi-ming, *Foreign Investment and Economic Development in China, 1840-1937* (Cambridge: Harvard University Press, 1965), passim; Robert F. Demberger, "The Role of the Foreigner in China's Economic Development, 1840-1949," in Dwight H. Perkins, ed., *China's Modern Economy in Historical Perspective* (Stanford: Stanford University Press, 1975), pp. 17-47; and Marie-Claire Bergère, *The Golden Age of the Chinese Bourgeoisie, 1911-1937* (Cambridge: Cambridge University Press, 1989), passim.

¹⁰ Dwight H. Perkins, "Law, Family Ties, and the East Asian Way of Business," in Lawrence E. Harrison and Samuel P. Huntington, eds., *Culture Matters: How Values Shape Human Progress* (N. Y.: Basic Books, 2000), pp. 232-243; and Tim Wright, "The Spiritual Heritage of Chinese Capitalism: Recent Trends in the Historiography of Chinese Enterprise Management," in Jonathan Unger, ed., *Using the Past to Serve the Present: Historiography and Politics in Contemporary China* (Armonk, N. Y.: M. E. Sharpe, 1993), pp. 205-238.

officials, banks, and the republican state; and ICI's strategies in dealing with Yongli, ranging from predatory competition to forms of network capitalism: partnership, sales agency, joint-venture (including minority equity stakes), price collaboration, and cartelization. Far from being an Asian particularism, network capitalism is a simple label for a complex business behavior embedded in cultural and social institutions across national boundaries.¹¹ Often difficult to explore because of "trade secrets," ICI and Yongli's voluminous archives, however, permit the reconstruction of how the two companies "manufactured" relationships and managed external and internal resources through informal personal links (both weak and strong, based variously on kinship, native place, school/classmate, club membership, or associational ties), or formal institutional connections such as inter-locking directorates, joint ventures, and cross-holding.¹² The two companies also constituted part of Great Britain and China's "policy community." They lobbied, separately or jointly, for state support, tariff protection, and tax waivers.¹³ After a bruising price war, the companies avoided predatory competition in favor of a "reasonable profit." For all its clouded reputation, network capitalism could be profitable and cut across the racial divide.¹⁴

¹¹ Gary G. Hamilton, "Patterns of Asian Network Capitalism: The Cases of Taiwan and Korea," in Mark Fruin ed., *Networks, Markets, and the Pacific Rim* (New York: Oxford University Press, 1998), pp. 181-199; and Thomas Menkhoff and Solvy Gerke, eds., *Chinese Entrepreneurship and Asian Business Networks* (London: RoutledgeCurzon, 2002), p. 39, fn. 2.

¹² Walter W. Powell, "Neither Market nor Hierarchy: Network Forms of Organization," *Research in Organizational Behavior*, vol. 11(1990), pp. 295-336; Nicole W. Biggart and Gary G. Hamilton, "On the Limits of a Firm-based Theory to Explain Business Networks: The Western Bias of Neoclassical Economics," in Nitin Nohria and Robert G. Eccles, eds., *Networks and Organizations* (Cambridge: Harvard Business School Press, 1992), pp. 471-490; Naomi R. Lamoreaux, Daniel M. G. Raff, and Peter Temin, "Beyond Markets and Hierarchies: Toward a New Synthesis of American Business History," *NBER Working Paper* No. 9029 (July, 2002), passim; Paul Windoff, *Corporate Networks in Europe and the U. S.* (Oxford: Oxford University Press, 2002), pp. 12-13; and Kenneth Lipartito and David B. Sicilia, eds., *Constructing Corporate America* (N. Y.: Oxford University Press, 2005), passim.

¹³ On the concept of "policy community," see Wyn Grant, William Paterson, and Colin Whitston, *Government and the Chemical Industry* (Oxford: Clarendon Press, 1988), pp 54-75.

¹⁴ A weakness of the "Asian network" model is that it ignores how non-Asian and Asian capitalists interacted. On

This is not to argue that “dark sides” such as mutual suspicion, industrial espionage, as well as corruption — use of bribes, gifts, and influence-peddling — did not exist.¹⁵ But by removing some of the stigma and enigma associated with network capitalism, the experience of Yongli and ICI reveals that network and market are not mutually exclusive business organizational principles in Republican China, if not beyond.¹⁶

Launch

Fan Xudong had long aspired to manufacturing synthetic soda ash (sodium carbonate), one of the two legs in his quest to develop the country’s basic chemical industry (the other being acids).¹⁷ Like salt, soda ash was a daily necessity with alimential as well as industrial uses, and China had long depended on natural soda ash found in various parts of the country.¹⁸ Small works in Shandong and Sichuan had

the other hand, examples of close personal and business relationship between foreign and Chinese entrepreneurs abounded. For instance, Vilhem Meyer, manager of Andersen, Meyer & Co., Ltd., entrusted the task of settling his estate and ensuring his children’s financial security to Li Ming, general manager of the Chekiang Industrial Bank, Ltd. See Christopher Bo Bramsen, *Open Doors: Vilhem Meyer and the Establishment of G. E. in China* (London: Curzon, 2001), p. 270. On transnational business practices, see for example, Geoffrey Jones, ed., *Coalitions and Collaboration in International Business* (Aldershot, Hants, U. K.: Edward Elgar Publishing, Ltd., 1993), passim.

15 Martin Gargiulo and Mario Benassi, “The Dark Side of Social Capital,” in Th. A. Roger, J. Leenders, and Shaul M. Gabbay, eds., *Corporate Social Capital and Liability* (Norwell, Mass.: Kluwer Academic Publishing, 1999), pp. 298-322. For an elaboration of my theoretical position on network capitalism, see Kwan Man Bun, “Managing Market, Hierarchy, and Network: The Jiuda Salt Industries, Ltd., 1917-1937,” *Enterprise and Society*, vol. 6:3 (forthcoming, September, 2005).

16 Fruin, *Networks, Markets, and the Pacific Rim*, p. 3; Sherman Cochran, *Encountering Chinese Networks* (Berkeley: University of California Press, 2001), passim; Mayfair Mei-hui Yang, “The Resilience of *guanxi* and its New Deployments: A Critique of Some New *guanxi* Scholarship,” *The China Quarterly*, vol. 170(2002), p. 465; John Scott, “Networks of Corporate Power: A Comparative Assessment,” *Annual Review of Sociology*, vol. 17 (1991), pp. 181-203.

17 章執中，〈我所知道的愛國實業家范旭東〉，《湖南文史資料選輯》，輯 17 (1983)，頁 16；全國政協文史資料編輯組編，《化工先導范旭東》（北京：中國文史出版社，1987），頁 218。

18 Henry Glendinning press copy letter, dated 6/26/1899 from Tianjin, in BM; 天津永利製鹼公司編輯部編，《蘇達工業》（天津：永利製鹼公司，1929），頁 132-152。

experimented with the Leblanc process, but the Solvay process remained the industrial standard in efficiency and large-scale production.

The Belgian Société Solvay (later Solvay et Cie), however, guarded the technology closely, and had no interest in manufacturing soda ash in China. When approached, it demanded total control over capital, equipment, and product pricing policy for any Chinese plant using the process.¹⁹ The China market was assigned by the Solvay cartel to Brunner, Mond & Co., Ltd. which had acquired the license for the technology on a verbal agreement and a loan from friends and associates.²⁰ In 1914, the company exported 32,000 tons to China directly, or some 88 percent of the imported total (not including those transshipped via Hong Kong).²¹ Reorganized in 1926 as the alkali division of ICI, it had become the world's leading manufacturer and exporter.

External circumstances and a network in high government places, however, created the opportunity for Fan Xudong. With civil war looming and the Reorganization loan of 1913 exhausted, the Northern warlord government negotiated for a second loan from the Hongkong and Shanghai Banking Corporation. The bank demanded, allegedly at the instigation of His Majesty's Government, that British interests be granted a monopoly on soda manufacturing from salt in China.²² Chen Jintao

¹⁹ On the Solvay Cartel, see W. J. Reader, *Imperial Chemical Industries*, passim; 景韜白, 《永利製鹼公司創立史》, 頁 3。On the chemical industry in China, see James Reardon-Anderson, *The Study of Change: Chemistry in China, 1840-1949* (New York: Cambridge University Press, 1991), passim.

²⁰ F. L. Dick, *A Hundred Years of Alkali in Cheshire* (Norwich: Imperial Chemical Industries, 1973), pp. 11-12. Similarly, the Solvay Co. survived only because of initial family support. See W. J. Reader, *Imperial Chemical Industries*, vol. I, p. 46; and J. R. Lischka, *Ludwig Mond and the British Alkali Industry* (N. Y.: Garland Publishing, 1985), pp. 79-85.

²¹ Out of some 670,000 tons produced by the company. See W. J. Reader, *Imperial Chemical Industries*, vol. I, p. 175. Import figures came from 《海王旬刊》, 1935 年第 7 期, 頁 556-567。

²² There is a misunderstanding here. Both the bank and the diplomats had confused sodium chloride with potassium chloride. The British government, deprived of its German nitrate supply, actually wanted the exclusive right to potassium chlorate which could be processed into potassium nitrate, a key ingredient for explosives. The Anglo-French China Corp., Ltd. had identified Zigong salt wells with a high potassium chloride

(1870-1939), then finance minister, relayed this demand to his fellow state councilor Fan Yuanlian (1875-1927), urging him and his brother Xudong to protect the country's sovereignty. On Chen's advice, the new company's application was backdated and submitted directly to him, by-passing the powerful British staff at the Salt Revenue Department to avoid diplomatic complications.²³ Among the company's founders were Zhang Hu (1875-1937), then Director of the Salt Administration, and Li Mu (1874-?), Changlu Commissioner, 1913-1914.²⁴ Without a network of such influential shareholders and insider information, the company would not have been launched.

Predation and Feigned Collaboration

ICI observed the development with alarm.²⁵ Under the management of E. S. Little, Sr., and his relatives, the company was proud that of having pioneered a farflung sales organization in China without using a native compradore. Penetrating deep into the countryside, it was envied even by Yongli.²⁶ Incorporated in Hong Kong, ICI (China) was well enmeshed in both local and national Chinese networks. Board members included Russell Sun Zhongli, general manager of Fou Foong Flour

content. 林振翰，〈川鹽紀要〉（上海：商務印書館，1919），頁479-488。The matter was settled with the British government awarded a first right of refusal. See Sir John Jordan to Foreign Office, dated 10/24/1918 in John Jordan Papers, 350.16 held at the National Archives, Kew, England (hereafter FO).

²³ John Jordan to Foreign Office dated 8/21/1916 in FO 371.2657. On the "synarchy" of the Salt Revenue Department, see S. A. M. Adshead, *The Modernization of the Chinese Salt Administration* (Cambridge, MA.: Harvard University Press, 1970), passim.

²⁴ 李賓四（李穆）6/30/1917呈，〈長蘆鹽務管理局檔〉680.21.561，河北省檔案館；范旭東，〈中國化工的偉人侯德榜〉，《海王旬刊》，卷16期11(1944)，頁82。Li was also a relative by marriage to Fan：許復七，〈回憶化學工業家范旭東〉，《江蘇文史資料選編》，輯25(1988)，頁26。

²⁵ Brodie, *Crescent over Cathay*, passim.

²⁶ On Brunner, Mond's pioneering organizational structure in China, see ICI's "Notes prepared for the British Economic Mission to the Far East," dated 9/15/1930, in Board of Trade 59/1/4 held at the National Archives, Kew, England. See also Ronald Farquharson, *Confessions of a China Hand* (N. Y.: William Morrow, 1951), passim; and 閻幼甫致范旭東函，2/7/1933，〈久大鹽業公司抄檔〉(hereafter JD)。

Mill, Co., Ltd. of Shanghai, part of the Chung Foo Group which also operated the Tongyi Salt Refinery, a major competitor/partner of Fan's Jiuda Salt Industries, Ltd.²⁷ ICI could also draw on the carefully chosen members of its private Chinese advisory board which included P. W. Guo, founder of the Southeastern University, and Zou Bingwen (P. W. Tsou) who had excellent ties to Shanghai's banking circle and access to high officials such as H. H. Kung and Chen Gongbo.²⁸ In addition, as a leader in various treaty port diaspora communities, the company enjoyed the respect and cooperation of other corporate compatriots such as the Hongkong and Shanghai Bank, and access to high officials in the Chinese and British governments.²⁹

Well-entrenched in China, ICI would not relinquish its grip of the market so easily. Through informants and "understood sources," it learned that Yongli had problems with raising enough capital and plant commissioning, and attempted to take over the young company by offering technical assistance as early as 1920.³⁰ Its attention, however, was temporarily diverted by the arrival of the Magadi Soda Ash Co., Ltd. in China and Japan. After driving Magadi into bankruptcy and taking it over in 1924, J. G. Nicholson, a home director of ICI, outlined the company's business strategy: "(b)y eliminating competition we have been enabled to control prices to mutual advantage..."³¹ Similarly, the company discouraged other Chinese and

²⁷ On Sun, see Brodie, *Crescent over Cathay*, p. 186; and company registration for Brunner, Mond & Co., Ltd. (China), HKRS 111-4-261, held at the Hong Kong Public Records Office. On Fou Foong, one of the country's largest, see Daniel Meissner, *Chinese Capitalists versus the American Flour Milling Industry, 1890-1910: Profit and Patriotism in International Trade* (New York: Edwin Mellen Press, forthcoming 2005), passim.

²⁸ Minutes of ICI managers meeting with Sir Miles Lampson, British Legation, dated 5/4/1929. On Guo and Zou, see Brodie, *Crescent over Cathay*, p. 101; cable from P. Fowler to J. G. Nicholson, dated 5/6/1929 in BM.

²⁹ Roe to Allen letter, dated 12/15/1926 in the papers of the Hongkong and Shanghai Banking Corp. (London) SHG II, p. 427; Brodie, *Crescent over Cathay*, p.121; E. S. Little, Sr. hosted Tang Shaoyi during the North-South peace talks in 1912. See Brodie, *Crescent over Cathay*, pp. 54-57.

³⁰ Report of G. F. R. Jackson on Jiuda Salt Refinery, dated 6/10/1920 in BM.

³¹ On the rise and fall of Magadi Soda Ash Company, see W. J. Reader, *Imperial Chemical Industries*, vol. I, pp. 341-344; Brodie, *Crescent over Cathay*, p. 75; and the company's papers held at Cheshire Record Office, Chester, U. K.

Japanese investors who wanted to break into the lucrative market. Thus when associates of Nantong's Zhang Jian proposed in 1921 to erect a soda ash plant at Haizhou, ICI turned down the offer faulting the poor quality of the salt and a less than ideal water supply.³² Four years later, the Southern Manchurian Railway approached ICI for a joint-venture. An engineering expert, Lincoln Steel, was sent to study the proposal, although the company's management was quite reluctant:

(T)he factor in my eyes is that a factory put up in Kwangtung would immediately sell its surplus production in China and the entire overprice in China would disappear.³³

It would be wise "for Brunners to go to any sacrifice to prevent a factory going up." Alfred Mond, its chairman, enthusiastically expected the China market to solve "many of Britain's problems of unemployment and trade."³⁴

Competition and Partnership

In 1925, with Yongli's trial production suspended and over half of its workers laid-off after the last of its Thelan pans gave out, Fan could not hold out any longer against the uncertainty and disgruntled shareholders.³⁵ In a meeting at Dairen with J. G. Nicholson, he offered Brunner, Mond the option of purchasing up to 50 percent of Yongli. The English version of the contract provided that, in addition to receiving

³² Minutes of meeting held on 1/28/1921 and G. S. Jones to J.G. Nicholson dated 10/11/1921 in BM. It was a judicious decision, for Zhang Jian's empire soon crumbled. See Elisabeth Köll, *From Cotton Mill to Business Empire* (Cambridge, MA.: Harvard University Asia Center, 2003), pp. 190-208.

³³ P. Fowler to J. G. Nicholson, dated 4/22/1925 in BM.

³⁴ See "Report of the directors, Brunner, Mond and Co., Ltd." for the year ending 3/31/1924 in BM; and speech by Alfred Mond in the company's general meeting, dated 5/13/1926 in BM.

³⁵ 李祉川等,《侯德榜》(天津:南開大學出版社,1986),頁28;任效等編,《天津鹽廠七十年史》(天津:天津鹽廠,出版日期不詳),頁15。Reardon-Anderson is imprecise when he wrote that Yongli began regular production in 1924. See Reardon-Anderson, *The Study of Change: Chemistry in China, 1840-1949*, p. 167.

approximately 1.07 million yuan in fresh capital, Yongli could, and did, request a Brunner, Mond technical expert as an advisor to the plant. In return, Yongli would disclose fully its data on production costs and product quality, and Fan promised to “do his best to ensure that cooperation between (the two companies) shall not in any way jeopardize any of the special rights and privileges granted to the original Yung Lee (Yongli) Soda Company by the Chinese government.” The Chinese version of the contract added a further understanding that Yongli would not sell at more than 10 percent below the price of Brunner, Mond’s “Crescent.”³⁶

In his memoirs, Yu Xiaoqiu, then Yongli’s company secretary and Fan’s chief aide during the negotiations, wrote equivocally about an agreement that compromised Yongli’s carefully cultivated public image and violated the “no foreign shareholder” clause under which the company was registered. Nevertheless, it was an understandable strategic move for Fan, buying him time to placate increasingly impatient shareholders, including his long-time collaborator, Jing Taobai, and an opportunity to obtain technical assistance as well as fresh capital. At any rate, Brunner, Mond did not exercise the option for a variety of reasons. One reason might be that, after analyzing a “great deal of information from Mr. Fan (Xudong)” and other sources, Nicholson and J. G. Gillbert (Winnington Works manager) concluded that Yongli was not a serious competitor.³⁷ It was also discouraged by a

³⁶ Brodie, *Crescent over Cathay*, pp. 81-82; 余嘯秋, 〈永利鹼廠和英商卜內門洋鹼公司鬥爭前後紀略〉, 《文史資料選輯》, 輯 80 (1982), 頁 49; 李德芳, 〈范旭東與永利化學公司, 1917-1937〉, 《中國經濟史研究》, 1998 年第 1 期, 頁 136。The events outlined here vary in important details such as the full disclosure clause and Fan’s promise from the versions presented in 余嘯秋, 《旭東先生掌握中之永利營業政策》(1951); 張同義, 《范旭東傳》(長沙: 湖南人民出版社, 1987), 頁 46-47。The Chinese version of the contract is reprinted in 中國人民銀行上海分行金融研究室編, 《金城銀行史料》(上海: 上海人民出版社, 1983), 頁 165-166; an English version, dated 5/21/1925 is in BM.

³⁷ E. S. Han’s report on Yongli, dated 5/9/1925 in BM. Despite the exclusion of foreigners as the company’s shareholders, Brunner, Mond used Zhang Shusen as its nominee and became privy to the proceedings of Yongli’s annual meetings. See BM.

national boycott of British goods following the May 30th Incident in Shanghai.³⁸ Why waste money on a plant that was not working, the products from which would be branded as “half-British” and therefore still subject to boycott?

Whatever the reason, or reasons, Fan’s determination paid off when the plant finally came back to life on June 29, 1926 after Hou Debang and G. T. Lee returned from the U. S. with new rotary dryers and ideas for improving the limestone kilns. With Yongli producing prize-winning soda ash, battle was joined. A price war erupted; taking advantage of China’s low import tariff, ICI set the pace, finally halving the price of soda ash to 4.2 yuan per dan.³⁹ Struggling to maintain a margin of 0.30 yuan against its competitor, Yongli reportedly sold its soda ash at 3.9 yuan when its production cost was 6.5 yuan, or at a “loss” of 2.6 yuan per dan.⁴⁰ When Yongli tried to raise the price, ICI would not follow suit in an attempt to crush the young company.⁴¹ Because of its lower costs, better quality, China’s low tariff, and an established monopoly in such markets as Yichang, ICI still returned a profit even after allowing a necessary gross profit to its fully owned China subsidiary.⁴² To survive Yongli needed to do something creative.

Sales Agency

Yongli’s strategy was to open a diversionary front in the Japanese market. As

³⁸ Brodie, *Crescent over Cathay*, p. 83.

³⁹ Yongli petitioned the government on 5/2/1926 against the unrealistically low “market price” used by the Maritime Customs in assessing import duty. 〈外交檔〉3-19-128，台北：中央研究院近代史研究所檔案館。

⁴⁰ 余嘯秋，〈永利鹼廠和英商卜內門洋鹼公司鬥爭前後紀略〉，《文史資料選輯》，輯 80，頁 51。However, E. S. Han’s intelligence report cited above estimated Yongli’s production cost, including a 10 percent profit and banking charges, as 4.05 yuan. Company records and ICI’s subsequent intelligence suggest irregularities which allowed Yongli to turn a profit. 關文斌，〈愛國者的博弈〉，收入張忠民、陸興龍編，《企業發展中的制度變遷》（上海：上海社會科學院出版社，2003），頁 152。

⁴¹ 范旭東，〈人畢竟是人〉，《海王旬刊》，卷 15 期 27（1942），頁 178。

⁴² Brodie, *Crescent over Cathay*, p. 94.

an old Japan hand, Fan Xudong understood the Japanese soda ash industry, a fast-expanding market much larger than China's and also profitably dominated by ICI.⁴³ Mitsubishi operated the Asahi soda ash works, but Mitsui also wanted a share of the market. In 1927 Mitsui agreed to serve as Yongli's exclusive agent guaranteeing an order for 2,000 tons per month for one year at a selling price set by Yongli.⁴⁴ While Reardon-Anderson attributed Yongli's success in the Japanese market to the high quality and low price of its refined salt, the reasons may be more complicated.⁴⁵ Yongli was dumping its "Red Triangle," still slightly inferior in consistency to ICI's "Crescent," on the Japan market.⁴⁶ The move killed two birds with one stone. In addition to clearing the stock it could not sell in China, Yongli caused grief to ICI and Japanese soda manufacturers.⁴⁷ After considerable discussion, the ICI management finally decided that limited cooperation with Yongli might be its "least objectionable" alternative.

One result was a truce. Beginning November 1928, ICI (Japan) became Yongli's exclusive agent in Japan for three years. Charging a commission of 4 percent of the selling price (F. O. B. Tianjin), with a guaranteed order of 600 tons per month, increasing to 1,000 tons per month after July 1929, but not to exceed an annual total of 15,000 tons, ICI (Japan) also agreed to maintain the price differential between Yongli and its own soda within 5 percent. Should ICI (Japan) decide to sell Yongli soda below that differential, it would make up the difference. In addition, ICI would

⁴³ 莊司務編，〈日本曹達工業史〉（東京：曹達曬粉同業會，1938），頁 390-398。

⁴⁴ 景韜白，〈永利製鹼公司創立史〉，頁 17。Yu Xiaoqiu recalled that the contract with Mitsui was for two years; 余嘯秋，〈旭東先生掌握中之永利營業政策〉（1951）。

⁴⁵ Reardon-Anderson, *The Study of Change: Chemistry in China, 1840-1949*, p. 280. E. S. Han, in his intelligence report cited above warned that the Japanese company might be trying to steal industrial secrets from Yongli, a possibility that Fan acknowledged.

⁴⁶ 〈永利廠史資料〉，天津鹼廠檔案室。Through 1936, Jiuda's exports to Japan were priced (F. O. B., Tanggu) between 16 to 50 percent below its lowest domestic price (C. I. F.).

⁴⁷ 永利製鹼公司民國十九年度業務報告書。

advance a security deposit (according to Yongli, but a loan from ICI's perspective) of 300,000 yuan with an interest of 6 percent p. a., refundable in kind beginning six months before the contract expired, or in cash with a secondary guarantee by Fan's Jiuda Salt Refinery. The check, drawn on the Hongkong and Shanghai Bank, was hand-delivered by E. S. Little, Jr., ICI's Tianjin manager, as "(Fan) did not wish to take the risk of carrying this cheque himself through Chinese territory."

Such accommodations had its price. Fan promised to limit output:
for the purpose of our mutual control in the Chinese and Japanese market
there is nothing better for us than only to produce about 80 tons within the
forthcoming two or three years...⁴⁸

In his cover letter, Fan noted not without irony ICI's claim of "(its) wholehearted desire to cooperate for the expansion and development of Chinese industry, and in the next he was asked to undertake not to expand his plant."⁴⁹ Lest the Nationalist government might interpret this contract as unpatriotic, Fan and his colleagues successfully persuaded ICI to drop its demand for the inclusion of the output limitation clause in the formal agreement. Despite a last minute concern with the legal enforceability of such a promise, ICI managers decided that "in any case the proper performance of the agreement was dependent to a great extent on Yung Lee's (Yongli) good faith..."⁵⁰

Yongli's company historians hailed the agreement as a major victory. A Chinese chemical manufacturer had competed successfully abroad and forced a major multi-national conglomerate to come to the negotiating table.⁵¹ ICI would pay for

⁴⁸ Fan's letter to ICI, dated 5/9/1928 in BM.

⁴⁹ ICI Archives W45/3/66 as cited in Brodie, *Crescent over Cathay*, p. 83.

⁵⁰ "Report on final negotiations with Yung Lee (Yongli) Soda Co. in connection with Japan sales agreement," dated 6/30/1928 in BM.

⁵¹ 余嘯秋，〈永利鹼廠和英商卜內門洋鹼公司鬥爭前後紀略〉，《文史資料選輯》，輯80，頁53；李德芳，〈范旭東與永利化學公司，1917-1937〉，《中國經濟史研究》，1998年第1期，頁137。

the cost of developing a market for Yongli's product in Japan and Taiwan. With the sizable security deposit carrying an interest rate 2 to 3 percent below the prime rate offered by Jincheng Bank, its house bank, Yongli would be able to invest in more capital equipment to improve the plant. In fact, however, Yongli did not reach the 80 ton average daily output limit consistently until 1931.

From ICI's perspective, the agreement might also be mutually beneficial. By the mid-1920s, other leading members of the Solvay cartel, including IG Farbenindustrie AG and DuPont, already considered soda manufacturing as "low" technology and insufficiently profitable.⁵² As agents for Yongli and Magadi, ICI remained the dominant supplier of soda for industrial use in Japan, with its lower priced supply keeping Asahi Glass and other Japanese producers at bay.⁵³ Exclusive agency for Yongli thus strengthened ICI's grip on that market without additional investment in production facilities in China or Japan and generated commissions for its subsidiary. Henceforth, it would not be the

intention of ICI to break Yung Lee (Yongli)...but to maintain the most amicable relations possible during the next three years in order to engender a feeling of confidence which may later on result in our holding a much stronger and favorable position as regards closer co-operation with Yung Lee (Yongli).⁵⁴

From 1929 to 1932, ICI (Japan) accounted for an average of 42 percent of Yongli's output and sales (see Table 2).

⁵² W. J. Reader, *Imperial Chemical Industries*, vol. II, pp. 36-37.

⁵³ Letter from Brunner, Mond & Co. (Japan) to Brunner, Mond & Co. (China), dated 4/27/1931 in BM.

⁵⁴ "Report on final negotiations with Yung Lee (Yongli) Soda Co. in connection with Japan sales agreement," dated 6/30/1928 in BM.

Terms of Collaboration, 1929-1932

Network capitalism thus incorporated both market competition and collaboration, an intricate interaction articulated clearly in the negotiations between Yongli and ICI over the terms of that “amicable relations”. Despite its uncompromisingly nationalistic corporate image, Yongli charted a tortuous course in an attempt to remain private and independent.

In 1928, the newly installed Nanjing government announced a plan to build a 20 million yuan state-owned soda ash/nitric acid plant with a daily output capacity of 200 tons, making the country self-sufficient in the chemicals with dire consequences to both ICI and Yongli. ICI’s representatives quickly met with Sun Fo, then a member of the State Council and Minister of Railways, and H. H. Kung, then heading the Ministry of Commerce and Industries (hereafter MCI) to discuss the possibility of a joint venture. On a separate front, Lincoln Steel arrived in Japan in November 1928 to discuss the doomed proposal from the Southern Manchurian Railway for a joint soda ash works to be built in Dairen at a cost of 20 million yen (see above). Steel then toured the Northeast and North China, collecting intelligence about Yongli.⁵⁵ Under siege by ICI and the government, short of capital, especially for much-needed improvements to the plant, and saddled with a rising inventory, Yongli again must find a way to survive.

Fan Xudong exploited every possibility, playing the Nationalist government against ICI. In a turnabout, he declared that, given the right terms, use of foreign capital was acceptable so long as the company remained under Chinese control.⁵⁶ He proposed a joint venture, capitalized between 7 to 8 million yuan, to take over his

⁵⁵ Brodie, *Crescent over Cathay*, pp. 84-86.

⁵⁶ 永利製鹼公司民國十七年度業務報告書。

plant, with ICI assuming a minority equity stake of 45 percent. ICI countered by resurrecting the equal partnership of 1925.⁵⁷ In a meeting with ICI two days later, Fan emphasized his opposition to government financial participation or control of any industrial enterprise. His brief career in government service and dealings with politicians had soured him toward state-owned enterprise and the bureaucracy. To bring pressure on Nanjing, he suggested that ICI approach the British government for diplomatic support. Accordingly, Percy Fowler, a director of ICI (China) met with Sir Miles Lampson, the minister to China and, after thanking him for his “assistance in the matter of duties on Heavy Chemicals,” secured his official support for the proposed joint venture.⁵⁸ Weighing in on the lobbying, Zhou Zoumin, chairman of Yongli and general manager of the Jincheng Bank also urged Sir Miles to meet with Fan to promote the project.⁵⁹

It was also necessary to involve the Nanjing government, if only as a negotiation strategy. In a meeting with ICI on May 1, 1929, Fan suggested a three-way venture (ICI, Yongli, and the government) to be capitalized at 10 million, a proposal that was rejected promptly by ICI as “utterly unreasonable (as) control would be Chinese... (with) no security.”⁶⁰ Six days later, ICI (China) agreed to recommend to London a 49 percent stake in a joint venture with Yongli to be capitalized at 3.6 million.⁶¹ While ICI would pay 1.7 million uan for the minority equity stake, Yongli would also have to write down its book value substantially.

⁵⁷ Minutes of meeting with Fan dated 2/15/1929 in BM.

⁵⁸ Summary of interview by Percy Fowler, managing director of ICI (China) with Sir Miles Lampson, British Legation, dated 5/4/1929 in BM. As part of Great Britain’s “policy community,” ICI routinely shared with the British government its intelligence reports and opinion on such issues as extraterritoriality. See, for example, report of E. S. Little, Sr., British Foreign Office Political Correspondences 371.641 held at the National Archives, Kew.

⁵⁹ Zhou’s interview with Lampson reported in letter from Harry Fox, commercial secretary, to Fowler, dated 5/9/1929 in BM.

⁶⁰ Cable from Fowler to Nicholson, dated 5/1/1929 in BM.

⁶¹ Meeting in Tianjin dated 5/7/1929 as cited in minutes of meeting, dated 9/26/1929 in BM.

Negotiations, however, soon bogged down on the by-laws of the proposed company.⁶² ICI insisted on a “cursory” inspection of the Yongli factory and its books, even though it had already collected considerable intelligence from well-placed agents and nominees. On the other hand, Yongli was torn between the prospect of receiving technical assistance and exposing itself without any assurance of cooperation.⁶³

More vexing issues soon surfaced as the negotiations proceeded: How ICI’s minority interest in a Chinese company could be protected without the privilege of extraterritoriality, and ICI’s demand to retain a 2/3 share of the China market and a similar proportion of any growth thereafter. On the other hand, Yongli expressed a deep concern over ICI’s minority equity stake being transformed into controlling interest should too many Chinese shareholders abstain from voting, and the possibility of ICI acquiring a majority stake by purchasing additional shares through Chinese nominees.⁶⁴

In their reports to London, ICI’s managers concluded that Fan Xudong was wavering. When pressed, Fan finally offered an explanation: He was in a difficult position answering to both the Nationalist government and public opinion. As a self-made entrepreneur known for his uncompromising patriotism, he was risking his reputation by proposing collaboration with a foreign company. For almost a year he had been petitioning the government for a ten-year waiver of gabelle and transit duty, and he was not at all certain that Nanjing would allow the transfer of such privileges to the joint venture. For the project to go ahead, Fan again suggested that the British

⁶² For tax purpose and extraterritoriality, ICI (China) Ltd. was incorporated in Hong Kong. See the company’s registration in Hong Kong Public Records Office HKRS 111-4-261.

⁶³ Cable from Fowler to Nicholson, dated 5/1/1929; and Fan’s suggestion of Yongli’s book value of four million yuan, dated 5/6/1929 in BM.

⁶⁴ Minutes of meetings on 5/30/1929, 6/7/1929, and 9/25-26/1929 in BM.

minister be approached for diplomatic support.⁶⁵ A draft of the by-laws was finally ironed out after a two-day session.⁶⁶ A proposal for the Yongli-ICI joint venture was submitted to MCI on October 2, 1929.⁶⁷

Two weeks later, Fan finally revealed his hand. Unbeknownst to ICI, Fan had also petitioned MCI on October 8, 1929. In this second petition, Fan warned that while the government might need more time to consider the involvement of foreign investment in an industry crucial to national interests, Yongli could not wait. To forestall foreign involvement, he requested an infusion of state capital, along with a permanent waiver of gabelle and lijin. With his associates working on H. H. Kung, Fan received word on October 22, 1929 that the infusion of state capital had been approved in principle.⁶⁸ He then presented the “bad” news to ICI: The Nanjing government would not approve the transfer of Yongli’s privileges to the proposed joint venture or the infusion of foreign capital. Instead, Yongli would receive two million yuan in state capital by November 5, 1929. Further negotiations would thus be unnecessary. To placate the disappointed British, Fan promised that it might be possible to appoint ICI as sole agent for Yongli’s product outside China.⁶⁹

Was Fan Xudong using the Nationalist government as a “ruse” against ICI? The available evidence, though incomplete, is consistent with Fan’s fervent economic nationalism and insistence on private enterprise. Making a clear distinction between country and state, he had already petitioned the Nationalist government against the

⁶⁵ 永利製鹼公司呈工商部，11/7/1928，中國第二歷史檔案館 422.2117; letter from Yu Xiaoqiu to Jackson, dated 9/2/1929 in BM.

⁶⁶ Minutes of meeting, dated 9/16-17/1929, and proposed by-laws in BM.

⁶⁷ In the petition, Fan reported that by-laws of the proposed joint venture had been approved by both parties. However, ICI (London) was still cabling questions three days later.

⁶⁸ 中國第二歷史檔案館編，《中華民國史檔案資料彙編》（南京：江蘇古籍出版社，1990），第五編，卷 1.6，頁 448-461。

⁶⁹ Minutes of meeting, dated 10/26/1929 in BM; 工商部致財政部函，6/12/1930，中國第二歷史檔案館編，《中華民國史檔案資料彙編》，卷 1.6，頁 454。

plan for a state-owned soda ash/nitric acid plant as early as January 22, 1929. State ownership might ease the problem of capital shortage, he argued, but success also depended on dedication and technological expertise. Instead of a twenty million yuan state investment, his group could complete the task for the country with 3.15 million. All he needed was a state guarantee of 6 percent interest for investors while the plant was under construction (repayable after production began), a waiver of transit duty and a rebate on transportation for both raw materials and output.⁷⁰ There was no mention of a foreign partner.

While Fan's maneuvers might have been able to keep ICI at bay for the time being, converting Yongli into a partially state-owned enterprise created another set of problems. Given his extensive experience with bureaucracy and politicians, Fan was uncharacteristically optimistic when he informed ICI that state capital would be provided soon. In fact, MCI's technical director, Xu Shanxiang, did not file his inspection report on Yongli until November 30, 1929.⁷¹ Thereafter, the proposal became mired in a turf battle between the MCI and the Ministry of Finance (hereafter MOF). T. V. Soong would not, or could not honor the commitment. However, Kung did manage to wrestle a thirty year gabelle waiver for Yongli from his reluctant brother-in-law.⁷² For this and other services, Fan's group donated 5,000 yuan in Kung's name to the Chinese Cultural Foundation.⁷³

While costly in time and energy, Fan's maneuvering kept ICI occupied as he established a working relationship with elements of the Nationalist government.

⁷⁰ 范旭東呈工商部 1/22/1929, 3/20/1929, MCI 422.2117; 永利製鹼公司民國十七年度業務報告書。

⁷¹ 中國第二歷史檔案館編,《中華民國史檔案資料彙編》,卷 1.6,頁 436-446。

⁷² MOF to MCI, dated 8/20/1930 in 中國第二歷史檔案館編,《中華民國史檔案資料彙編》,卷 1.6, p. 457; and T. V. Soong's letter to H. H. Kung, dated 7/18/1930 in MCI 422.2117. The decision was also facilitated by Sun Xuewu, chief of Fan's Golden Sea Chemical Industry Research Institute, who approached his Harvard classmates at the MOF. 黃漢瑞,〈憶孫學梧先生〉,收入譚傑等編,《紅三角的輝煌》,頁 113。

⁷³ 鐘履堅致范旭東 12/10/1934,〈精鹽公會抄檔〉。

Even though the state capital did not materialize, quick approval of Yongli's applications for transit duty waiver and a rate reduction in rail transport reassured both bankers and investors. Yongli's bank network, led by Zhou Zuomin's Jincheng, syndicated a 2 million yuan company debenture offering.⁷⁴ Although undersubscribed, the banks accepted the remainder as collateral for more loans.⁷⁵ The tide was turning for Yongli.

The 1932 Cartel Negotiations

ICI also faced more problems. With the onset of the World Depression and countries busy erecting protective barriers, ICI found its China market shrinking as the country regained its tariff autonomy.⁷⁶ The Republican state was interested in raising revenue as much as protecting a nascent industry such as Yongli. On December 30, 1930, it raised the import tariff for ICI's soda ash from 6 s. per ton in 1922 to 34 s. by 1932.⁷⁷ In Spring 1930, ICI's business position was even further eroded by a sharp depreciation of silver which favored Yongli. As gold appreciated against silver, ICI was forced to raise prices to maintain its "realization" in pound sterling until Great Britain abandoned the gold standard in September 1931.⁷⁸

With its hold on the China market in jeopardy and any chance of cooperating with Yongli uncertain, ICI's managers scrambled to stem the tide. Perhaps a more malleable partner, such as the Yao Hua Mechanical Glass Works (partly owned by the

⁷⁴ 〈金城銀行檔〉，分存天津市檔案館 211.4161，上海市檔案館，Q264.1.666。

⁷⁵ 〈卞白眉日記〉，11/14/1930 條，天津市政協圖書館。

⁷⁶ 葉松年，〈中國近代海關稅則史〉（上海：上海三聯書店，1991），頁 354-357；久保亨，〈戰間期中國自立への摸索〉（東京：東京大学出版會，1999），頁 67-69。

⁷⁷ G. F. R. Jackson to E. G. Jamieson, acting commercial secretary (Shanghai), dated 1/2/1931 in BM; and Brodie, *Crescent over Cathay*, p. 95.

⁷⁸ From one tael of silver for 33 pence in January, 1929 to 14.93 pence by February, 1931. 孔敏等編，〈南開經濟指數資料彙編〉（北京：中國社會科學出版社，1988），頁 445。

British-controlled Kalia Mining Administration) could be found.⁷⁹ Perhaps Yongli's shipment to Japan could be increased so that it "would not be making the enormous profits..." and thus "delay [its] excellent financial position..."⁸⁰ Or perhaps the market could be divided, with Yongli supplying such firms as Bohai Chemical Industries (cross shareholding with Yongli) at any price that it wished and ICI similarly free to do the same with Laotianli. One way or the other, the two companies must prevent under-cutting each other.⁸¹

Yongli managed its share of problems with care. The loss of the Northeast market due to the Japanese invasion, coupled with disruptions in North China and Shanghai meant declining sales even as its production reached 110 tons/day. Although there were many applications for agency, it purposely refrained from selling in Hong Kong, for doing so "would not be entirely in keeping with its present relations with ICI" (but see Table 2).⁸² Observing the spirit of the expired 1925 agreement, Yongli kept its price to 10 percent below ICI.⁸³

It was a prudent strategy, for foreign presence remained powerful. In early 1931, the Nanjing government resurrected the plan for a nitric acid and ammonium sulphate plant (both ingredients for chemical fertilizer and explosive). This time, however, foreign participation would be permitted, a development that immediately captured the attention of ICI and Farbenindustrie AG, both leading members of the Convention Internationale de l'Azote, a cartel controlling the world's manufacturing and sales of nitrogen-fixing fertilizer. As a member of the National Committee on

⁷⁹ Jackson to Jamieson, dated 1/2/1931 in BM. Unfortunately, political uncertainty prevented that.

⁸⁰ E. S. Little, Jr. to Shanghai office, dated 1/30/1931 in BM. ICI (Japan) rejected that suggestion as it was also experiencing difficulty.

⁸¹ E. S. Little, Jr. to Shanghai, dated 8/27/1931 in BM. In 1934, ICI, Yongli, and Laotianli signed a separate market sharing agreement. 〈永利化學工業公司檔〉169, 化學工業部檔案館。

⁸² ICI, Tianjin office to Shanghai, dated 11/16/1931 in BM.

⁸³ E. S. Little, Jr. to ICI (Shanghai), dated 3/30/1932 in BM.

Defense Industries Fan Xudong, too, was privy to the state plan, and wanted the project.⁸⁴ The stage was thus set for another round of negotiations between ICI and Yongli.

In late 1931, Daniel Little, Jr., proposed that the two companies should discuss a quota system. The home directors of ICI endorsed the proposal, since Yongli's initial response did not raise "the bogey of government interference." A carrot and stick negotiation strategy was set: While "aim(ing) at ultimate complete co-operation both technical and commercial," ICI would put on the table whether its 300,000 yuan loan (security from Yongli's perspective) should be called, with the veiled threat of terminating its Japan agency for Yongli. Alternatively, could ICI sell in China what Yongli placed with ICI (Japan)?⁸⁵

In the first meeting over the issue, H. G. Allen, a director of ICI (China), argued that a quota system would benefit both parties. Fan agreed; one of the goals of this arrangement would be to keep China's soda market to Yongli and ICI while shutting Russian import out. However, the two companies could not come to terms about how to set the quota: Should it be based on Yongli's growing production capacity, even though the depression had weakened the demand for soda ash? If calculated on the basis of actual sales, how far back should the past sales record be used? Fan, claiming inexperience in quota and market management, insisted that any arrangement should be tried first in a local market, and then only for a short period. When ICI presented comparative sales figures of the two companies to bolster its argument for a ten-year national quota scheme, Fan evaded further discussion by claiming that he needed verification of the sales data and guidance from his board in Tianjin.⁸⁶

⁸⁴ 〈經濟部檔〉17-22-21, 中央研究院近代史研究所檔案館。 On ICI's interest and interview with H. H. Kung on this project, see G. F. R. Jackson to E.G. Jamieson, dated 1/2/1931 in BM.

⁸⁵ Letter from ICI home directors (London) to ICI (China), dated 1/20/1932 in BM.

⁸⁶ Minutes of meeting, dated 5/10/1932 in BM. Fan, of course, had considerable experience managing an elaborate national and local quota system for refined salt. See Kwan Man Bun, "Managing Market, Hierarchy,

In a meeting one week later, Fan announced the decision of his board: Bad current business made determining an acceptable quota ratio impossible. To placate the exasperated ICI negotiators, he promised to “instruct all his branches to co-operate as closely as possible with ICI.” Undaunted by that response, G. A. Haley, another director of ICI (China), pointedly questioned whether Fan and his directors

fully realized that many of the selling difficulties with which Yung Lee [Yongli] were now faced could be automatically overcome by a quota agreement...(as it) would be assured of the sale of the agreed upon quantity and would gain access without price cutting to districts which had previously been difficult or impossible to enter...⁸⁷

The discussion then shifted to ICI's complaints about price cutting in such markets as Hankou and Changsha which it had controlled. Finally, Fan conceded that he would keep the price differential between the two companies' soda ash to 5 percent. Remaining on the offensive, E. S. Little, Jr., raised the possibility of ICI calling the 300,000 yuan loan (or security deposit).

Exploiting Yongli's lack of an adequate sales organization, cash flow and overstock problems, on top of the political disruption following Japanese aggression in the Northeast and elsewhere, ICI kept the pressure on.⁸⁸ It proposed a ten year agreement preserving its hold on the China market through a ratio that promised to allow for Yongli's growth, a share of all the markets, and higher realizations. However, Yongli would not be able to produce as much soda as it desired.⁸⁹ One day after the proposal was sent to Fan, E. S. Little, Jr., elaborated on his strategy. In a

and Network: The Jiuda Salt Industries, Ltd., 1917-1937.”

⁸⁷ Minutes of meeting, dated 5/18/1932 in BM.

⁸⁸ To protect its investment, the Jincheng Bank transferred 800,000 yuan of Yongli's debenture to the American Investment Trust of China (Beijing), thus allowing Yongli to claim a measure of American “ownership” and protection. See letters, dated 4/4/1932 in TM 217.340; SM Q264.1.583.

⁸⁹ ICI quota scheme to Yongli, dated 5/27/1932; and H. J. Collar to ICI (Shanghai), dated 6/25/1932 in BM.

letter to ICI's home directors in London, he proposed embarrassing Yongli at a reasonable cost by judicious local price reductions in such markets as Tianjin where Yongli was headquartered.⁹⁰ Summarizing his follow-up meeting with Yu Xiaoqiu, H. J. Collar (ICI's Tianjin office manager) reported that Yongli's inventory was overflowing. To help reduce its inventory, Yu suggested a price differential of at least 7 ½ percent, and a 50/50 split of the market.⁹¹

ICI found the counter-offer unacceptable: Yongli's share of China's market amounted to barely over 20 percent in 1931 (excluding sales to Japan handled by ICI, see Table 2). On behalf of the Solvay cartel, J. C. S. Steel endorsed Little's strategy. Writing to ICI (China), he affirmed that a quota arrangement was the best means of safeguarding ICI's position and profit. To counter the low price of silver favoring Yongli, he approved the judicious price cutting as suggested, and authorized the ruse of Japanese dumping soda in China as a screen. To add to Yongli's cash crunch, the 300,000 yuan loan (or security deposit) might be called. The target was to limit Yongli's annual production to no more than 35,000 tons, or 40 percent of China's market for at least five years.⁹²

Events, however, soon interfered with ICI's design. An appreciating silver as a result of the Silver Purchase Act (1933) made imports relatively cheaper.⁹³ At the same time, "rogue" soda ash from the US and the USSR outside the control of the Solvay cartel was also trickling into China, disrupting ICI's "judicious" price-cutting.⁹⁴ Continuing negotiations with Japanese soda ash producers to limit their exportation and production also meant that ICI needed Yongli's cheap supply, if not dumping, as a

⁹⁰ E. S. Little, Jr. to Home Directors, dated 5/28/1932 in BM.

⁹¹ H. J. Collar to ICI (Shanghai), dated 7/1/1932 in BM.

⁹² J. C. S. Steel (Alkali Group, London) to ICI (China), dated 8/29/1932 in BM.

⁹³ On how US silver policy affected China, see K.P. Chen Papers, Box 1, held at the Manuscripts and Special Collection, Columbia University.

⁹⁴ U. S. /Canadian soda ash was imported by Getz Bros. (Shanghai). 許俊權致范旭東，1/5/1934, 2/4/1935, JD.

bargaining chip. Calling the 300,000 yuan loan would then seem premature, if not malicious.⁹⁵ With its sprawling interests in Japan and China at odds with each other, ICI's options were limited.

Nor did Yongli find business easy. Negotiations with the Russian exporters for exclusive agency proved futile.⁹⁶ Its options included price-cutting or rebate, or a further increase in import tariff.⁹⁷ Taking advantage of the convocation of the 4th plenary meeting of the Guomindang central committee, Fan and his associates launched a coordinated lobbying campaign. Through the Continental News Agency [*Dalu xinwenshe* 大陸新聞社] they funded, a national media campaign was waged to exploit the "Buy Chinese" movement. Major newspapers received bi-annual "subsidies," while smaller presses received 10 yuan for each favorable report they ran.⁹⁸

However, Fan and his associates soon found out from sympathetic under-secretaries at the Executive Yuan that raising the import tariff specifically on soda ash would involve a general treaty revision with the various powers, a long and cumbersome process with an uncertain outcome. When Wu Zhihui and twenty three other central committee members passed a resolution to improve the enforcement of the anti-dumping duty promulgated in 1931, Ma Renchu and Chen Boxiu suggested adding soda ash to the list of "protected" industries such as cement and coal.⁹⁹

The Yongli campaign was costly, but with a protective tariff, prospects of an anti-dumping duty (Russian and U. S./Canadian soda ash did withdraw from China), a

⁹⁵ 永利製鹼公司民國二十一年度業務報告書。The negotiations for quota and export limitation with Japanese producers ultimately failed in 1934, resulting in another round of price war. 日本ソーダ工業會編，《日本ソーダ工業百年史》（東京：日本ソーダ工業會，1982），頁 227-228。

⁹⁶ 陳滄來致范旭東函 1/6/1934，1/11/1934，1/12/1934，JD。

⁹⁷ 陳滄來致范旭東函 3/9/1934，JD。

⁹⁸ 鐘履堅致范旭東函 11/16/1934，〈精鹽公會抄檔〉。

⁹⁹ 鐘履堅致范旭東函 2/16/1935，〈精鹽公會抄檔〉。

stabilized exchange rate, and integration of a shared distribution network with Jiuda, it continued to gain ground against ICI. By Spring 1937, with three years of market share in his favor (see Tables 1 and 2), Fan was confident enough to reopen negotiations. It was ICI's turn to bite the bullet for a "worthwhile share" of the China market. The result was the 1937 quota agreement.

Conclusion

The story of Yongli and ICI illuminates the myths and realities of the chemical industry in Republican China. Neither the image of uncompromising patriotism constructed by Yongli, nor that of "generally unrestricted competition" fully explains the behavior of the two companies. Far from free entry and exit, technological, capital, and government barriers limited the number of players in this sector of the economy. ICI, which owed its beginning to insider loans and a verbal agreement, limited competition by blocking technological transfer, divided the world market, and then pursued a predatory strategy against any potential or emerging competitor to protect its "overprice" extra-economic profits. As part of Great Britain's policy community, it enjoyed access to and support of its compatriots in China, not to mention the advice of its own Chinese local and national network. If only to level the playing field, if not by necessity, Yongli similarly drew on the support of its network for advice, insider information, and loans.

Moving beyond the unrestricted, if not quite free, market myth, the saga of Yongli-ICI illustrates the operation of networks as a mode/principle of business organization. As predatory competition became too costly, the companies collaborated to manage the production and marketing of soda ash, including a mutually acceptable quota and "market" price of soda ash, and lobbied officials and governments. Network capitalism, while tainted by the appearance of corruption,

helped create opportunities and ensured profitability.

Transcending the national divide also made Yongli and ICI an odd couple in the age of economic nationalism. If the goal of national salvation drove Yongli initially to compete with a multi-national goliath such as ICI, Fan Xudong also exported soda ash to Japan through the British company and explored partnership possibilities despite the risk of divulging its own secrets. Making a distinction between country and state, Yongli used ICI as a negotiating ploy against the Nationalist government for an infusion of state capital, just as it used the “bogey” of government intervention in dealing with ICI. In a final twist to the saga, when the Japanese invaders threatened Yongli’s plant at Tanggu in 1937, Yongli’s house banks, led by Zhou Zuomin, engineered a scheme by taking from ICI one million yuan worth of soda ash and converted the 300,000 yuan security deposit (or loan) to Yongli debentures. ICI finally became an “owner” of Yongli to shield it from Japanese seizure.¹⁰⁰ For better or for worse, however, all these were necessary for Yongli to survive, making it an exception to the “paradigm of failure.”

¹⁰⁰ See contract signed by Zhou and V. St. John Killery, dated 12/30/1937 in SM Q264.1.686.

Table 1: Soda Ash Production and Sales in China: Yongli and ICI, 1924-1937

unit: dan, approx. 133 lbs; 16.8 dan=1 ton

	Production		Sales		
	Yongli*	Yongli*	ICI*	Ratio* YL/ICI	Ratio^ YL/ICI
1924	4,334				
1925	30,324				
1926	75,667				
1927	225,187				
1928	258,981	209,421	845,861	20:80	11.7:88.3
1929	248,270	277,074	934,530	23:77	12.8:87.1
1930	326,978	310,795	1,076,654	22:78	16.6:83.4
1931	393,826	341,111	768,592	31:69	21.8:78.2
1932	536,374	413,833	485,097	46:54	42.9:57.1
1933	566,143	485,326	394,030	55:45	49.8:50.2
1934	629,311	672,523	485,657	58:42	55.9:44.1
1935	742,426	715,668	448,939	61:39	57.1:42.9
1936	930,888	635,173	414,000	61:39	59.4:40.6
1937	612,410	650,005	447,400	59:41	57.8:42.2

*Sources: 〈永利鹼廠廠史資料〉，天津鹼廠檔案室；陳調甫（1960），頁19。

^Sales in China only. See Table 2 and J. C. S. Steel to ICI (Shanghai), dated 8/29/1932 in BM.

Table 2: Yongli Soda Ash Sales by Region, 1928-1937*

unit: dan

	Tianjin^	Shanghai	Hankou	H. K.	N. E.	Japan	SEA
1928	59,104	23,449	17,195	----	12,967	96,776	---
1929	82,220	22,968	15,613	----	16,964	139,329	---
1930	107,491	41,105	13,310	----	23,526	125,462	---
1931	117,627	64,873	11,123	----	20,514	126,974	---
1932	173,576	117,398	24,247	15,621	28,380	48,110	6,501
1933	179,333	122,644	43,886	31,189	20,045	82,349	5,880
1934	290,508	176,169	64,081	36,998	47,941	49,505	7,320
1935	356,866	189,332	73,927	48,401	26,625	17,245	3,270
1936	306,459	143,980	68,760	49,242	37,367	28,839	525
1937	281,526	163,937	81,821	57,963	28,310	36,297	150

*Source: 〈永利鹼廠廠史資料〉，天津鹼廠檔案室。Hong Kong is abbreviated as H. K., Northeast as N. E., and Southeast Asia as SEA.

^Tianjin region included Hebei, Shandong, Henan, Shanxi, Shenxi, Gansu, and the Northeast provinces; Shanghai region included Nanjing, Zhenjiang, Suzhou, Wuxi, Changzhou, Haimen, Nantong, Jiaqing, Hangzhou, Ningbo, Wenzhou, and Jiangyin; Hankou region included Hunan, Hubei, Jiangxi, and the southern part of Henan; Hong Kong region included Guangdong and Guangxi; and Southeast Asia included Sumatra and Pinang, Malaysia.

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