

THE UNIVERSITY OF CHICAGO

FINANCIAL MARKETS IN LATE IMPERIAL CHINA, 1820-1911

A DISSERTATION SUBMITTED TO  
THE FACULTY OF THE DIVISION OF THE SOCIAL SCIENCES  
IN CANDIDACY FOR THE DEGREE OF  
DOCTOR OF PHILOSOPHY

DEPARTMENT OF HISTORY

BY

MATTHEW LOWENSTEIN

CHICAGO, ILLINOIS

AUGUST 2021

## Acknowledgements

I would like to express my deepest gratitude to my teachers, mentors, advisors, colleagues, family, and friends without whom this dissertation would not have been possible. The debt I owe to Kenneth Pomeranz is inestimable. One could not ask for a more generous, wise, and attentive advisor. His inspiration is present on every page of this manuscript. His bottomless epistemic charity make him a role model of what it means to be a historian. I was also privileged to have Jacob Eyferth as a teacher and a mentor. His graduate seminar on Chinese history was my reintroduction to the academy after a decade toiling in private finance. The course taught me how to read and discuss texts with charity, incisiveness, and rigor; in short, how to be a scholar. Outside the field of Chinese history, I have also been fortunate to have Bruce Cumings as a teacher and committee member. His instruction permanently changed how I think about political economy, and inspired the first course that I taught to undergraduates. On the other side of the pacific, the mentorship of several Chinese scholars has been formative. My Fulbright Advisor Cao Shuji first suggested I look at “popular sources,” and alerted me to the exciting new discoveries in the realm of Qing-era economic and social history. Further north, Meng Wei of Shanxi University trained me in how to read Shanxi merchant documents. I would not have been able to write a single chapter of this dissertation without their instruction.

In addition to my formal instructors, I also benefited from a large network of scholars engaged in the study of traditional Chinese finance. My father-in-law Li Chenguang is himself a historian of Shanxi, and helped me enormously in the acquisition and reading of materials, as well as in sharing his vast knowledge on the region’s history. Song Xiaoming, Director of the Shanghai Museum of Accounting, was endlessly generous with his time, and always willing to

educate me in the finer points of traditional Chinese accounting. Li Jinzhang, a banker-turned-scholar and collector, was an invaluable resource on traditional Chinese business organization. The many hours parsing highly difficult Qing-era correspondence with Chen Tianyi of Handan University were illuminating, and great fun. I am also grateful to Yang Bo and Zhou Ya of Shanxi University, who welcomed me to the university by organizing reading workshops and offering me lodgings. Lou Min from the Shanghai Academy of Social Sciences was a great source of inspiration and encouragement. I am also indebted to Liu Qiugen and Wang Zhisheng at Hebei University, Jiang Qin and Wang Guojin at Shanghai Jiao Tong University, Yan Xuelian and Zhang Yanxin at Shanxi University, Zhang Yalan and Xu Junsong at Shanxi Finance and Economics University, and Wang Zhongliang at Hebei Finance University.

My research abroad was punctuated by several setbacks, owing largely to the rapidly changing archival situation in China. I was fortunate to have a number of friends and peers in China on whom I could depend. I would like to thank Spencer Stewart for his inexhaustible good humor and sound advice, the intrepid and mysterious Xiao Li for his comradery and assistance during my frustrations in Dongbei, Dong Yan for his learned disquisitions on financial history, and Tristan Revells for his unerring job market advice. I would especially like to thank Jinghong Zhang for introducing me to highly valuable and difficult-to-access material, and Zhou Lin and Wang Guo at the University of Sichuan for their invaluable support in my research in the southwest. Zhou Lin provided me with reams of cases from the Baxian archives and highly productive document reading sessions. Wang Guo helped me access library and archival sources, and was himself a walking encyclopedia of Chinese and Anglophone historiographic traditions. I am truly grateful to all of these dear friends and fellow scholars.

On the home side of the Pacific, I benefited from a number of generous and discerning readers. I am particularly grateful for Elisabeth Köll's unsparing and highly valuable feedback. Manuel Rincón-Cruz's line-by-line edits informed by his deep financial expertise were equal parts encouraging and humbling, and always precious. Conversations with George Qiao over the minutiae of Shanxi liability structures and notes markets were both stimulating and revealing. Dan Knorr, Rui Hua, Adam Frost, Nic Johnson, Michael Douma, and Brian Marein, were keen editors on my written work and helpful commenters on how to present my research to a larger audience. I would also like to thank University of Chicago's East Asia Transregional Histories workshop, as well as University of Hong Kong's Chinese Business History Webinar.

Finally, I would like to thank my family. My parents cultivated my intellectual curiosity from an early age, and I would not have pursued a scholarly career without their enthusiastic encouragement. They remain my first and most trusted teachers, and the lodestars I turn to for succor and wisdom. My brother and sister Zack and Alli are my closest and most cherished confidants. My in-laws in Shanxi province were a source of warmth and family in my time abroad—truly a home away from home. My former boss, the brilliant, witty, and inimitable Anne Stevenson-Yang, taught me how to conduct research, think analytically, and is a dear, dear friend. Most of all, my wife Yujie Li is a pillar of support and a fount of editorial and scholarly wisdom. Whether helping me parse arcane Qing texts or trekking through Europe and Asia, she is my deepest and most constant companion. My love and gratitude are eternal.

The credit for any contribution that this dissertation has made goes as much to my many collaborators, mentors, friends, and family as it does to me. Any mistakes are entirely my own—and possibly Spencer's.

## Table of Contents

<b><u>ACKNOWLEDGEMENTS</u></b> .....	<b>II</b>
<b><u>LIST OF IMAGES</u></b> .....	<b>VII</b>
<b><u>LIST OF TABLES</u></b> .....	<b>IX</b>
<b><u>LIST OF FIGURES</u></b> .....	<b>X</b>
<b><u>INTRODUCTION</u></b> .....	<b>1</b>
<b>THE ROAD TO SHANXI</b> .....	<b>4</b>
<b>THE WORLD OF SHANXI MERCHANTS</b> .....	<b>6</b>
<b>“POPULAR” SOURCES AND METHODOLOGY</b> .....	<b>11</b>
<b>ARGUMENT AND CHAPTER OUTLINE</b> .....	<b>17</b>
<b>LITERATURE REVIEW AND SCHOLARLY CONTRIBUTION</b> .....	<b>24</b>
<b><u>CHAPTER ONE: LENDING AT THE GRASSROOTS</u></b> .....	<b>45</b>
<b>LITERATURE REVIEW</b> .....	<b>48</b>
<b>LOANS FROM INDIVIDUALS</b> .....	<b>54</b>
<b>THE LINEAGE TRUST, OR <i>TANGHAO</i> (堂号)</b> .....	<b>64</b>
<b>LOANS FROM <i>ZIHAO</i> (字号), “CORPORATE ENTITIES,” OR “COMMERCIAL ENTITIES”</b> .....	<b>72</b>
<b>PAWNSHOPS</b> .....	<b>88</b>
<b>RELIGIOUS ORGANIZATIONS</b> .....	<b>91</b>
<b>MUTUAL CREDIT SOCIETIES</b> .....	<b>101</b>
<b>THE DIANZU (典租), OR “MORTGAGE,” MARKET</b> .....	<b>102</b>
<b>RURAL LENDING AND THE GRASSROOTS CAPITAL MARKET</b> .....	<b>112</b>
<b>CONCLUSION</b> .....	<b>121</b>
<b><u>CHAPTER TWO: DEPOSITS AND CREDIT MONEY AT THE GRASSROOTS</u></b> .....	<b>123</b>
<b>LITERATURE REVIEW</b> .....	<b>125</b>
<b>THE LINEAGE AS PROTOBANK: DEPOSITS IN RURAL MARKETS</b> .....	<b>135</b>
<b>CREDIT MONEY, BROKERAGE, AND TRANSFER SERVICES</b> .....	<b>149</b>
<b>GRASSROOTS FINANCE AND THE MARKETING SYSTEM</b> .....	<b>158</b>
<b>CONCLUSION</b> .....	<b>165</b>
<b><u>CHAPTER THREE: CHINESE ROTATING SAVINGS AND CREDIT ASSOCIATIONS (ROSCAS) IN HISTORICAL PERSPECTIVE</u></b> .....	<b>167</b>

<b>RULES AND PROCEDURES OF THE <i>HEHUI</i>, OR ROTATING SAVINGS AND CREDIT ASSOCIATIONS (ROSCAS): DICE SOCIETIES AND COMPETITIVE AUCTIONS.....</b>	<b>173</b>
<b>RISK MANAGEMENT AND COLLATERAL .....</b>	<b>192</b>
<b>ROSCAS AND THE MONEY MARKET .....</b>	<b>209</b>
<b>INTERNAL RATE OF RETURN (IRR).....</b>	<b>218</b>
<b>OLD INSTITUTIONS IN THE NEW CHINA .....</b>	<b>228</b>
<b>CONCLUSION.....</b>	<b>236</b>

**CHAPTER FOUR: THE BIAOQI SYSTEM: SETTLEMENTS FAIRS AND HIGH FINANCE IN LATE IMPERIAL CHINA .....** **238**

<b>LITERATURE REVIEW .....</b>	<b>242</b>
<b>THE WORLD OF SETTLEMENT FAIRS .....</b>	<b>246</b>
<b><i>BIAOQI</i>: ORIGINS IN THE TEMPLE FAIR.....</b>	<b>252</b>
<b><i>BIAOQI</i>: SETTLEMENTS AND CLEARING.....</b>	<b>264</b>
<b>CREDIT MARKETS AND INTEREST RATES AT THE <i>BIAOQI</i>.....</b>	<b>278</b>
<b>CURRENCY EXCHANGE: THE BIAOQI MONEY MARKET .....</b>	<b>300</b>
<b>DOMESTIC EXCHANGE: REMITTANCE MARKETS AND THE <i>BIAOQI</i> .....</b>	<b>325</b>
<b>THE BANKER’S BANK: ZHANGJU AND THE <i>BIAOQI</i> .....</b>	<b>338</b>
<b>CONCLUSION.....</b>	<b>347</b>

**CHAPTER FIVE: THE INVESTMENT MARKET: SHAREHOLDERS, ACCOUNTING, AND THE MARKET FOR FIRMS IN LATE IMPERIAL SHANXI.....** **350**

<b>LITERATURE REVIEW .....</b>	<b>355</b>
<b>SHARE CAPITAL, SHARE COMPENSATION, AND EMPTY SHARES .....</b>	<b>363</b>
<b>ACCOUNTING FOR CAPITAL.....</b>	<b>382</b>
<b>THE INVESTMENT MARKET .....</b>	<b>406</b>
<b>FROM COMMERCE TO COUNTRYSIDE .....</b>	<b>419</b>
<b>SECONDARY MARKETS .....</b>	<b>428</b>
<b>CONCLUSION.....</b>	<b>449</b>

**CONCLUSION.....** **451**

<b>FROM REMITTANCE MARKETS TO DOMESTIC EXCHANGE .....</b>	<b>451</b>
<b>REMITTANCES IN LATE-IMPERIAL CHINA .....</b>	<b>454</b>
<b>DOMESTIC EXCHANGE MARKETS IN REPUBLICAN CHINA .....</b>	<b>461</b>
<b>THE QING ORIGINS OF REPUBLICAN FINANCE: FROM REMITTANCES TO DOMESTIC EXCHANGE ....</b>	<b>466</b>
<b>FURTHER QUESTIONS FOR STUDY.....</b>	<b>474</b>

**WORKS CITED.....** **477**

## List of Images

Image 1. Loan contract between Guo Shenxing and Shisheng Company .....	86
Image 2. Loan contract between Jiang Fuxian and Heaven and Earth Society .....	93
Image 3. Lease Contract for Sanyi Company Dian over Zhang Estate .....	105
Image 4. Yuqing Pawnshop Loans, “Interest-yielding loans.” .....	119
Image 5. Pingpiao from Fujian Province .....	129
Image 6. Private account book, Jiaqing Reign.....	137
Image 7. Side hall account book, Wangyichuan account, 1833. ....	139
Image 8. Side Hall Account Book, Daoguang Reign .....	142
Image 9. Tuibao Hall Customer Accounts, Tongxin Hall and Cao Quanxing .....	158
Image 10. Fushengchang Customer Account book, Yuci Marketing Schedule .....	160
Image 11: Sample ROSCA Invitation.....	175
Image 12: Sample payment schedule.....	177
Image 13. Republican-era Profession of Friendship.....	190
Image 14: Wang Shenghai Member Account, 1926 Credit Society.....	200
Image 15: Receipt for Wang Shenghai .....	201
Image 16: ROSCA Interest Rates from Daniel Kulp.....	218
Image 17: Friendship Mutual Assistance Society payment schedule.....	232
Image 18 Friendship Mutual Assistance Society payment schedule II .....	233
Image 19. Shanxi Merchant Prayer to Lord Guan .....	258
Image 20. Dadexing Settlement Slips, 1878.....	266
Image 21. Fuquandian Settlement Slip, 1875 .....	269
Image 22. Quotation slip, Baotou, 1910 .....	276
Image 23. Tianshunkui client account, Chunyi Hall, 1895.....	281
Image 24. Settlement slip, Deshengchang and Zhongshan Hall, 1888.....	283
Image 25. Yushungong Co, Pingyao Yin hao (Name unknown) Client Accounts, 1852.....	286
Image 26. Client accounts of Pingyao Zhangju (unnamed), 1908.....	289
Image 27. Correspondence from Baohuitong to Hengyidian, Envelope .....	293
Image 28. Baohuitong seal.....	295
Image 29. Qi County Quotation Slip, 1866 .....	303
Image 30. Xin Prefecture Quotation Slip, 1879.....	308
Image 31. Qianruiyi Silver/Copper purchases, 1925 .....	311
Image 32. Zong'ai market quotation slip, 4/1924 .....	313
Image 33. Remittance note, 1873 .....	327
Image 34. Remittance note, 1877 .....	330
Image 35. Tianshunkui client account, Jiyi Hall, 1895.....	341
Image 36. Partnership contract, Hengsheng money shop, 1782.....	369
Image 37. Capital Certificate, Qianshengxiang, 1880 .....	377
Image 38. Necessary Knowledge for Trade, Model Rubenzhang, 1894. ....	384
Image 39. Tongshunquan Company, Rubenzhang, 1862 .....	386
Image 40. Necessary Knowledge, Wanjinzhang, 1894 .....	388
Image 41. Changshengfu shareholding structure, 1904.....	395
Image 42. Changshengfu's starting capital, 1904 .....	396
Image 43. Changshengfu Profit and Retained Earnings, 1905-1906.....	398
Image 44. Fengshengheng qingdan, 1895.....	401

Image 45. Qingfeng and Wanfeng Cos. Partnership Contracts, 1814 .....	408
Image 46. Yishengwei Pawnshop Capital Statement, 1879 .....	417
Image 47. Sale of Timberland Shares, 1806 .....	430
Image 48. Contract for Sale of Coalmine Shares, 1876.....	432
Image 49. Sale of Coalmine Shares, 1892 .....	434
Image 50. Contract for Sale of Pawnshop, 1829 .....	438
Image 51. Contract for Sale of Pawnshop, 1845 .....	441
Image 52. Remittance note, 1873 .....	455
Image 53. Shanghai “zhuangpiao,” 1899.....	462
Image 54. Chongqing in relation to Sichuanese Chongqing exchange markets, 1934.....	465



## List of Tables

Table 1. Summary of lending rates by loan type .....	61
Table 2. Capitalization Rate on Rents.....	107
Table 3. Accounts of Yuqing Pawnshop, 1931.....	116
Table 4. De Fu Hall Customer Account, Yan Luming .....	146
Table 5. De Fu Hall Customer Account, Guang Yougong.....	147
Table 6. Tuibao Hall Customer Account, Li Dianyuan, 1886-1888.....	155
Table 7. Fushengchang Note Issuance by Date .....	161
Table 8. ROSCA payment schedule, 1768 .....	223
Table 9: Juyi Society IRR Calculation.....	226
Table 10: Renyi Society Payment Schedule .....	227
Table 11: Friendship Mutual Assistance Association Payment and IRR (Units in RMB).....	234
Table 12. Tianshunkui client accounts, Jiyi Hall.....	342
Table 13. Qianshengxiang Initial Shareholders, 1880 .....	378
Table 14. Tongshunquan Company, Rubenzhang, 1862 .....	387
Table 15. Necessary Knowledge, Wanjinzhang, 1894 .....	389
Table 16. Changshengfu shareholding structure, 1904 (silver taels).....	395
Table 17. Changshengfu's starting capital, 1904 .....	396
Table 18. Changshengfu Profit and Retained Earnings, 1905-1906.....	399
Table 19. Changshengfu, Shareholding structure and dividend distribution, 1907.....	400
Table 20. Fengshengheng qingdan, capital and profit, 1895. Monetary units in strings of copper cash (吊文).....	402
Table 21. Fengshengheng qingdan, distribution of profits, 1895. Monetary units in strings (吊文). .....	404
Table 22. Shareholders in Qingfeng Money Shop and Wanfeng Grain Shop, 1814.....	410
Table 23. Transactions between Yingkou and Changchun.....	471

## List of Figures

Figure 1. Annualized rates of individual loans from 1800 to 1845, by loan type .....	60
Figure 2. Share of Loan Originations by Month.....	62
Figure 3. Fushengchang Qianzhhuang number of transactions per date, by decile.....	162
Figure 4. Distribution of number of transactions in top decile for simulated Fushengchang accounts, 999 simulations .....	163
Figure 5. IRR (left) vs. Net Receipts (right) .....	224
Figure 6. Dice Society IRR by pool size, 1768.....	225
Figure 7. The Biaoqi Circuit, 1936 .....	248
Figure 8. Map of Settlement Fairs and Tea Routes, Qing to Republican period.....	250
Figure 9. Summer biao yield curve, Qi County, 1892 .....	291
Figure 10. Tianshunkui yield curves by quarterly biaoqi, 1895 .....	292
Figure 11. Tianshunkui Deposits and Loans by Counterparty type, in silver taels .....	344
Figure 12. Annual rates, deposits vs. loans, by season, Tianshunkui, 1895 .....	345

## Introduction

On the third day of the tenth month of the fifth reign year of the Guangxu emperor, the manager of a Shanxi-merchant *qianzhuang* (钱庄), or “native bank,” located in present-day Hebei province (probably the Lulong county seat)<sup>1</sup> sent a letter to his business partner in Chifeng, in present-day Inner Mongolia. He apprised his partner of the firm’s recent activity and general business conditions:<sup>2</sup>

前捎去四十号一信并捎去原生裕帖钱十千，想俱收到，今日收到四十一号一信，内事俱悉，所卖之布已经登账，今着脚役送信所谓会同盛合，郡平宝银三百两。咱执票向永增魁去取伊言同盛合并不存银，存伊交易钱 378000，此银不能交付就迟几日亦不能行，至日向伊号执兑，将银收回为妥，送信人在赤使钱多寡，写信题来。临笔小米 14230、高粮 6890、宝银 3660、碎银 3584、本月标银 3570、肃此另条。滦州近信钱盘 9280、明年四月期米 14800，大约十月标来银准在五万以上自会之后赤邑如会银两与永字号捎来。

Along with the previous letter #40, I have sent you 100,000 copper cash in Yuanshengyu notes, which I trust you have received. Today, please receive this letter #41 and read the contents carefully...we have attempted to redeem our notes from Yongzengkui, but they are short of silver stocks. We have deposited there 378,000 copper cash, which they cannot pay. To delay would be unsuitable. When the notes come due, you must redeem them with drafts on other accounts...At present: millet 14,230. Sorghum 6,890. Silver sycee 3,660. Loose silver 3,484. Monthly *biao*<sup>3</sup> silver 3,570...Word from Luanzhou has copper plate at 9,280, and next year’s fourth-month millet futures at 14,800. At the tenth month *biao*, it is certain that over 50,000 silver taels will arrive. After this, any remittances should be sent via the Yong company.

The letter was received by Chifeng and copied into a ledger book with other correspondence sent from the firm headquarters to the Chifeng branch.

---

<sup>1</sup> See chapter 4 for an depth discussion of these documents and their provenance.

<sup>2</sup> Miscellaneous *qianzhuang* and cloth merchant correspondence book, 1879 (光绪五年正月某钱庄布店来信稿), LJMPC, 35.

<sup>3</sup> This referred to silver that would be exchanged at a scheduled trade fair, known as a *biaoqi*. See Chapter 4 for details.

This letter touches, in a mere paragraph, on a dizzying array of financial practices in late imperial China. First, we see the use of banknotes; the firm is using notes from a third party, the Yuanshengyu company, to transmit copper cash. Second, we see that it is holding notes from the Yongzengkui company, which it wants to redeem. To accept redemptions in arrears would be “unsuitable,” though the firm is willing to accept drafts on other firms in lieu of hard silver.<sup>4</sup>

Thus, we get a brief snapshot of a highly developed banking system, replete with paper notes and deposit transfers. Furthermore, we see towards the end of the letter a series of market quotations. These include prices not only of physical stocks of grain and silver, but in a *futures* market. Prices for next year’s millet and silver sycee at the end of the month trade at different values from spot millet and spot sycee. Since nowhere in the historiography do we get even a hint of futures markets or depository drafts, and not much is said about banknotes, the question must be asked: what are these practices referring to? How common were they? Why do prices in Luanzhou, to the east of Beijing, impact prices nearly 500 overland kilometers away in Chifeng, near the Manchurian border? In short, how much do we really know about late imperial finance?

This dissertation confronts the problem of finance in late imperial China. Its animating thesis is that market mechanisms distributed capital and credit throughout the economy, both horizontally across different regions and vertically between different sectors of society. In the countryside, lineage trusts and other rural institutions extended loans to and accepted deposits from rural people. This allowed peasants to borrow money in order to meet both production and consumption needs. It also gave them an avenue to accumulate savings in the form of financial assets. In the world of high finance, dedicated financial institutions furnished credit, trade

---

<sup>4</sup> The key Chinese character here is *bo* (拨), which means account-book transfers, or “drafts,” as distinct from payments in hard silver, which are denoted with the *xian* (现) character.

instruments, and clearing services to the commercial sector. A key contention of this dissertation is that these spheres—high finance and low finance—were not really separate. They interacted together in what can justly be called a capital market.

Moreover, this was an intensely *laissez-faire*, competitive financial market. Actors from small-time peasants to rural lineages to grand financiers in commercial centers were free to create, *ex-nihilo*, their own credit instruments. At times, these circulated on par or higher with hard cash. The result was a profusion of financial institutions and credit instruments, whose only serious constraint was the market. To coordinate such a vast diversity of financial institutions and services, late imperial China developed its own primitive central banks. These were privately run “bankers’ banks” located in major financial centers, and which furnished wholesale credit to other financial institutions, as well as provided clearing and settlement services. The implications of this dissertation are therefore considerable: while I do not claim that China was “capitalist”—either relative to the west or in any absolute sense—I do argue that Chinese financial institutions were at least consistent with profit-driven capital accumulation, and market-based mobilization of capital, credit, and physical resources. If there is a Chinese cause of the Great Divergence, it cannot be found either in its financial institutions, nor in the scope of its capital markets.

That said, I do not see the significance of this dissertation as theoretical. My primary contribution is in a series of empirical discoveries about the specific institutions and practices that obtained in late imperial Chinese finance. Many of these discoveries are new, others have only been hinted at, while a few overturn long-held consensus. It is my fervent hope that future historians—no matter their outlook on history, capitalism, the Great Divergence, or other world historical events—will find this dissertation useful in getting the facts right.

## The road to Shanxi

When I applied for a Fulbright Grant to conduct dissertation research in China, I had intended a dramatically different project. My prospectus, “Mao Money, Mao Problems,” proposed a history of money and credit in the planned economy. I had selected Dongbei as the site of my research, since this was both an important origin of the planned economy as well the site of Maoist China’s most intensive industrialization.<sup>5</sup> Though archival access was already being restricted, I felt confident. I called ahead and went through a local contact to gain assurances that the Liaoning Provincial Archives would allow me to review the pertinent material from the People’s Bank of China and Liaoning Planning Commission. But upon arrival, it soon became clear that the archivists, though I believe they had spoken to me in good faith, had no way to honor these assurances. After a week or so of drinking tea in the lobby, I received an apologetic after-hours phone call: there was absolutely no way I was going to get access.

I suddenly found myself without a dissertation topic. I pivoted to the Republican period, and resolved to study the origins of the private banking system in Sichuan and Yunnan. This research proved much more fruitful, and I acquired a number of archival materials. Nevertheless, I faced a tantalizing gap in the historical record. The line between traditional financial institutions and “modern banks” was much less discrete than I had anticipated, and traditional financial practices continued to inform Chinese banking practices throughout the Republican period. But I lacked the sources to clarify this problem, let alone to trace the deeper history of

---

<sup>5</sup> For a fantastic study of Manchurian industrialization, see Koji Hirata, “Steel Metropolis: Industrial Manchuria and the Making of Chinese Socialism,” *Enterprise & Society* 21, no. 4 (2020): 875–85, <https://doi.org/10.1017/eso.2020.58>.

China's traditional institutions. I turned to Professor Cao Shuji, my Fulbright advisor and one of the leading social and economic historians of China. Cao directed me to Professor Meng Wei of Shanxi University.

At Shanxi University, I discovered an unthinkable rich collection of what I call “popular sources,” or *minjian ziliao* (民间资料).<sup>6</sup> These sources offered an unprecedented window into the economic life of late imperial China, and their potential impact on global economic history was enormous. But more important, I discovered a community of Qing dynasty business and economic historians whose dedication to the historian's craft was as unstinting as their warmth and hospitality. These scholars, largely from Jiao Tong University, Shanxi University, and Hebei University have devoted years of study to developing methodologies and approaches to Chinese popular sources—and were eager to share them. When I first arrived at Shanxi University, Professor Meng Wei asked me to read a single page of *piaohao* correspondence. As I recall, I could not read a single character. Meng Wei, with Mencian patience, insisted that I could be taught and that I stay in Shanxi so that he could organize a sources workshop. What persuaded me to study Shanxi merchants was not merely their importance to global economic history, but the opportunity to work with such welcoming, generous, and insightful teachers and colleagues.

---

<sup>6</sup> The translation is approximate; the emphasis in the original Chinese is simply the fact that these sources are produced by non-state actors, rather than by state institutions. These sources are published in Jianmin Liu, ed., *Jin Shang Shi Liao Ji Cheng*, Di 1 ban (Beijing: Shang wu yin shu guan, 2018).

## The world of Shanxi merchants

Shanxi province lies to the west of Beijing, wedged between the capital and the Mongolian border. It is one of several provinces with a claim to being the origins of Chinese civilization. The Divine Farmer (神农 *shennong*), who in Chinese myth brought Agriculture to the ancient Chinese, is claimed by Shanxi (among other provinces) as a native of Gaoping County.<sup>7</sup> The sage kings Yao, Shun, and Yin all built capitals in Shanxi.<sup>8</sup> Later, during the Spring and Autumn Period (771-476 BCE), Shanxi became a powerful independent state. The State of Jin rose to be one of the five “hegemons” contending for supremacy, until the Partition of Jin in 453 BCE marked the beginning of the Warring States Period (476-221 BCE).<sup>9</sup> During the tumult of the Three Kingdoms (220-280 AD), Shanxi again rose to prominence. Under the Cao family’s Wei dynasty and the subsequent Sima family’s Jin dynasty, it was one of the three main powers. It was ultimately successful in conquering its rival kingdoms of Wu and Shu, and unifying the empire. During this period, one of Shanxi’s favorite sons, Guan Yu, was born in

---

<sup>7</sup> Lihui Yang and Deming An, *Handbook of Chinese Mythology*, Handbooks of World Mythology (Santa Barbara, Calif: ABC-CLIO, 2005), 198-199.

<sup>8</sup> Dong Yonggang (董永刚), “Yaoshun in Southern Shanxi (尧舜在晋南),” *Taiyuan Wanbao* (太原晚报), December 5, 2007,

<http://www.shanxiql.com/mlsx/94854d46863911e7aaa4c5fca12f0797.html>.

<sup>9</sup> Cho-yun Hsu, “The Spring and Autumn Period,” in *The Cambridge History of Ancient China: From the Origins of Civilization to 221 BC*, ed. Edward L. Shaughnessy and Michael Loewe (Cambridge: Cambridge University Press, 1999), 545–86,

<https://doi.org/10.1017/CHOL9780521470308.010>; Mark Lewis, “Warring States Political History,” in *The Cambridge History of Ancient China: From the Origins of Civilization to 221 BC*, ed. Edward L. Shaughnessy and Michael Loewe (Cambridge: Cambridge University Press, 1999), 587–650, <https://doi.org/10.1017/CHOL9780521470308.011>.



present-day Yuncheng county.<sup>10</sup> Guan Yu would go on to become the patron deity of Shanxi merchants, and of all Shanxi-Shaanxi guild halls in the Ming and Qing dynasties.<sup>11</sup>

In the late imperial period, Shanxi developed some of the pre-industrial world's largest commercial and financial networks. The rise of the "Shanxi merchants" dates back to the Ming dynasty (1368-1644). The Ming state's massive investment in northern border defense resulted in high fiscal demand for grain, salt, and other commodities along the frontier—much of which was provided by grain taxes on Shanxi and Shaanxi provinces.<sup>12</sup> During the Hongwu reign (1368-1399), the "kaizhong" policy brought partial liberalization to the previously monopolized salt trade. The kaizhong system permitted private actors to purchase salt quota in return for grain at a number of designated frontier markets. This guaranteed large profits to merchants who could arrange wholesale shipments of grain to these frontier market towns, and was the origin of many of the earliest long-distance, large-scale Shanxi merchant firms. At the same time, other Shanxi merchant firms arose to take advantage of the new trade in salt quota certificates, setting up salt purchasing agents as far south as Yangzhou.<sup>13</sup> By the end of the Ming dynasty, private firms

---

<sup>10</sup> B. J. ter Haar, *Guan Yu: The Religious Afterlife of a Failed Hero*, First edition (Oxford, United Kingdom: Oxford University Press, 2017), 47. Personally, if I had to select a "great man of Shanxi history," it would be Hua Guofeng. Hua's native Jiaocheng is the only place in China with his portrait hung in prominent buildings, and with a Hua Guofeng statue. The statue was apparently not authorized by the proper authorities, and during the Xi Jinping administration there was an attempt by the provincial government to demolish it. A mob of locals swarmed the statute in defense, and Taiyuan relented. This is an interesting story, but I'm not sure that it belongs here.

<sup>11</sup> See Chapter 4.

<sup>12</sup> Takanobu Terada, *Shanxi Shangren Yanjiu* (山西商人研究), trans. Zhang Zhengming, Tōyō Shi Kenkyū Sōkan 25 (Taiyuan: Shanxi People's Press, 1986), 26-30.

<sup>13</sup> Terada, 226-229.

from Shanxi had moved aggressively into pack-animal markets along the Mongolian frontier, dominating the market in Zhangjiakou (largely consisting of trading salt for horses).<sup>14</sup>

These border markets in horses ultimately gave rise to the Sino-Russian tea trade. By the end of the Ming, Shanxi merchants were already dealing in tea in border areas. During the Qing dynasty, the Shanxi tea trade continued to expand. By the late 17<sup>th</sup> century, Shanxi and Shaanxi merchants were active in shipping via Hankou to Xikang and Tibet.<sup>15</sup> But the boom in tea trading came in the 18<sup>th</sup> century, with the signing of the Treaty of Kyakhta in 1728. The treaty fixed the border between Russia and the Qing, and permitted free trade between the two empires in the border city of Kyakhta.<sup>16</sup> Shanxi tea networks extended grew to encompass Mongolia, Xinjiang, and western Sichuan. By the mid-19<sup>th</sup> century, virtually every tea-growing region of China hosted purchasing agents from Shanxi firms.<sup>17</sup> On the other side of the frontier, “outer tea merchants” concentrated in the Sino-Mongolian overland entrepots of Zhangjiakou and Guihua (now Hohhot, the provincial capital of Inner Mongolia). Zhangjiakou was the key waypoint in the trade with Kulun (now Ulaanbatar, capital of Mongolia) and eventually Russia. Guihua was generally used for transshipments to points west, including Uliasta, Khovd, and Xinjiang.<sup>18</sup>

The phenomenal expansion in commercial trade spurred the development of Shanxi merchant finance.<sup>19</sup> The earliest Shanxi financial institutions were most likely pawnshops. In the

---

<sup>14</sup> Terada, 229.

<sup>15</sup> Jianhui Huang, *Studies on Ming and Qing Dynasty Shanxi Merchants (明清山西商人研究)*, Di 1 ban (Taiyuan Shi: Shanxi jing ji chu ban she, 2002), 110.

<sup>16</sup> Li Chenguang (李晨光), *The Shanxi Merchant Tea Route (晋商茶路)* (Taiyuan, Shanxi: Shanxi Chuban Jituan, 2008), 7-8.

<sup>17</sup> Huang Jianhui, 109.

<sup>18</sup> Huang Jianhui, 115.

<sup>19</sup> George Qiao, “The Rise of Shanxi Merchants Empire, Institutions, and Social Change in Qing China, 1688-1850” (Ph.D., Stanford, 2017), <http://purl.stanford.edu/bg803zm7823>.

early 17<sup>th</sup> century, Datong in northern Shanxi had a vibrant pawn industry (we know this because the Ming army raided the Datong pawnshops during the Tianqi reign).<sup>20</sup> With the rise of the Qing, and the opening of transcontinental trade, Shanxi finance developed rapidly. By the end of the Qianlong reign (1736-1796), pawnshops and “native banks” (*qianzhuang* and *yinhao*) north of the Yangzi were often run by Shanxi merchants.<sup>21</sup> Indeed, in the century leading up to the 60<sup>th</sup> reign year of the Qianlong emperor, Shanxi-run pawnshops are said to have entirely displaced Huizhou-run pawnshops north of the Yangzi river, including in important riverports.<sup>22</sup> During the 1820s, a far more sophisticated, and the most celebrated of the Shanxi merchant financial institutions, began to emerge: the *piaohao*. These were remittance banks that conducted interregional financial transfers and trade financing.<sup>23</sup> They operated financial networks throughout the empire, from Mongolia to Guangdong, and even opened branches in Russia and Japan.

In addition to empire-wide trade and financial networks, Shanxi merchants operated a host of trading firms throughout northern China. In Zhili province, including Beijing and its environs, trade in edible oils, dye, liquor, general goods, silk, metals, and opium were largely run by Shanxi merchants. In Shandong and Henan, the finance and salt trades were effectively a Shanxi monopoly, while Shanxi merchants also did a brisk business in other commodities.<sup>24</sup> Nor was Shanxi commercial prosperity confined to elite or urban society. In the countryside, a frenzy

---

<sup>20</sup> Huang Jianhui, 156.

<sup>21</sup> Huan Jianhui, 156-178.

<sup>22</sup> Huang jianhui, 158.

<sup>23</sup> Luman Wang, *Chinese Hinterland Capitalism and Shanxi Piaohao: Banking, State, and Family, 1720-1910* (London: Routledge, 2021), 30-31.

<sup>24</sup> Qiao Nan (乔南), “A Research in the Domain Where Shanxi Merchants Took Their Commercial Activities in the Qing Dynasty (清代山西商人行商地域范围研究),” *Academic Journal of Jinyang*, no. 2 (2008): 36–40.

of temple construction starting in the late Ming testify to the growing wealth of rural society. Moreover, Shanxi rural temples and shrines were usually financed by corporate entities, or *zihao* (字号)—indicating the penetration of corporate, commercial forms of economic organization into the grassroots of society.<sup>25</sup>

In sum, in the span of a little under four centuries, Shanxi merchants elaborated highly sophisticated trade and financial networks. Horizontally, these networks extended across vast geographic space, from their native Shanxi north to Mongolia, west to Inner Asia, and south to the tea-producing hills of Fujian and Guangdong. But they also extended vertically to different strata of society—from grand banks and tea wholesalers in commercial hubs, to village general stores and money shops. As such, Shanxi merchants make a rich subject of study for any historian of the Chinese economy, and especially of Chinese finance.

However, this dissertation is not only about Shanxi merchants. It is also about late imperial finance and its relationship to Chinese commercial and rural life. The historical questions that concern me are about the state of financial organization and the development of financial technologies prior to the advent of western-style banking. This raises a serious

---

<sup>25</sup> Yang Bo (杨波), “Study on Village Community (She) in Taihang Mountain Area since Song Dynasty (宋代以来太行山地区村社研究)” (Ph.D. Dissertation, Baoding, Hebei, Hebei University, Center for Song History, 2020). Yang Bo traces the long-durée origins of the Shanxi merchants all the way back to the Song dynasty (960-1279), during which there is already some evidence of corporate entities engaged in temple and altar construction. In my travels in the Shanxi countryside, I was fortunate enough to see a Song or Yuan temple still standing and it was every bit as magnificent as I had been led to believe. Professor Meng Wei, a walking encyclopedia of Shanxi material culture, was able to date the temple by comparing the type of lumber and the warp in the wood to that of other nearby temples. Wang Jinping shows how in the 16<sup>th</sup> century, temples became a foci for elite, gentry-led communal activities that were often undertaken by lineages in the south. See Jinping Wang, *In the Wake of the Mongols: The Making of a New Social Order in North China, 1200-1600*, Harvard-Yenching Institute Monograph Series 116 (Cambridge, Massachusetts: Published by the Harvard University Asia Center, 2018), 251-261.

difficulty: for the questions that this dissertation poses, Shanxi merchants are both the best and most problematic subjects of study. They are the best because they founded the most sophisticated financial institutions in late imperial China. But precisely because of this, it is questionable how representative Shanxi merchant institutions were of other parts of China. I could hazard a guess that similarly wealthy areas such as the Yangzi and Pearl River deltas as well as Fujian developed their own, equally sophisticated financial systems. But I advise against extrapolating the findings in this dissertation too far afield. How representative my discoveries are of rural Guizhou—or even of Shanxi’s own isolated Taihang mountain villages—remains an open question.

#### “Popular” sources and methodology

There are several published collections of historical documents pertaining to Shanxi merchants. By far the richest, largest, and most varied collection is the *Jinshang shiliao jicheng* (晋商史料集成), or “Collected Shanxi merchant historical materials.”<sup>26</sup> It consists of the private collection of Liu Jianmin (刘建民), a former banker turned scholar and collector. After extensive editing and restoration work by Professors Meng Wei, Yang Bo, and their colleagues, the *Jinshang shiliao jicheng* was published in limited print in 2018. It contains 88 volumes with material as diverse as correspondence, business ledgers, banknotes and certificates, business primers, and contracts. Very occasionally, the collection includes a document from the late Ming. But most of the material comes from the Qing and Republican period, with documents

---

<sup>26</sup> Jianmin Liu, ed., *Jin Shang Shi Liao Ji Cheng*, Di 1 ban (Beijing: Shang wu yin shu guan, 2018).

becoming significantly more common after the Daoguang reign (1820-1850). This dissertation relies heavily on the Liu Jianmin private collection (hereafter abbreviated as “LJMPC”), today held at Shanxi University. But scholars who wish to consult this material themselves can do so easily and without a trip to Shanxi, as it has all been published in the *Jinshang shiliao jicheng*. It is also worth emphasizing that I have only reviewed a fraction of this material. I have focused on correspondence, accounts, and contracts from financial institutions near major northern commercial centers. I have also biased my research efforts towards documents from the Qing as opposed to the Republican period, and which were legible without undue difficulty. I have also privileged financial records and correspondence, at the expense of textbooks, family letters, and a number of sources that may prove important not only to economic and social historians, but to cultural historians as well. In short, there is undoubtedly much important material that I have missed, and enough in the LMJPC to consume a career.

These sources pose several methodological difficulties. First, they can be difficult to read. It takes considerable practice, especially for a non-native speaker of Chinese, to be able to comfortably recognize the characters in many of these documents. Second, many of these documents are highly formulaic, produced as part of the regular paperwork of Chinese institutions. Therefore, to be able to understand the document it is often necessary to understand its context. Otherwise, the documents will appear to have non-sequiturs, extraneous boilerplate, and incomplete sentences.

Meng Wei has elaborated a six-step methodology for analyzing these documents, which I have tried to employ as faithfully as possible:

1. Distinguish (甄別 *zhenbie*)、Identify by source (归户 *guihu*)、Locate (定位 *dingwei*)

2. Specification (规范 *guifan*)、Model (模式 *moshi*)、Structure (结构 *jiiegou*)、Format (格式, *geshi*)
3. Technical language (术语 *shuyu*)、Industry jargon (行话 *hanghua*)、Customs (习惯法 *xiguanfa*)、Dialect (方言 *fangyan*)
4. Background (背景 *beijing*)、Time period (时代 *shidai*)、Events (事件 *events*)
5. Classification (类型化)、Essentials (要素化)、Taxonomy (谱系化)
6. Comprehensive familiarity (综合认识 *zonghe renshi*)、Tracing connections (关联性)

This methodology is difficult to translate into English, and is not meant to be authoritative. But I hope that in introducing Professor Meng's methodology as I understand it, it will shed light on the analysis in this dissertation, as well as assist other scholars interested in using these sources.

Step 1 refers to a basic understanding of what the document is that one is looking at. It means one must first distinguish the category of document—is it a sales contract for land, or a letter to someone's mother? If possible, it is also important to know the source of the document in every sense. This means one must try to distinguish whether the document was produced by a firm, a state official, an individual, and if possible to determine the exact name of the entity. Finally, locating the document geographically and in time is extremely useful. A document from the Kangxi reign cannot be read the same way as a Republican-era document, nor can an account of a cloth merchant in Ningxia be read the same way as an account from a Shanghai shop. Unfortunately, it is not always possible to pinpoint the date or location of a document's creation.

Step 2 means that the document must be approached with an understanding of the conventions around its production. Just as we do not read a bank statement the same way as we read an email from a friend, so it must be with Shanxi merchant sources. To properly understand a letter between *piaohao* branches, one must first understand the structure of such letters. Different information goes in the opening of a *piaohao* letter (information largely used for

verification purposes)<sup>27</sup> than in the middle (information regarding contracted business) or the end (market information). Similarly, the same characters arranged on a *qingdan* or “settlement slip” can have different meanings depending on where they are placed. If one is familiar with the formatting of settlement slips it is easier to tell who is doing what business with whom.

The core of this step—and, in my experience, the heart of interpreting popular Chinese business sources—is the assumption of parsimony. One should always assume business or legal writing is parsimonious, such that within a given document every character is purposeful. The character “兑” (*dui*, “redeem”) does not, within the same document, mean the same thing as “拨兑” (*bodui*, “account transfer”), nor is a single character “银” (*yin*, “silver”) identical to “现银” (*xianyin*, “spot silver”). The more formalized or standardized a document, the stricter its parsimony. Thus, there is leeway for style and turns of phrase in a letter between friends, much less in a letter between the branches of a firm, and essentially none in a printed quotation slip (行情单 *hangqingdan*) or banknote (票帖 *piaotie*).

Step 3 will be familiar to all historians and is simply the need to be familiar with the language employed by one’s historical sources. This can include technical language. One example would be *shangma* (商码), also known misleadingly as “Suzhou digits” (苏州码子), the decimal shorthand in which Chinese merchants often recorded numbers. Similarly, industry jargon abounds; what is meant by a *kaibiao* (开标) or the *maoyin* (卯银) is impossible to learn from glancing at a single document, and requires background study. Finally, these documents include substantial dialect. It helps to be familiar with Shanxi-ese, so that one knows that 尽宝银

---

<sup>27</sup> This would generally include a summary of the contents of the previous letter, and the letter’s serial number, to both ensure that the letter was legitimate as well as that no previous letters had been lost.



*jin baoyin*) is dialect for *jing baoyin* (镜宝银) or “mirror silver” and that Shanxi merchants’ *gufeng* (股俸), or “shares of ownership,” are identical to southern merchants’ 股份 (*gufen*).

Step 4 is another mainstay of the history discipline, and means placing the sources within their broader historical context. In Step 4, it is important to go beyond the nitty gritty of who exactly was producing a document, and know what major events were transpiring at the time. A market report about the Guangxi tea industry must be read differently if it was written during the Taiping Rebellion vs. during the Republican period. Similarly, if a document discusses tax payments, it is important to know what the tax regime was; are the *shui* (税) payments export duties at the Tiger-slaying Pass (杀虎口 *shahukou*), or levies from Republican-era warlords?

Step 5 is about classification. This means taking a step back and understanding the genre of a document, as well as where it fits into the hierarchy of Shanxi merchant document production. For example, if one is examining an account, it is essential to know if it is a “flowing account” (流水账 *liushuizhang*), as distinct from a “client account” (分户账 *fenhuzhang*), as distinct from an “inventory account” (置货账 *zhihuozhang*). If one is looking at a contract, it is vital to differentiate a sales contract, from a loan contract, from a partnership contract. At the same time, one should try to understand how the document fits into the larger taxonomy of paperwork. Thus, a partnership contract implies the existence of a “comprehensive funds account” (万金账 *wanjinzhang*) as well as an equity account (入本账 *rubenzhang*). A letter from one *piaohao* branch to another implies the issuance of physical notes, the existence of *at least* one companion letter, and also of entries into the “comprehensive summary account” (总结账 *zongjiezhang*). In short, Step 5 is similar to Step 1, but at a higher level of abstraction. It requires

an understanding of the processes behind the production of paperwork, so that one may locate a document within the constellation of other popular documents.

Finally, I see Step 6 as an ideal to aspire to as much as a methodology. It means being able to interpret documents in the context of one another, allowing them to speak to each other, and to thereby tell a fuller story. Thus, to understand what a letter means when it discusses the *biaoli*, it helps to have seen *biaoli* entered into the client books of financial firms. Similarly, it would be impossible to understand the nature of capital accounting without examining partnership contracts alongside comprehensive funds accounts, equity accounts, and firm settlement slips. But this ability to draw connections and inferences between different documents derives from having a store of accumulated experience rather than from conscious application, and thus is always a work in progress.

Apart from the Liu Jianmin collection, I also draw occasionally on the Baxian archives, or the magisterial archives of Ba County. The Baxian archives are the most complete county-level archives from the Qing dynasty that are currently available. According to Philip Huang, “About 80% of those [documents] come from the Punishment Office, and include materials such as the fragments I have worked with in Baodi: about subcounty quasi-bureaucrats. In addition, there is something of a goldmine for social-economic history in lawsuits involving family disputes, creditor-debtor disputes, and other kinds of social conflict in the normal course of life.”<sup>28</sup> I originally planned to conduct further research in the Baxian archives, but was prevented

---

<sup>28</sup> Philip C.C. Huang, “County Archives and the Study of Local Social History: Report on a Year’s Research in China,” *Modern China* 8, no. 1 (January 1, 1982): 133–43, <https://doi.org/10.1177/009770048200800104>.

from doing so by the pandemic. Nevertheless, thanks to my colleague Zhou Lin from Sichuan University, I have been able to review several fascinating cases. As Huang writes, these sources are truly a goldmine for socio-economic history, and call for further research with respect to Chinese financial practices.

## Argument and Chapter Outline

The thesis of this dissertation is simple: financial markets in late imperial China extended both horizontally across the vast reach of the Qing empire, and vertically, between different strata of society. In this way, the empire was, to varying extents at different times and in different places, integrated into a capital market capable of deploying resources where marginal returns were highest. These financial markets were competitive, operated with minimal state interference, and participants were mostly for-profit enterprises. Much as the late Giovanni Arrighi observed that the Qing empire possessed “Smithian” markets in commodities,<sup>29</sup> so I argue that it possessed “Hayekian” financial markets.<sup>30</sup> Li Jinzhang makes this point with respect to the issuance of banknotes.<sup>31</sup> I reinforce and extend Li’s thesis, and posit that China not only had a free market in the issuance of paper notes but in a host of financial instruments and services. These included deposits, clearing and settlements, exchange markets, and even money

---

<sup>29</sup> Giovanni Arrighi, *Adam Smith in Beijing: Lineages of the Twenty-First Century* (London ; New York: Verso, 2007).

<sup>30</sup> Friedrich A. von Hayek and I. F. Pearce, *Choice in Currency: A Way to Stop Inflation*, Occasional Paper - Institute of Economic Affairs 48 (London: Institute of Economic Affairs, 1976); Friedrich A. von Hayek, *Denationalisation of Money: An Analysis of the Theory and Practice of Concurrent Currencies*, Hobart Papers Special ; 70 (London: Institute of Economic Affairs, 1976).

<sup>31</sup> Jinzhang Li, *Jin Shang Lao Zhang* (“*The Historical Accounts of Shanxi Merchants*”), Beijing di 1 ban (Beijing Shi: Zhonghua shu ju, 2012), 128-129.

market futures. These markets were integrated with land markets, such that wealth inherent in the land could be made liquid and converted into financial capital.<sup>32</sup>

I do not mean to imply that Chinese finance was as effective as western finance, and still less do I posit that China was on a path toward breaking through to dynamic, secular growth. But my work does imply that China's financial institutions, along with its ability to deploy credit and capital, was consistent with such growth. More importantly, I argue that the causes of the Great Divergence cannot be found in Chinese, Qing, or Confucian institutional constraints on capital formation. Of course, this argument is not dispositive. It is possible that such constraints existed outside the realm of finance—in restrictions on land, labor, or other factors of production—and I address several of these possibilities in the literature review.

My argument rests on a series of empirical claims and discoveries. Each of my five chapters introduces the reader to financial institutions and modes of economic organization that they are unlikely to be aware of, at least at the level of detail that I present them in. Some of these practices are my own discovery, or at least are analyzed with my own gloss. Others have been studied by Chinese historians, but exist only in very recent Chinese-language publications and are thus completely inaccessible to the Anglophone reader.

Chapter 1 will be the most familiar to scholars of Chinese social and economic history. It limns a variety of institutional lenders that made credit available to peasants in Qing and early Republican China, in addition to individual lenders. These included lineage trusts (堂号 *tanghao*), individuals, temples and religious societies, and pawnshops. The sheer number of

---

<sup>32</sup> According to Hernando de Soto, the ability to unlock wealth (“dead capital”) inherent in the land and convert it into liquid financial assets is the *sina-qua-non* of a dynamic economy. Hernando de Soto, *The Mystery of Capital: Why Capitalism Triumphs in the West and Fails Everywhere Else* (New York: Basic Books, 2000).

institutions indicates that rural credit was likely to have been competitive, and therefore unlikely to have been merely exploitative or parasitic on the peasantry.<sup>33</sup> In short, we are looking at a lending market rather than debt peonage. That said, much of this will be old ground, particularly to those familiar with the work of Ming-te Pan,<sup>34</sup> and the numerous Republican-era social science surveys of rural China.<sup>35</sup> What I add that is new is the discovery of “*changnian*” (长年) low-interest lending. These were loans that charged an annual rate of between 1% to 3%. These rates are extremely common in Shanxi commercial lending markets, but it is shocking to find them even in contracts between individuals. Many of these contracts contain no collateral, and so the borrowers may have had exceptionally good credit, and perhaps been merchants themselves. But a handful are collateralized by land or grain harvests, indicating these loans did reach the agrarian economy.

Chapter 2 gets into much newer ground. It deals not simply with lending, but with credit creation. It first introduces the pathbreaking work of Cao Shuji, Meng Wei, Lou Min, and Yang

---

<sup>33</sup> This does not mean that accessing the market was easy for peasants, nor that terms weren't onerous—which they were. Rather, it means that the causes of these hardships were material; i.e., having to walk many miles to see a lender, or not having sufficient collateral to join credit societies with lower rates. I do not view high rates, however, as a function of gentry using social and political power to coerce the local peasantry into paying above-market rates or to take out loans that they would not need in a freer market.

<sup>34</sup> Though it must be said, Pan and I have a different view of credit markets. Pan believes state intervention in pawnshops was crucial, and also that different institutional lenders operated in different spheres, such that competition was perhaps less important than it is in my interpretation of late-imperial rural credit. Ming-te Pan, “Rural Credit in Ming-Qing Jiangnan and the Concept of Peasant Petty Commodity Production,” *The Journal of Asian Studies* 55, no. 1 (1996): 94–117, <https://doi.org/10.2307/2943638>; Ming-te Pan, “Rural Credit Market and the Peasant Economy (1600-1949): The State, Elite, Peasant and ‘Usury,’” *ProQuest Dissertations and Theses* (Ph.D., Ann Arbor, University of California, Irvine, 1994), ProQuest Dissertations & Theses Global (304081530), <https://search.proquest.com/docview/304081530?accountid=14657>.

<sup>35</sup> Xiaotong Fei and Tse-i Chang, *Earthbound China: A Study of Rural Economy in Yunnan*, Rev. English ed, International Library of Sociology and Social Reconstruction (London: Routledge & K. Paul, 1949), 121-124.

Qiming on the issuance of money-like paper notes in Qing China and the Republican period.<sup>36</sup> It then builds on their work to show how Chinese financial institutions, even in rural society, also created deposits. These deposits were not only savings instruments, but could be transferred via a checking-like system or serve as custodial accounts for loans to third parties. This means that, along with paper notes, deposits served as a non-metal medium of exchange. In short, a completely private, proto-banking system operated in Qing China that penetrated deep into the interstices of rural life.

The importance of Chapter 2 for my argument cannot be overstated. It means that financial institutions were not merely competing for borrowers, but for savers as well. This means that rural residents would have the opportunity to acquire wealth in the form of financial assets. It also means that rural lenders would have had to steward their capital as carefully as possible, since more prudent, effective lenders would be able to offer higher savings rates. For similar reasons, predatory or wasteful financial institutions were unlikely to have been the rule. Any monopolistic actor earning excessive profits would have invited competition—not only for loans, but for deposits—and would soon find itself unable to attract financing, and forced to charge market rates or face insolvency.

Chapter 3 offers a radical revision of a well-known institution: the Rotating Savings and Credit Association (ROSCA). Even today, these associations are found throughout the world in

---

<sup>36</sup> Cao Shuji (曹树基) and Xu Junsong (徐俊嵩), “清代山西的钱帖与信用:与东南地区比较,” *Historical Review (史林)*, no. 6 (2020); Cao Shuji and Yang Qiming, “Pingpiao and Credit in Qing-Era Southeast Regional Markets (清代东南地方小市场中的凭票与信用)” (Unpublished); Lou Min, “Modern Chinese Commercial Bills in the Upper Yangzi: A Case Study of Ba County and Jiangjin (近代中国长江上游地区的商业信用票据:以巴县与江津为例),” *Researches in Chinese Economic History*, no. 6 (2020): 118–32.

underbanked communities, from Africa to South Asia, to the rural United States.<sup>37</sup> Scholars have long understood their importance as vehicles for raising credit in rural China. What I show, is that ROSCAs had a highly developed risk management system that sought to protect ROSCA credit at several levels. Moreover, ROSCA credit was fungible, and tightly integrated with both land and lending markets, indicating a market-oriented institution. This findings are especially significant because ROSCAs are often conceived as a non-economic institution par excellence, meaning the economic functions they played were governed by tradition, rather than by economic calculation. I provide overwhelming evidence to show that this is not the case.

Chapter 4 takes us into the realm of what I call “high finance,” that is, specialized financial institutions that dealt primarily with the commercial sector. At a concise 106 pages, it presents a study of the *biaoqi* (标期), a kind of rotating circuit of temple fairs that allowed large financial institutions and commercial firms access to deep markets in grain, cloth, credit, and exchange, as well as futures markets. At the heart of this bustling core of Shanxi finance were the Zhangju (账局), a private “banker’s bank” that allowed other financial firms to meet their settlement obligations, and thus ensured that *biaoqi* operated smoothly. The *biaoqi* and its associated markets and institutions are some of the most important economic phenomena of Qing China, and yet have previously been unknown or barely known to the scholarship.

---

<sup>37</sup> Clifford Geertz, “The Rotating Credit Association: A ‘Middle Rung’ in Development,” *Economic Development and Cultural Change* 10, no. 3 (1962): 241–63; Timothy Besley, Stephen Coate, and Glenn Loury, “The Economics of Rotating Savings and Credit Associations,” *The American Economic Review* 83, no. 4 (September 1, 1993): 792–810; Timothy Besley, Stephen Coate, and Glenn Loury, “Rotating Savings and Credit Associations, Credit Markets and Efficiency,” *The Review of Economic Studies* 61, no. 4 (October 1, 1994): 701–19.

Though the empirical discoveries presented in Chapter 4 are some of the most exciting, unfamiliar findings of this work, the arguments presented in Chapter 4 are in some ways familiar. Scholars have long accepted a degree of regional integration in Chinese markets, particularly in wholesale or commercial markets.<sup>38</sup> What is most surprising about my argument is the case it makes for the sophistication of these markets, and for the geographic “core” of these financial markets as being anchored along the Sino-Inner Asian frontier. These claims in turn buttress my overarching thesis by demonstrating how credit prices in these core markets could filter back to the countryside and thus integrate credit markets in rural localities throughout areas with Shanxi merchant activity. Here, perhaps a caveat is in order: geography meant everything in market “integration.” The relationship to an “integrated market”<sup>39</sup> would have been different for a peasant in the Central-Shanxi basin—the heartland of Shanxi finance and commerce—as distinct from a peasant in an isolated Taihang village.<sup>40</sup>

---

<sup>38</sup> Hansheng Quan and Richard A. Kraus, *Mid-Ch'ing Rice Markets and Trade: An Essay in Price History*, Harvard East Asian Monographs 54 (Cambridge, Mass: East Asian Research Center, Harvard University : distributed by Harvard University Press, 1975); Carol H. Shiue and Wolfgang Keller, “Markets in China and Europe on the Eve of the Industrial Revolution,” *The American Economic Review* 97, no. 4 (2007): 1189–1216.

<sup>39</sup> By “integrated market,” I mean that supply in demand changes in one market will, over time, be felt in another market. This does not mean that there is a unity of price across all markets at all different times. To use a contemporary example, cardboard does not cost the same in Shenzhen as it does in New York, and even a serious cardboard glut in Shenzhen is unlikely to impact New Yorkers. Nevertheless, we have an integrated market in cardboard since, in principle, at some extremely high price differential traders would begin to ship cardboard from Shenzhen to New York and bring cardboard prices to parity. An example of a truly un-integrated market would be mainland iPhones and Hong Kong iPhones. No matter how high demand is for iPhones in mainland China, they cannot be shipped from Hong Kong because the government bans it. (Although even then, there is *some* market integration because when price differentials go high enough, smugglers enter the market.)

<sup>40</sup> Isolation of a given geography could also change over time. Cao Shuji shows that Southern Jiangxi went from being a commercial hub along major trade routes, to a backwater after it was cut off by the Taiping Rebellion. After the Taiping Rebellion was suppressed, the trade routes had reestablished elsewhere and Southern Jiangxi never recovered. Cao Shuji, “The Circulation



Chapter 5 examines the investment market in firms. First, it demonstrates a sophisticated system of capital accounting that enabled Shanxi merchants to monitor, quantify, and distribute capital and profits in a way that was predictable and transparent. It goes on to show how this system of accounting enabled a multi-class share structure employed by Shanxi merchants. Chapter 5 then probes the extent of the investment market. In the primary market, I find an array of institutional investors, including other corporate entities, and especially lineage trusts. The scope of the secondary market appears to have been more limited. Trading in shares may have been confined only to natural resources, while the secondary market for firms appears to have largely consisted of sales of entire firms.

This chapter supports my core argument because it means capital markets did more than simply allocate capital between land and commerce; they also created an investment market for the creation of new firms, and the buying and selling of old ones. This means that entrepreneurial activity in China created selective pressures to reward successful entrepreneurs for market entry, and punish or destroy firms that were not sufficiently competitive. Moreover, since even pawnshops lending to peasants were financed by this investment market, it means that credit markets in much of the countryside were integrated with investment markets for commercial firms. In short, late imperial China possessed what can justly be called a capital market.

---

of Topsoil Rights and Rural Finance in Qing-Era Southern Jiangxi (清代赣南的田面流动与乡村金融),” *Agricultural History of China (中国农史)*, no. 3 (2020): 54–68. Shanxi underwent a similar marginalization during the Republican period, and has never recovered. Even today, it is common for Shanxi-ers to lament that Shanxi’s best years are behind it. For the general theory and most complete analysis of the process by which formerly prosperous areas became sleepy or even impoverished backwaters, see Kenneth Pomeranz, *The Making of a Hinterland: State, Society, and Economy in Inland North China, 1853-1937* (Berkeley: University of California Press, 1993).

## Literature Review and Scholarly Contribution

This dissertation is a history of finance in late imperial China. Finance is historically important because it is necessary for a commercial economy,<sup>41</sup> for building strong, sovereign states,<sup>42</sup> and because economic development demands a financial system capable of channeling savings into investment.<sup>43</sup> The industrial revolution itself may have been possible thanks to Britain's exceptional degree of capital market integration.<sup>44</sup> As such, this dissertation touches on a number of themes, and speaks to at least three distinct literatures. First, it directly addresses the history of Chinese finance. Second, it contributes to the related scholarship on Chinese social relations and the origins of the Great Divergence. Third, it adds to the wider literature on the global history of capitalism.

---

<sup>41</sup> On the deep origins of trade finance, see Olivier Accominotti and Stefano Ugolini, "International Trade Finance from the Origins to the Present: Market Structures, Regulation and Governance," 2020, <https://doi.org/10.1093/oxfordhb/9780190900571.013.1>. There is also a VoxEU version at Olivier Accominotti and Stefano Ugolini, "The Structure of Global Trade Finance: A Very Long-Run View," *VoxEU.Org* (blog), August 5, 2019, <https://voxeu.org/article/structure-global-trade-finance-very-long-run-view>.

<sup>42</sup> Larry Neal argues that European interstate war created markets in public debt, which in turn helped spur the development of representative government and European capitalism. Larry Neal, *The Rise of Financial Capitalism: International Capital Markets in the Age of Reason*, Studies in Monetary and Financial History (Cambridge [England] ; New York: Cambridge University Press, 1990). L. Neal, "How It All Began: The Monetary and Financial Architecture of Europe during the First Global Capital Markets, 1648-1815," *Financial History Review* (Great Britain: Cambridge University Press, 2000).

<sup>43</sup> M.O. Odedokun, "Alternative Econometric Approaches for Analysing the Role of the Financial Sector in Economic Growth: Time-Series Evidence from LDCs," *Journal of Development Economics* 50, no. 1 (June 1, 1996): 119–46, [https://doi.org/10.1016/0304-3878\(96\)00006-5](https://doi.org/10.1016/0304-3878(96)00006-5); Lance E. Davis and Robert E. Gallman, *Evolving Financial Markets and International Capital Flows: Britain, the Americas, and Australia, 1865-1914*, Japan-U.S. Center Sanwa Monographs on International Financial Markets (Cambridge, UK ; New York: Cambridge University Press, 2001).

<sup>44</sup> Wolfgang Keller, Carol H. Shiue, and Xin Wang, *Capital Markets in China and Britain, 18th and 19th Century: Evidence from Grain Prices*, NBER Working Paper Series, no. w21349 (Cambridge, Mass: National Bureau of Economic Research, 2015).

The literature on the history of Chinese finance has tended to study the transition from traditional institutions to modern-style banks capable of sustaining industrial development.<sup>45</sup> This has led to a regional focus on Shanghai and other treaty ports, a temporal focus on the Republican period, and a thematic focus on the role of financial institutions in Sino-foreign competition and in Chinese state-making.<sup>46</sup> Thus, Andrea McElderry's study of Shanghai qianzhuang examines the evolution of the industry in the context of increasing influence of foreign banks.<sup>47</sup> Historians of Chinese banking have similarly viewed the issue through the lens of political economy. Some argue that banks were captured by government interests,<sup>48</sup> others that they were largely commercial in their lending.<sup>49</sup> Brett Sheehan takes a middle view, of banks as being essentially entrepreneurial and as apolitical as possible—but ultimately unable to resist a series of increasingly rapacious state actors.<sup>50</sup> More recently, Debin Ma's recent survey of the

---

<sup>45</sup> This grew out of a larger business history that was similarly focused on China's alleged inability to foster modern, industrial firms. Kuo-heng Shih, "The Early Development of the Modern Chinese Business Class," in *The Rise of the Modern Chinese Business Class: Two Introductory Essays*, by Marion Levy and Kuo-heng Shih (New York: International Secretariat, Institute of Pacific Relations, 1949), 19–56; Albert Feuerwerker, *China's Early Industrialization: Sheng-Hsuan-Huai (1844-1916) and Mandarin Enterprise*, 1st Atheneum ed, Atheneum ; 153 (New York: Atheneum, 1970). See Adam Frost's excellent historiographical essay at Adam Frost, "Chinese Business History: Origins, Legacies, and Future Directions," Forthcoming in *Business History Review*, n.d.; Feuerwerker, Kuo-heng Shih.

<sup>46</sup> Parks M. Coble, *The Shanghai Capitalists and the Nationalist Government, 1927-1937*, Harvard East Asian Monographs 94 (Cambridge, Mass: Harvard University Press, 1980).

<sup>47</sup> Andrea Lee McElderry, *Shanghai Old-Style Banks (Ch'ien-Chuang), 1800-1935: A Traditional Institution in a Changing Society*, Michigan Papers in Chinese Studies, no. 25 (Ann Arbor: Center for Chinese Studies, University of Michigan, 1976).

<sup>48</sup> Coble, 1980.

<sup>49</sup> Linsun Cheng, *Banking in Modern China: Entrepreneurs, Professional Managers, and the Development of Chinese Banks, 1897-1937*, Cambridge Modern China Series (Cambridge, UK ; New York: Cambridge University Press, 2003).

<sup>50</sup> Brett Sheehan, *Trust in Troubled Times: Money, Banks, and State-Society Relations in Republican Tianjin* (Cambridge, Mass: Harvard University Press, 2003; Brett Sheehan, *Industrial Eden: A Chinese Capitalist Vision* (Cambridge, Massachusetts: Harvard University Press, 2015), <https://doi.org/10.4159/9780674287167>. Sheehan's work seems particularly

financial industry from 1900 to 1937 blames the Qing state for stifling the development of large financial institutions, but credits the treaty port system with creating a space in which private actors could develop modern banks.<sup>51</sup> This scholarship has been illuminating in helping us understand China's turbulent transition from the Qing empire, to a republic beset by rapid social change and imperialist predations. But it leaves the late imperial origins of Chinese finance relatively unexplored.

A handful of older works do examine Chinese finance on its own terms, and find highly developed banking institutions and credit markets.<sup>52</sup> But even these focus on the treaty ports of Ningbo and Fujian.<sup>53</sup> Niv Horesh thus argues that such studies are exceptional, and that no

---

prescient in light of Xi Jinping's China—where some of the most competitive, innovative entrepreneurs forge multinational powerhouses by developing products and services to meet consumer demands, but must nevertheless answer to an internal party committee and be ready at a moment's notice to make themselves useful to the Xi administration.

<sup>51</sup> Debin Ma, "Financial Revolution in Republican China During 1900–37: A Survey and a New Interpretation," *Australian Economic History Review* 59, no. 3 (November 1, 2019): 242–62, <https://doi.org/10.1111/aehr.12173>; Debin Ma, "Between Cottage and Factory: The Evolution of Chinese and Japanese Silk-Reeling Industries in the Latter Half of the Nineteenth Century," *Journal of the Asia Pacific Economy* 10 (January 1, 2005): 195–213; Carol Shiue and Wolfgang Keller, "Capital Markets and Colonial Institutions in China" (January 2014), [http://allucgroup.ucdavis.edu/uploads/5/6/8/7/56877229/keller\\_and\\_shiue\\_capital\\_markets\\_and\\_treaty\\_port\\_institutions\\_january\\_30\\_2014.pdf](http://allucgroup.ucdavis.edu/uploads/5/6/8/7/56877229/keller_and_shiue_capital_markets_and_treaty_port_institutions_january_30_2014.pdf); Wolfgang Keller and Carol H. Shiue, "China's Foreign Trade and Investment, 1800-1950" (National Bureau of Economic Research, Inc, 2020), <https://ideas.repec.org/p/nbr/nberwo/27558.html>.

<sup>52</sup> The single best work in this vein is Madelein Zelin's exploration of the investment market in Furong salt mines. See Madeleine Zelin, *The Merchants of Zigong: Industrial Entrepreneurship in Early Modern China* (New York: Columbia University Press, 2005). However, Zelin's focus is not on the financial system per se, but specifically on the financing of salt and coal mines. On lineage trust investment in commercial credit, see Kenneth Pomeranz, "'Traditional' Chinese Business Forms Revisited: Family, Firm, and Financing in the History of the Yutang Company of Jining, 1779–1956," *Late Imperial China* 18, no. 1 (1997): 1–38, <https://doi.org/10.1353/late.1997.0008>.

<sup>53</sup> Susan Mann, "Finance in Ningpo: The 'Ch'ien Chuang,' 1750-1880," in *Economic Organization in Chinese Society*, ed. W. E. Wilmott (Stanford: Stanford University Press, 1972), 47–77; George Selgin, "Free Banking in Foochow," in *The Experience of Free Banking*, ed. Kevin Dowd (New York: Routledge, 1992).

Chinese indigenous banking existed beyond a handful of treaty ports.<sup>54</sup> This conclusion is echoed by no less an eminence than David Faure, who with the exception of finance has a high opinion of traditional Chinese business. In Faure's words, "[T]he financial market in China never took off, and, as a result, China did not find it easy to develop its own banks, paper money, shares or bonds. In short, whether or not China had the capital for steam-driven technology, aside from the government itself, China did not possess the mechanism for focusing enough of it on industrial enterprises."<sup>55</sup> In short, the historiography on Chinese finance has been almost exclusively focused on issues of business's relations with the state, on a handful of treaty ports, and on Sino-foreign cooperation and competition. Temporally, there is also a bias toward 20<sup>th</sup> century finance, with little attention paid to the possible origins of Chinese finance in its indigenous institutions. To the extent that the scholarship considers indigenous finance during the Qing dynasty, it is often to assume that no significant financial markets existed.

Several recent works examine Shanxi merchants during the Qing dynasty, and thus expand the scope of the scholarship both backward and time, and further inland.<sup>56</sup> Luman Wang's monograph on the *piaohao* connects Qing history to the global history of capitalism. According to Wang, *piaohao* should be considered capitalist "...because they featured an expansionist role in facilitating inter-regional monetary flows as well as the production and

---

<sup>54</sup> Niv Horesh, *Chinese Money in Global Context: Historic Junctures between 600 BCE and 2012* (Stanford, California: Stanford University Press, 2013).

<sup>55</sup> David Faure, *China and Capitalism: A History of Business Enterprise in Modern China*, Understanding China (Hong Kong: Hong Kong University Press, 2006), 12.

<sup>56</sup> Meng Wu, "Traditions and Innovations: An Exploration of the Governance Structure, Business Strategy and Historical Development of the Chinese Shanxi Piaohao, 1820s to 1930s" (Ph.D. Dissertation, London, The London School of Economics and Political Science (LSE), 2016), <http://etheses.lse.ac.uk/3415/>; George Qiao, "The Rise of Shanxi Merchants Empire, Institutions, and Social Change in Qing China, 1688-1850" (Ph.D., Stanford, 2017), <http://purl.stanford.edu/bg803zm7823>.

trading of global commodities” and followed a “universal logic of capital.”<sup>57</sup> Nevertheless, how much Shanxi merchants participated in a wider financial market remains unaddressed. Moreover, this is a question that cannot be answered through a case study of a specific kind of institution, whether *piaohao* or *qianzhuang*. It requires a wholistic examination of late imperial finance. This dissertation provides such a study.

In filling this scholarly lacuna, my dissertation also bears on an older conversation about the origins of the Great Divergence; that is, why in the 18<sup>th</sup> century run-up to the industrial revolution, did per capita productivity in England begin to accelerate, leaving China (and other highly developed pre-modern economies) behind?<sup>58</sup> Broadly speaking, scholars offer two explanations: institutions and factor endowments<sup>59</sup> (though of course almost all scholars would acknowledge that both of these variables were at play, and that moreover material conditions and institutions are never independent of each other). In short, did Chinese institutions—in the broadest sense of cultural values, law, political and organizational forms, and social relations—

---

<sup>57</sup> Luman Wang, *Chinese Hinterland Capitalism and Shanxi Piaohao: Banking, State, and Family, 1720-1910* (London: Routledge, 2021), 15-16.

<sup>58</sup> There are a number of plausible dates for the beginning of this divergence. I use Stephen Broadberry’s most recent estimate of 1700. S Broadberry, “Accounting for the Great Divergence: Recent Findings from Historical National Accounting,” Oxford Economic and Social History Working Papers (University of Oxford, 2021). But I should say I remain wary of historical national accounting. It seems to be me that when a rounding error can throw off estimates by several centuries that such data sets give the illusion, rather than the substance, of quantitative precision.

<sup>59</sup> Carl Riskin makes the same observation with respect to the divergence literature in Carl Riskin, “Surplus and Stagnation in Modern China,” in *China’s Modern Economy in Historical Perspective: Sponsored by the Social Science Research Council*, ed. Dwight H. Perkins, Gang Zhao, and Social Science Research Council (U.S.) (Stanford, Calif: Stanford University Press, 1975), 49–84. He identifies two explanations for divergence, namely, the “distributive” and “technological” arguments. These are essentially the same as institutional and factor-endowment explanations, respectively.

prevent the mobilization of economic surplus that was there for the taking? Or was China confronted with a paucity of material resources out of which to create a surplus for development?

The literature that focuses on institutional causes of the great divergence is itself extremely varied. For some scholars, western Europe's economic, legal, and scientific institutions were more conducive to sustained investment and innovation—possibly as a result of interstate warfare.<sup>60</sup> By implication, China's institutions must have been comparatively less effective. In the Marxist historiography, Brennarians view the origins of capitalism in the British aristocracies' violent appropriation of land. Unlike in England, Chinese peasants remained landed, and so never became a proletariat dependent on labor markets.<sup>61</sup> Thus, the logic goes, they had no need to improve labor productivity to earn the high wages that, according to Robert Allen, drove the increasingly capital-intensive production at the heart of industrialization.<sup>62</sup>

Geoffrey Ingham also presents an institutionalist argument that is in many ways similar to North and Thomas, but he was worth singling out because of his direct relevance to my dissertation. Channeling Weber, Schumpeter, and Braudel, Ingham states that only Europe had a

---

<sup>60</sup> Douglass North and Robert Paul Thomas, *The Rise of the Western World: A New Economic History* (Cambridge: Cambridge University Press, 1973); Debin Ma, "State Capacity and Great Divergence, the Case of Qing China (1644–1911)," *Eurasian Geography and Economics* 54, no. 5–6 (December 1, 2013): 484–99, <https://doi.org/10.1080/15387216.2014.907530>.

<sup>61</sup> Recent evidence from Japan suggests this was a good thing in terms of living standards. Unlike Britain, where rural laborers earned relatively high wages, Japanese landless laborers were among the hardest-working, yet "poorest people recorded in history." See Yuzuru Kumon, "The Labor Intensive Path: Wages, Incomes and the Work Year in Japan, 1610-1932" (CIRJE, Faculty of Economics, University of Tokyo, 2020), <https://ideas.repec.org/p/ky/fseres/2020cf1154.html>. Kumon's thesis is similar to Elvin's, in that it suggests equitable land distributions are short-run rational and but lead to lower equilibria in the long-run. He also makes an interesting case for the prevalence of adoption in East Asia leading to more stable lineages, and thus smaller plots.

<sup>62</sup> Robert C. Allen, *Global Economic History: A Very Short Introduction*, (Oxford: Oxford University Press, 2011).

rational financial market. His argument rests on three assertions. First, citing Faure, he says that China had no banks and no financial markets. By this he means that Chinese financial institutions could not expand the supply of credit, issue notes payable to the bearer, or issue financial instruments that were tradable in an impersonal market. Second, Ingham writes that China had no unified monetary standard. According to Ingham—drawing, again, on Weber—without a unit of account Chinese firms could not make rational calculations.<sup>63</sup> My dissertation pushes back against these assertions. For every practice or financial technology that Ingham cites as being exclusive to Europe, I demonstrate a highly developed form in Qing China. Ingham’s second point has some justification; China did not have a single, standardized currency until 1933 and this imposed serious frictional costs on the economy.<sup>64</sup> But this does not mean Chinese *firms* had no unit of account. Within a given firm’s account books—particularly in Shanxi—all units were standardized in monetary amounts at the silver fineness of the firm’s headquarter, using either the local public scale (公平 *gongping*) or the firm’s own scale (本平 *benping*). As I amply demonstrate in Chapter 5, Chinese accounting and money was no obstacle to economic calculation. Finally, it is also worth noting a problem in Ingham’s chronology. All of his examples of monetary confusion come from the early 20<sup>th</sup> century. But this is problematic, as by even the 1920s, despite China’s monetary confusion, modern industrialization was well underway. From 1895-1925, Shanghai modern industrial growth outpaced even Japan.<sup>65</sup> Note

---

<sup>63</sup> Geoffrey Ingham, “‘The Great Divergence’: Max Weber and China’s ‘Missing Links,’” *Max Weber Studies* 15, no. 2 (2015): 160–91.

<sup>64</sup> Austin Dean, “‘The Shanghai Mint and U.S.-China Monetary Interactions, 1920-1933,’” *Journal of American-East Asian Relations* 25, no. 1 (01 2018): 7–32, <https://doi.org/10.1163/18765610-02501002>.

<sup>65</sup> Debin Ma, “Economic Growth in the Lower Yangzi Region of China in 1911–1937: A Quantitative and Historical Analysis,” LSE Research Online Documents on Economics (London



that my dissertation does not refute Ingham's claims as being *directionally* accurate; he could well be right that western European financial institutions and technologies were more conducive to capitalist activity. Indeed, I believe Ingham is correct that unified national currencies are good for business. But I do call into question whether the lack of a state currency can bear the causal weight for the great divergence that Ingham assigns it.

Other scholars focus on the uniqueness of Chinese, rather than European, history as a cause of the great divergence. For R.H. Tawney, Chinese social relations made productivity gains impossible. To be sure, Tawney keenly observed the shortage of resources relative to population. Nevertheless, in my reading of Tawney, he believes the root cause to be institutional impediments to Chinese development, rather than poverty. In his own words, "The need for modernization of agricultural methods is recognized; but the extensive introduction of technical improvements is regarded as improbable, until the social fabric within which they must function has been drastically modified."<sup>66</sup> Tawney's conclusion follows in part from his appraisal of rural finance.<sup>67</sup> According to Tawney, "...the rates at which loans are made naturally tend to be exorbitant. In reality, indeed, no market rate can be said to exist."<sup>68</sup> For Tawney, as for Faure and Ingham, this was partly a problem of Chinese accounting. Tawney believed that Chinese bookkeeping conflated investment and expenses, and precluded lenders from distinguishing borrowers of different risk profiles. He believed that in a functioning market, China would have

---

School of Economics and Political Science, LSE Library, May 2008), <https://ideas.repec.org/p/ehl/lserod/32398.html>.

<sup>66</sup> R. H. Tawney, "Introduction," in *Agrarian China: Selected Source Materials from Chinese Authors*, ed. Institute of Pacific Relations (London: G. Allen & Unwin, 1939), x–xviii.

<sup>67</sup> R. H. Tawney, *Land and Labour in China* (London: G. Allen & Unwin ltd, 1932), p. 13.

<sup>68</sup> Tawney, 1932, 62.

investments offering high enough returns to justify capital costs, but without proper accounting these investment opportunities remained invisible.

Philip Huang has certain affinities with Tawney, particularly in his assessment of social relations as an obstacle to growth. For Huang, China's problem was not poverty per se; rather, China was trapped in a centuries-long "involutionary" pattern of development. In his exchange with Kenneth Pomeranz, Huang defines involution as declining average returns to labor, which he sees as driven primarily by reduction in average farm sizes along with cotton cultivation replacing grain cultivation.<sup>69</sup> But Huang shows that this is not the whole story. He posits that social relations prevented possible gains in agricultural productivity. Specifically, onerous rents and interest payments did not go to wealth accumulation (in land or productive capital), but represent a kind of waste. Not only did creditors waste their interest income, but borrowers also fail to take advantage of the credit offered to them. According to Huang, "...for a poor peasant family farm with surplus labor...it made sense to continue using that labor as long as the marginal product of labor remained above zero...the same logic applied to usurious interest rates. Though a capitalist enterprise would not normally tolerate interest rates higher than the prospective returns to invested capital, a hungry family can be made to bear almost any interest rate."<sup>70</sup> This is a long way of saying that returns on invested capital were lower than interest rates, meaning the Chinese rural sector was constantly destroying its own wealth.<sup>71</sup>

---

<sup>69</sup> Philip Huang, *Further Thoughts on Eighteenth-Century Britain and China: Rejoinder to Pomeranz's Response to My Critique*, vol. 62, 2003, 158. Also see Philip C. Huang, *The Peasant Economy and Social Change in North China* (Stanford: Stanford University Press, 1985).

<sup>70</sup> Huang, 1985, 190.

<sup>71</sup> The involutionary model also runs afoul of geometric compounding. But its inconsistencies are demographic. See James Lee, Cameron Campbell, and Wang Feng, "Positive Check or Chinese Checks?," *The Journal of Asian Studies*, no. 2 (2002): 591.

The involutory model depends on certain assumptions, only sometimes made explicit, about the nature of finance at the grassroots. In an economy with liquid, competitive financial markets it is extremely difficult for resources like labor or capital to systematically misallocate over the long-term. Resource mis-allocation should be “felt” in terms of lop-sided risk/return profiles and default rates. In a world of involution, extremely high returns will be available not only to laborers who break this mold, but to capitalists who can fund them by borrowing cheaply from low-return sectors of the economy (such as involuted household farms), and earning surplus profits by reinvesting in higher-return areas (such as commerce, handicrafts, or less labor-intensive agriculture). At the same time, borrowers in the involuted sectors of the economy should communicate their inefficiency in terms of higher default rates, thus prompting lenders to seek out more efficient recipients of capital. Though some lenders may be content with returns in the form of political power and social status, as long as a few are willing to “defect” and to seek economic returns instead, the system will unravel. A financial market acts as a feedback mechanism through which a society can find and unlock “potential energy”—i.e. underutilized capital or labor—in the system. This means that while involution is not impossible in a world with functioning financial markets,<sup>72</sup> it is highly unlikely.

Scholars who favor the involutory model have dealt with this problem by arguing that no financial market existed at the grassroots level. They concede that credit existed, inasmuch as peasants could go to money-lenders for loans, but reject the idea of a competitive financial market in which financial intermediaries had to compete for creditors and borrowers. Huang makes this claim explicit, writing, “The usual calculations associated with a capitalist loan,

---

<sup>72</sup> In fact, an involuted system should break down as long as any factor markets are functioning reasonably well.

governed by supply and demand in the credit market, and by the prospect of returns measured against costs, do not apply.”<sup>73</sup> Christopher Isett makes a similar assertion. He writes, “[T]he extent to which merchants could enforce a regime of market dependency through debt remained limited. Even if they could, given the interest rates it is not clear that anything would have come of it.”<sup>74</sup> This implies either a world in which supply of credit is fixed (making financialization impossible) or else the price of credit is inelastic and therefore immune to market forces. My dissertation complicates this view.

Taisu Zhang’s new monograph on the importance of Confucian values also posits institutional obstacles to development. But Zhang sees the primary causes as cultural and legal, and thus solves many of the inconsistencies in the involutory model. In his words, he seeks:

...to demonstrate a chain of causation between cultural norms, legal institutions, and macro-level economic outcomes in early modern pre-industrial China and England...the dominance of kinship networks in later Qing and Republican society (1860-1949) operating under broadly ‘Confucian’ norms of social ranking, allows many relatively poor individuals to possess status and political authority highly disproportionate to their wealth.”<sup>75</sup>

Zhang’s thesis rests on two empirical claims. The first is about social status. For Zhang, Confucian cultural norms meant that status was not directly tied to wealth, and so the pressures

---

<sup>73</sup> Philip C. Huang, *The Peasant Family and Rural Development in the Yangzi Delta, 1350-1988* (Stanford: Stanford University Press, 1990), 109.

<sup>74</sup> Christopher Isett, *State, Peasant, and Merchant in Qing Manchuria, 1644-1862* (Stanford: Stanford University Press, 2007), 272-273. I understand Isett as invoking an unstated assumption that interest rates are fixed by custom, and thus inelastic to changes in supply, demand, or returns on capital. Note that even fixed (or quantized) prices do not, over the long term, prevent factor markets from reaching equilibrium since volumes, purity of metal, and prices of real goods can all fluctuate around prices.

<sup>75</sup> Taisu Zhang, *The Laws and Economics of Confucianism: Kinship and Property in Pre-Industrial China and England*, (Cambridge: Cambridge University Press, 2017), 1.

to accumulate or engage in entrepreneurial activity were less acute than in Europe.<sup>76</sup> The second, and more important, mechanism by which Confucian values impact economic activity is the institution of the *dian*, or live sale. Zhang's theory is coherent and elegant, with none of the internal inconsistencies of the involutory model. It allows for factor markets that fail to boost agricultural productivity simply because the legal code obstructs concentration of landed wealth.

Nevertheless, Zhang's empirical claims are open to question. David Faure has written a spirited critique of Zhang's contention that status was not linked to wealth.<sup>77</sup> I do not have an opinion about this dispute, except that *if* Faure is correct, it poses a serious challenge to Zhang's argument. My concerns revolve around Zhang's analysis of the *dian*. Zhang argues that agriculture did not undergo market consolidation into larger landholdings because small plot-holders could readily conduct *dian*, or "live sales." Thus, the illiquid Chinese peasant had an advantage relative to the illiquid English peasant. While an English peasant in need of cash risked bankruptcy and permanent loss of title, the Chinese peasant could redeem his land when his fortunes turned. In short, Zhang argues that China had something like American bankruptcy

---

<sup>76</sup> There are echoes here of Marion Levy, who argued the most entrepreneurially successful lineages exited business owing to status considerations, thus hampering the accumulation of business talent. Marion Levy, "The Social Background of Modern Business Development in China," in *The Rise of the Modern Chinese Business Class: Two Introductory Essays*, by Marion Levy and Kuo-heng Shih (New York: International Secretariat, Institute of Pacific Relations, 1949), 1–18. Ho-fung Hung, *The China Boom: Why China Will Not Rule the World*, Contemporary Asia in the World (New York: Columbia University Press, 2016), 15–33 takes a similar view.

<sup>77</sup> David Faure, "Zhongguo Chuantong Diquan Zhidu Jiqi Bianqian 中国传统地权制度及其变迁 By Long Denggao 龙登高. Beijing: Zhongguo Shehui Kexue, 2018. 242 Pp. 69.00 Yuan. - Chuantong Zhongguo Diquan Jiegou Jiqi Yanbian 传统中国地权结构及其演变 By Cao Shuji 曹树基 and Liu Shigu 刘诗古. Shanghai: Shanghai Jiaotong Daxue, 2014. 320 Pp. 50.00 Yuan. - The Laws and Economics of Confucianism: Kinship and Property in Preindustrial China and England By Taisu Zhang. Cambridge: Cambridge University Press, 2017. 308 Pp. \$116.00.," *Journal of Chinese History 中國歷史學刊* 4, no. 1 (January 2020): 198–208, <https://doi.org/10.1017/jch.2019.17>.

protections on primary residences. Indeed, Qing protections went much further; sellers could invoke them to recover land or receive additional payments on land that they later regretted as having sold too cheaply (this process was known as *zhaojia* 找价).

The first problem with this account is technical. As Cao Shuji has shown, it makes more sense to view the *dian* as existing on a spectrum with tenancy at one end and permanent sales at the other.<sup>78</sup> *Dian* rights, like permanent title, were transferable in the market.<sup>79</sup> This suggests that the *dian* as such would not have been an insurmountable obstacle to land aggregation as investors could purchase *dian* on the open market. The second problem is that final sales, while not as common as the *dian* in most of China, were in certain areas the rule rather than the exception. In parts of Jiangxi, virtually all land transactions were final sales.<sup>80</sup> The final and most serious problem, is Zhang makes no allowance for entrepreneurialism amongst *suppliers* of capital. For him, a land sale is always initiated by a peasant in desperate need of funds. But thanks to Yi Wang's brilliant scholarship on the Han settlement of Inner Mongolia, we now know that Shanxi "land merchants" (地商 *dishang*) put together corporate entities for the specific purpose of buying up land, developing its infrastructure, and resettling it with Han

---

<sup>78</sup> Cao Shuji and Liu Shigu, *The Structure and Evolution of Land Rights in Traditional China* (传统中国地权结构及其演变) (Shanghai: Shanghai Jiao Tong University Press, 2014).

<sup>79</sup> Cao Shuji, "Live Sales and Rents: Land Markets and Financial Markets in Qing-Era Southern Fujian (典地与典租: 清代闽南地区的土地市场与金融市场)," *The Qing History Journal* (清史研究), no. 4 (2019); Cao Shuji and Li Feiji, "Land Mortgage in Mountainous Regions of Southern Zhejiang during the Mid- and Late Qing: A Study Based on 'Land Mortgage Contracts' from Shicang Village, Songyang County (清中后期浙南山区的土地典当——基于松阳县石仓村'当田契'的考察)," *Historical Research* (历史研究), no. 4 (2008): 40–54.

<sup>80</sup> Cao Shuji, "The Circulation of Topsoil Rights and Rural Finance in Qing-Era Southern Jiangxi (清代赣南的田面流动与乡村金融)," *Agricultural History of China*, no. 3 (2020): 54–68.

migrants.<sup>81</sup> Moreover, these land merchants were buying substantial, consolidated blocks of land unencumbered by existing tenants—and yet the profit-maximizing strategy was still not to turn land into managerial farms based on wage labor, but to divide it amongst smaller farmers! This makes it highly unlikely that the *dian* could prevent concentration of landholdings over an extended period of time, or that there was an obvious, more economically efficient way of reorganizing Chinese agriculture.

In contrast to the involutory school and to Zhang's intriguing new theory, some scholars see the Great Divergence as a question of factor endowments and path dependency. An early such work is Mark Elvin's *The Pattern of the Chinese Past*. Elvin has important similarities to Huang, and also sees Chinese rural economic production as fundamentally less capable of capital accumulation than Europe. However, Elvin views declining marginal returns and economic relations as second-order effects of resource exhaustion and technological path dependence. In other words, China was trapped at a low-level equilibrium."<sup>82</sup> Elvin's model is more plausible than the involutory model since, as the name implies, it does not have to explain the persistence of economic disequilibria. In this respect, Elvin's model of Chinese development is similar to the California School; he too thinks divergence is a result of contingency. But for Elvin the important contingencies came into play centuries earlier.<sup>83</sup>

The California School went further than Elvin, and challenged the belief that there were decisive endogenous reasons for China's purported failure to develop capitalism. According to

---

<sup>81</sup> Yi Wang, "Irrigation, Commercialization, and Social Change in Nineteenth-Century Inner Mongolia\*," *International Review of Social History* 59, no. 2 (August 2014): 215–46, <https://doi.org/10.1017/S0020859014000133>.

<sup>82</sup> Mark Elvin, *The Pattern of the Chinese Past* (Rainbow-Bridge Book Co, 1973), 298-315.

<sup>83</sup> Elvin's model is not, however, consistent with all California School historians; Jack Goldstone's view of agricultural productivity poses a serious challenge to Elvin's model.

these scholars, Qing China and pre-industrial Europe were part of a “world of surprising resemblances.”<sup>84</sup> By this, California School scholars mean that Qing China, like much of preindustrial England, was home to a laissez-faire Smithian economy with a peasantry that was just as profit-maximizing as its European counterparts. Meanwhile, these scholars also point out that insofar as Qing peasants were not profit maximizing, one can find similarly non-*homo economicus* behavior in European peasants.<sup>85</sup> The California School requires no strange exceptions—cultural or legal—to explain its empirical findings. However, it has repeatedly wrestled with the fact of persistently high interest rates in the Chinese countryside. Kenneth Pomeranz’s seminal work on Shandong found that the level of integration and availability of credit depended on the geographic and social endowments of a given locality. Local elites, and local governments in particular, monopolized transfers of funds and exchange between copper and silver, in effect imposing a tariff on capital inflows. These dynamics were most pronounced further inland, keeping inland regions less integrated and less able to develop. An upshot of these findings is that economic development in the “core” may have come at the expense of the “hinterland,” as capital remained on the coast.<sup>86</sup>

Ming-te Pan’s study of sericulture in Jiangnan is the most direct challenge to the involutory view of finance. Pan shows that credit was used in production, and that the return on capital invested in sericulture exceeded the price of credit. Thus, he concludes that rural credit

---

<sup>84</sup> Kenneth Pomeranz, *The Great Divergence: Europe, China, and the Making of the Modern World Economy*, The Princeton Economic History of the Western World (Princeton, N.J: Princeton University Press, 2000).

<sup>85</sup> Roy Bin Wong, *China Transformed: Historical Change and the Limits of European Experience* (Ithaca: Cornell University Press, 1997).

<sup>86</sup> Kenneth Pomeranz, *The Making of a Hinterland: State, Society, and Economy in Inland North China, 1853-1937* (Berkeley: University of California Press, 1993).



markets enabled higher capital accumulation and living standards, albeit not necessarily long-term growth.<sup>87</sup> Pan's findings are extremely important, but it is worth noting that he is really talking about trade credit (*sheshao*), akin to a modern-day accounts payable. His study stops short of arguing that a true financial market existed, in which financial intermediaries competed to exploit differences in risk profile or in long- and short-term demand.

The California School's most aggressive position on rural credit institutions can probably be found in both Pomeranz's seminal *The Great Divergence* and in R. Bin Wong and Jean Rosenthal's 2011 volume. Pomeranz points out that high interest rates should not be taken as prima facie evidence of underdeveloped financial markets, since the risk to creditors/borrowers appears to have been higher/lower under the Chinese foreclosure system.<sup>88</sup> Wong and Rosenthal go even further; they believe that too much has been made of the difference in Chinese and European interest rates, because these rates are taken from different kinds of markets. That is, we are comparing low-risk European borrowers with high-risk Chinese borrowers. But the argument is highly theoretical. Empirically, they come close to conceding that "...scholars have found far less evidence of financial markets and credit institutions in late imperial China than in early modern Europe..." and that Chinese formal debt markets were relatively small.<sup>89</sup> Ultimately, then, the California school has been willing to concede that financial markets were not well developed in Qing China, while minimizing the importance of finance. Even so, when reading

---

<sup>87</sup> Ming-te Pan, "Rural Credit in Ming-Qing Jiangnan and the Concept of Peasant Petty Commodity Production," *The Journal of Asian Studies* 55, no. 1 (1996): 94-117..

<sup>88</sup> Kenneth Pomeranz, *The Great Divergence: Europe, China, and the Making of the Modern World Economy*, *The Princeton Economic History of the Western World* (Princeton, N.J.: Princeton University Press, 2000), 161-164.

<sup>89</sup> Jean-Laurent Rosenthal and Roy Bin Wong, *Before and beyond Divergence: The Politics of Economic Change in China and Europe* (Cambridge: Harvard University Press, 2011), 152.

these scholars, particularly R. Bin Wong, one gets the sense that they are unsatisfied with this concession and believe more work needs to be done. Wong wrote in 1997, "...at present we need to learn more about credit, labor, and product markets in prewar China. While urban-based credit networks through modern banking clearly existed, it remains unclear how systematically, if at all, urban credit was integrated with rural credit."<sup>90</sup> Over two decades later, this is as true as ever.

This dissertation answers Wong's call to develop a more empirically-based understanding of late imperial finance. It shows that rural financial markets were effective by the standards of a pre-industrial agrarian society, and demonstrates the ability of Chinese society to accumulate and allocate capital. This calls into question both semi-feudal and involutory models of premodern China. At the same time, these chapters push the boundaries of the California School thesis to new limits. I argue that not only was the Qing economy commercialized, but it was thoroughly financialized as well. By this I mean that resource allocation into commerce and productive investment was—at least since the Daoguang reign and along Shanxi merchants' more prosperous trade routes—accomplished through financial markets as well as commodities markets, that interest rates and the price of financial capital impacted agrarian producers directly, and that financial assets could circulate independently from the physical stocks of commodities and capital that they were derived from.

The third body of scholarship that this dissertation speaks to is the burgeoning literature on the global history of capitalism. The recent interest in the history of capitalism has led many scholars to refer to it as new discipline, but in my reading all roads lead to Ferdinand Braudel. Of

---

<sup>90</sup> Wong, *China Transformed*, 66.

Braudel's many overlapping definitions of capitalism, at least a few reference the creation of financial capital. His description of the economy's "triple division" is worth quoting in full:

On the other hand, looking up instead of down from the vast plane of the market economy, one finds that active social hierarchies were constructed on top of it: they could manipulate exchange to their advantage and disturb the established order. In their desire to do so - which was not always consciously expressed - they created anomalies, 'zones of turbulence' and conducted their affairs in a very individual way. At this exalted level, a few wealthy merchants in eighteenth-century Amsterdam or sixteenth-century Genoa could throw whole sectors of the European or even world economy into confusion, from a distance. Certain groups of privileged actors were engaged in circuits and calculations that ordinary people knew nothing of. Foreign exchange for example, which was tied to distant trade movements and to the complicated arrangements for credit, was a sophisticated art, open only to a few initiates at most. To me, this second shadowy zone, hovering above the sunlit world of the market economy and constituting its upper limit so to speak, represents the favored domain of capitalism, as we shall see. Without this zone, capitalism is unthinkable: this is where it takes up residence and prospers.<sup>91</sup>

In the fullness of Braudel's lyrical descriptions of the birth of capitalism, it becomes clear that his "third level" of the economy, which distinguishes capitalism from mere markets, refers to high finance and investment. That is, entrepreneurs seek out investments in the real economy.<sup>92</sup>

The economic theorist-cum-sociologist Giovanni Arrighi built on Braudel's distinction between markets and capitalism to argue that China had Smithian markets without capitalism.<sup>93</sup>

---

<sup>91</sup> Fernand Braudel, *Civilization and Capitalism, 15th-18th Century*, vol. 1, 3 vols. (Berkeley: University of California Press, 1992), 23-24.

<sup>92</sup> Sometimes this is described as a process of monetization, other times as a process of increasing concentration of wealth in urban areas. Fernand Braudel, *Civilization and Capitalism, 15th-18th Century*, vol. 2, 3 vols. (Berkeley: University of California Press, 1992).

<sup>93</sup> Giovanni Arrighi, *Adam Smith in Beijing: Lineages of the Twenty-First Century* (London ; New York: Verso, 2007). Arrighi is drawing on his theoretical framework developed in Giovanni Arrighi, *The Long Twentieth Century: Money, Power, and the Origins of Our Times*, New and updated, [2nd] ed (London ; New York: Verso, 2010). Arrighi's understanding of China as having a distinctive form of capitalism came largely from Kaoru Sugihara and Kenneth Pomeranz. See Kaoru Sugihara, "The East Asian Path of Economic Development: A Long-Term Perspective," in *The Resurgence of East Asia : 500, 150 and 50 Year Perspectives*, ed. Giovanni Arrighi, Asia's Transformations (London: Routledge, 2003),

<http://proxy.uchicago.edu/login?url=https://search.ebscohost.com/login.aspx?direct=true&db=e000xna&AN=105290&site=ehost-live&scope=site>; Kenneth Pomeranz, "Is There an East Asian

For Arrighi, one thing that makes western capitalism so unstable is its financial industry, which is created to absorb excess capacity and, once created, requires speculation to remain profitable. Arrighi was optimistic about a China-led East Asian order that would be more stable, equitable, and peaceful than American hegemony. More recently, scholars in the “new history of capitalism” have also studied the role of finance in capitalism and exploitation. Sven Beckert has argued that “war capitalism” and slavery were essential to the development of western financial markets—and futures markets in particular.<sup>94</sup>

There is one important way in which my dissertation supports these assertions. Though I find high finance, banking, futures markets, and capitalist accounting thriving amongst Shanxi merchants prior to the arrival of western powers, there is one institution notable by its absence. I find absolutely no evidence of an *insurance* market. This is significant, since insurance is typically credited with encouraging early industrial investment—both by financing it directly out of insurance float, and by allowing entrepreneurs to offload risk associated with large capital investment. In the European experience, marine insurance first emerged in 14<sup>th</sup> century Italy along with a series of other financial innovations. This period coincided with the decline of the caravan, which is significant because in Europe, as in China, overland trade does not seem to have led to insurance.<sup>95</sup> It may therefore be that marine trade and overseas imperialism spurred

---

Development Path? Long-Term Comparisons, Constraints, and Continuities,” *Journal of the Economic and Social History of the Orient* 44, no. 3 (2001): 322–62; Kenneth Pomeranz, *The Great Divergence: Europe, China, and the Making of the Modern World Economy*, The Princeton Economic History of the Western World (Princeton, N.J: Princeton University Press, 2000).

<sup>94</sup> Sven Beckert, *Empire of Cotton: A Global History*, First edition (New York: Alfred A. Knopf, 2014).

<sup>95</sup> Florence Edler de Roover, “Early Examples of Marine Insurance,” *The Journal of Economic History* 5, no. 2 (1945): 172–200.

greater financial innovation in Europe with particular respect to insurance; ultimately, this was a contingency of geography and seafaring capability that would manifest in a unique financial technology.

Nevertheless, the broader thrust of my dissertation is to question the distinction between markets and capitalism—at least in the Braudelian and Arrighi sense of entrepreneurs that exist at the level of high finance. First, it demonstrates conclusively that China possessed Braudel’s “third level” of the economy. By showing the growth of massive, interregional capital markets replete with specialized institutions of high finance—and certainly no shortage of speculation—operated entirely by private actors in late imperial China, it throws doubt on the contention that state violence is necessary for the construction of high finance. It also supports Faure’s argument that, *pace* Weber (and, by extension, Braudel), town charters were not a precondition for capitalist enterprise.<sup>96</sup>

At the same time, my dissertation strengthens other arguments found elsewhere in the new history of capitalism’s corpus. Christine Desan’s study of the origins of English money

---

<sup>96</sup> David Faure, “What Made Foshan a Town?: The Evolution of Rural-Urban Identities in Ming-Qing China,” *Late Imperial China* 11, no. 2 (1990): 1–31, <https://doi.org/10.1353/late.1990.0000>; David Faure, “What Weber Did Not Know: Towns and Economic Development in Ming and Qing China,” in *Town and Country in China: Identity and Perception*, ed. David Faure and Tao Tao Liu (London: Palgrave Macmillan UK, 2002), 58–84, [https://doi.org/10.1007/978-1-137-07001-2\\_4](https://doi.org/10.1007/978-1-137-07001-2_4); Meng Nan and Meng Wei, “From Guangzhou to Shanghai, Using Popular Materials to Uncover Qing-Era Financial Connections and Changes: A Case Study of Weichanghou’s Yearly Accountbook (从广州到上海：隐藏在民间文献中的清代中国金融关联与变迁（系列文论十五）——以《光绪十四年冬月吉立·蔚长厚票号上海分号通年结账》为重点的实证)” (Unpublished).

center on the legal custom of nominalism. Her analysis is a quintessentially chartalist account,<sup>97</sup> in which the state’s power to tax implies a monopoly power to create money.<sup>98</sup> In China, where the state did not enforce this monopoly and permitted a Hayekian monetary regime, the economy remained stubbornly metalist; a dizzying number of currencies, exchange rates, and money-like instruments competed on the open market. This radically different developmental trajectory between English and Chinese money (dare we say, “monetary divergence”?) strengthens Desan’s contention that modern money is a legal creation and a political compromise (in the case of England, a compromise between the crown and the Whigs).

---

<sup>97</sup> Chartalism, or the “state theory of money” comes from Georg Friedrich Knapp, Mrs H. M. Lucas, and James Bonar, *The State Theory of Money* (London: Published on behalf of the Royal Economic Society by Macmillan and Co., limited, 1924). Also see Rand

<sup>98</sup> Christine Desan, *Making Money : Coin, Currency, and the Coming of Capitalism* (Oxford: Oxford University Press, 2014), <https://doi.org/10.1093/acprof:oso/9780198709572.001.0001..>

## Chapter One: Lending at The Grassroots

This chapter studies rural lending in the late Qing and early Republic. In doing so, it addresses three questions critical to our understanding of Chinese society. First, to what extent did rural lending constitute a lending “market”? In other words, did creditors engage in free and fair competition to find willing borrowers, or were they able to use political leverage in order to extract monopoly rents? Second, I ask about the nature of borrowers. If credit demand was driven by despair, or by emergency consumption, this indicates an inelastic, high price of lending; that is, the absence of a true market. But if investment and production were components of credit demand, this would indicate more flexible pricing and supply of loans; that is, a market. Third, this chapter investigates the extent to which rural credit institutions participated in a capital market. That is, did lenders extend credit to one another, as in a modern banking system, or did they finance their operations out of their own, limited stocks of hard silver and copper? These questions are closely related. If there was indeed a capital market, it would suggest a competitive lending market, as financial intermediaries would be forced to lend as efficiently as possible in order to compete for funding. But if financial intermediaries funded operations mainly out of equity, rather than seeking financing in capital markets, then monopoly pricing and inelastic supply would be more likely.

After reviewing hundreds of documents including loan contracts, land contracts, and pawnshop business correspondence from Qing-era and Republican-era Shanxi Province, I conclude that rural Chinese lending was, for the most part, market based and highly competitive. This argument rests on a number of empirical claims. First, I show that the countryside housed a

multitude of institutional lenders. These included individual peasants, pawnshops, lineages, mutual credit associations, corporate entities, religious associations, and a humming mortgage market. This suggests a society in which credit markets were competitive, with no single institution able to monopolize loans. Moreover, the records of these institutions reflect relationships with borrowers that were predominantly economic: loans were made on the basis of collateral, usually land. Kinship ties and “semi-feudal” customary relationships were rarely if ever sufficient to receive a loan. The interest rate that obtained in rural China is significantly lower than the 2-3% monthly (or higher) that is frequently alleged in the literature. When one calculates the rate across a wider range of institutional grassroots lending, it becomes clear that the average cost of credit was unlikely to have exceeded 20% on an annual basis, and was probably a good deal lower.

These arguments supported by the discovery of a long-term, low-interest lending market. Such loans were quoted at a *changnian* (长年), or “annual,” rate at between 1% and 3% per annum, and were supplied by a wide array of institutional lenders. This may astonish scholars accustomed to thinking of Qing-era rural lending rates as falling north of 30% per year, but I provide ample evidence to show that long-term low-interest loans were real and common. Critically, the *changnian* rate was also a kind of “prime rate” in Qing-era high finance, used for clearing in the Shanxi financial centers of Zhangjiakou (in modern-day Hebei Province, but settled by Shanxi merchants), Pingyao, Taigu, and Qi County.<sup>99</sup> Second, I demonstrate the existence of a highly developed institutional capital market that extended down to the grassroots.

---

<sup>99</sup> Chapter 4 goes into greater detail on the importance of the *changnian* rate in high finance. The appearance of *changnian* rates in loan books and cash flow statements from institutions of high finance is also how I can be certain that these were truly annual rates.



Using pawnshops and lineage trusts as a proof of concept, I show that they lent freely and frequently to one another. This indicates that at least within Shanxi, lending markets were highly integrated. Different institutions competed for the same pool of capital.

Before moving on to the substance of the argument a few words on sources and geography are in order. The historical materials used in this chapter are taken from the LJMPC. The materials are thus almost entirely drawn from Shanxi province and are what Chinese scholars refer to as *minjian ziliao* (民间资料). Translated literally, this means “materials from the people.” The term is used to denote historical materials that were not produced by official state bureaucracies. I translate this term as “popular material.” It is not a perfect translation, but it captures the connotations of “bottom up” history that are also present in the original Chinese. It also preserves the emphasis on the sources’ private, rather than state, origin.

The fact that these materials are from Shanxi strengthens some of my conclusions, and qualifies others. The Jiangnan and Pear River Deltas were the wealthiest and most highly commercialized parts of China. That these materials are from the north suggests that the phenomena they show are widely applicable, and not merely representative of the most developed parts of the country. However, Shanxi province—along with parts of modern-day Hebei province and Inner Mongolia that were settled by Shanxi-ers—was probably the most developed in terms of financial technology. Thus, certain financial arrangements that I discuss in this chapter may be unique to Shanxi. Indeed, scholars of southern Chinese finance that I have discussed *changnian* rates with report that they have yet to find evidence of a comparable practice in the south.

This chapter is divided into a total of ten sections, including this introduction. Section two is a review of the literature that emphasizes the influence of the California school and related Chinese scholarship on my thinking. Sections three through eight focus on specific institutional lenders, namely, individuals, lineage trusts, corporate entities, pawnshops, religious institutions, and mortgages. Each section first establishes the fact that the institution was an important provider of financial credit. I then go on to analyze the interest rate, and to discuss its role in the market. One critical institution that I omit is the Rotating Savings and Credit Society (ROSCA), to which I devote chapter three. Section nine demonstrates the existence of a capital market. Specifically, it examines the relationship between lineage trusts and pawnshops, and shows that capital flowed freely between these two different institutions. The final section is a conclusion.

#### Literature Review

This chapter contributes to a rich literature on the social history of rural China. In doing so, it puts the “California School” literature in dialogue with an exciting, newer body of Chinese scholarship. Four California School works are particularly relevant to this chapter. The most two California School works most relevant to his chapter are Ming-te Pan’s highly prescient doctoral dissertation and his article in the *Journal of Asian Studies* on credit in the Qing-era sericulture industry. Though Pan did not have nearly the abundance of historical materials that I make use of, he adumbrated many of the ideas in this chapter. Pan argued that “the traditional rural credit market was crucial to a market oriented agricultural production” and that “although the interest rates on loans were high, when peasants used rural credit to produce for the market, they were

able to raise their standard of living above what they would have been otherwise.”<sup>100</sup> Most impressively, Pan gives us a typology of different institutional providers of rural credit that maps closely to my own. Like Pan, I single out lineage trusts, religious organizations, corporate entities, pawnshops and mutual credit societies as the key suppliers of rural credit. Pan’s article in the *JAS* elaborates on the importance of trade credit extended by corporate entities, with a focus on Jiangnan silk producers. Pan shows that credit was used in production, and that the return on capital invested in sericulture exceeded the price of credit. Thus, he concludes that rural credit markets enabled higher capital accumulation and living standards, albeit not necessarily long-term growth. Pan’s findings are extremely important, but it is worth noting that he is mostly talking about trade credit (*sheshao*), akin to a modern-day accounts receivable.<sup>101</sup>

I build on Pan by examining *financial* credit, and thereby raising the possibility of a competitive financial market. In doing so, I expand on his argument in several important respects. First, I posit a much higher level of grassroots financialization, showing that credit consisted of financial credit and not merely trade payables and receivables. Indeed, I show that every single institutional supplier of rural credit made financial loans; that is, loans that took the form of money principal in return for interest rather than simply trade credit in the form of an advance of goods. Furthermore, Pan classifies the rural credit market into “formal” and

---

<sup>100</sup> Ming-te Pan, “Rural Credit Market and the Peasant Economy (1600-1949): The State, Elite, Peasant and ‘Usury,’” *ProQuest Dissertations and Theses* (Ph.D., University of California, Irvine, 1994), ProQuest Dissertations & Theses Global (304081530), Vii-viii. Pan also argues that a cycle of peasant debt dependency led to the Communist victory. This is quite close to a more traditional social history of the revolution. It is a position I strongly disagree with and that, I believe, many early Communist revolutionaries and rural cadres would have disagreed with as well. I address this in detail in later chapters.

<sup>101</sup> Ming-te Pan, “Rural Credit in Ming-Qing Jiangnan and the Concept of Peasant Petty Commodity Production,” *The Journal of Asian Studies* 55, no. 1 (1996): 94, <https://doi.org/10.2307/2943638>.

“informal” institutions as well as between “intra-” and “inter-” village institutions, and is ambivalent with regard to how or if these spheres interacted. In short, Pan was agnostic about the existence of a capital market, and probably for this reason did not argue for a truly competitive lending market. By looking at account books and correspondence from pawnshops and lineage trusts, I am able to break down Pan’s distinctions. I show that there was little difference between “formal” and “informal” lending, and that village-based institutions frequently invested capital in grassroots institutions in other locales. Thus, a rural capital market forced different financial institutions to compete with one another, even as it linked village finance with greater, regional finance. I also make some important amendments to Pan’s understanding of the lineage trust, the details of which are in section four of this chapter.

In addition to Pan, two other California School works that I build on are Kenneth Pomeranz’s *The Making of a Hinterland*, and R. Bin Wong and Jean-Laurent Rosenthal’s more recent *Before and Beyond Divergence*. Pomeranz uses the McCloskey-Nash technique to impute interest rates, and finds persistent interest rate differentials between different localities. He concludes that politically powerful groups were capable of preventing capital (copper and silver) from moving freely in and out of their localities. The effect is something like an interregional tariff on capital that prevented people in certain areas from accessing credit at the same rates as those in other areas. This resulted in a persistent bias toward low interest rates and higher investment in better-integrated areas (the exemplars of which are Shanghai and Manchuria, but which could also include treaty ports and favored rural environs), and high interest rates and low investment in more politically isolated areas.<sup>102</sup> Pomeranz’s conclusions fit nicely with Akinobu

---

<sup>102</sup> Kenneth Pomeranz, *The Making of a Hinterland: State, Society, and Economy in Inland North China, 1853-1937* (Berkeley: University of California Press, 1993).

Kuroda's model of an increasingly cellular monetary system, in which local communities controlled their own money supply by minting (or debasing) copper cash.<sup>103</sup>

Wong and Rosenthal argue that too much has been made of China's high rural Chinese interest rates in comparison to pre-industrial European rates because these rates are taken from different kinds of markets. That is, we are comparing high-risk Chinese borrowers to low-risk European borrowers. One passage is worth quoting in full:

Most likely the remaining differences in interest rates came from variations between rural and urban pawnbroking. The rates we have for Europe all come from urban areas, where unredeemed pledges were easy to sell and there was more competition among pawnbrokers. The rates we have for China come from more rural settings, where pledges were likely more difficult to sell and competition was lower. When we compare pawnshops with pawnshops, differences in interest rates are less substantial.<sup>104</sup>

They go on to concede that there is less evidence of financial markets in China than in Europe. However, they end on a cautionary note, concluding that there is simply not enough scholarship on Chinese financial markets to come to any firm conclusions. In reassessing rural interest rates, this chapter builds directly on Wong and Rosenthal by providing precisely the evidence to confirm many of their speculations.

The second body of literature that this chapter draws on is a Cao Shuji's scholarship on rural finance markets. Recently, Cao Shuji studied the links between rural land markets and rural financial markets by analyzing land contracts from Fujian province. By backing into the implied interest of "live rent sales," he calculates rural mortgage rates at an average of 12.6% on average in Fujian, thus "overturning our conception of traditional Chinese rural lending rates of around

---

<sup>103</sup> Akinobu Kuroda, "Another Monetary Economy : The Case of Traditional China," in *Asia-Pacific Dynamism 1550 - 2000*, ed. A.J.H. Latham and Heita Kawakatsu (New York: Routledge, 2000), 187–98.

<sup>104</sup> Jean-Laurent Rosenthal and Roy Bin Wong, *Before and beyond Divergence: The Politics of Economic Change in China and Europe* (Cambridge: Harvard University Press, 2011), p. 138.

20% or even 30% annually.”<sup>105</sup> Cao has also found evidence of similar transactions—albeit much more complex—in Southern Jiangxi.<sup>106</sup> I apply Cao’s methodology to similar contracts from Northern China, and find similar results.

Even as this chapter builds on the California School and on Cao Shuji, it seeks to revise an older literature on Chinese rural lending. Beginning with R.H. Tawney, many scholars have argued that China had no rural lending market. According to Tawney, “[T]he rates at which loans are made naturally tend to be exorbitant. In reality...no market rate can be said to exist...What the peasant pays is dictated by his necessities, and by the ability of the lender to take advantage of them.”<sup>107</sup> Philip Huang takes a similar view, writing, “Interest rates on these [i.e., rural] loans seldom operated by the law of supply and demand. Peasant borrowing from usurers was generally for emergency or survival purposes and defies the logic of simple calculations of costs and returns. Moreover, custom and law played a strong role in governing interest rates in

---

<sup>105</sup> “...颠覆了传统乡村借贷利率为 20%甚至 30%的一般观念” in Cao Shuji 曹树基, “Diandi Yu Dianzu: Qingdai Minnan Diqu de Tudi Shichang Yu Jinrong Shichang 典地与典租：清代闽南地区的土地市场与金融市场 [Live Sales and Rents: Land Markets and Financial Markets in Qing-Era Southern Fujian],” *Qingshi Yanjiu 清史研究 [The Qing History Journal]*, no. 4 (2019).

<sup>106</sup> Cao Shuji 曹树基, “Qingdai Gannan de Tianmian Liudong Yu Xiangcun Jinrong 清代赣南的田面流动与乡村金融 [The Circulation of Topsoil Rights and Rural Finance in Qing-Era Southern Jiangxi],” *Zhongguo Nongshi 中国农史 [Agricultural History of China]*, no. 3 (2020): 54–68.

<sup>107</sup> R. H. Tawney, *Land and Labour in China* (London: G. Allen & Unwin Ltd, 1932), 62. I have no doubt that the rural poverty Tawney witnessed was real. But his explanation for this poverty—that no *market* for credit existed—is dubious. Not only does it not fit the historical record that I examine in this chapter, but it does not really follow from Tawney’s own survey. In the same chapter in which Tawney draws his conclusion, he enumerates the long list of institutional lenders at the grassroots, and their connections to urban credit markets. But he believes that because Chinese peasants do not account separately for capital investment and income, lending rates fail to transmit information about where investment is needed in the economy. Note that if this were true, then Tawney’s favored solution—public funding of rural credit cooperatives—would do little to solve the problem.

the rural usury market: the usual range was 2–3 percent a month...”<sup>108</sup> For both of these authors, and Huang in particular, credit prices are inelastic. Huang believes the price mechanism was one of “custom” rather than monopoly, but the effect would be the same: to fix lending prices far higher than rural returns on capital. This also means, as Huang explicitly states, that credit demand is a function of emergency rather than of investment demand.<sup>109</sup> Finally, a recent and highly intriguing monograph from Taisu Zhang proceeds from similar assumptions about credit demand. Zhang’s argument is too elegant and too sophisticated to do it justice in this space, and I discuss it at greater length in my introduction. But Zhang also sees financial transactions as motivated by peasants in distress, rather supply-driven (i.e. motivated by entrepreneurial lenders) or investment-driven.<sup>110</sup> By demonstrating the existence of entrepreneurial lending, this chapter provides evidence that, though hardly dispositive, may call Zhang’s thesis into question.

---

<sup>108</sup> Philip C. Huang, *The Peasant Family and Rural Development in the Yangzi Delta, 1350-1988* (Stanford: Stanford University Press, 1990), 109.

<sup>109</sup> Christopher Isett takes a similar view in Christopher Isett, *State, Peasant, and Merchant in Qing Manchuria, 1644-1862* (Stanford: Stanford University Press, 2007). Writes Isett, “...debt was most commonly taken on for subsistence and similar non-productive investment...the rates of interest levied were high enough to preclude ongoing productivity gains when such investment was used for tools, buying land, and the like. Because the high cost of capital precluded most peasants from accumulating...loans by merchants to peasants did not so much advance the productive process as merely permit it to continue in the same vein” (pp. 272-273). Note that Isett does not distinguish between marginal and average costs of capital/investment, making his meaning ambiguous. He could be read as rejecting Huang’s involutory model and positing an almost perfectly efficient market. After all, a price of capital “high enough” to preclude more investment but well suited to current levels of investment (“continuing in the same vein”) sounds like a roundabout way of saying that the marginal cost of credit equaled the marginal return on investment: the textbook definition of a functioning credit market.

<sup>110</sup> Taisu Zhang, *The Laws and Economics of Confucianism: Kinship and Property in Pre-Industrial China and England*, Cambridge Studies in Economics, Choice, and Society (Cambridge, United Kingdom: Cambridge University Press, 2017). Zhang writes, “Chinese property institutions were much more ‘poor friendly’, in that they allowed cash-needy landowners—who were usually poor—to collateralize land without risking permanent loss of title. This severely discouraged the permanent selling of land and, correspondingly, the accumulation of land into larger, capitalist farms.” Even if it is true that lenders were on the

## Loans from Individuals

Individual loans refer to loans contracted between two individuals, rather than between corporate entities, and were a critical source of credit in rural China. In the extent literature, such loans are usually described as “landlord” loans. Thus, Ming-te Pan writes, “The *tang*, the landlord's compound, was often a financial institution in the village.”<sup>111</sup> In Pan’s case, there is some justification for this because the diary he draws from is indeed from a large landholder. But the classification is misleading. It implies a kind of feudal relationship, in which a peasant short of cash was necessarily a tenant farmer, and the lender was necessarily his landlord. I see no evidence of this. Any peasant with excess cash could make a loan and any peasant with good enough credit could hope to receive one. Loans were made not *qua* landlord and tenant, but simply between two individuals.

The earliest contract for an individual loan that I have access to dates from the final imperial reign of the Ming Dynasty. It was drawn up in the sixth reign year of the Chongzhen Emperor (1633), and reads:

**Contract 1:**<sup>112</sup> 立借约人王永刚、毅自为故母丧是使用无处吉取，今问到赵温名下借取系银本贰两七钱整，向至来年本月交还，不许短少，恐人失信，故立交字为用照。  
崇祯六年四月二十四日立约人王永刚十、王永毅十  
见人赵泰十、张梅十、赵夏 X、郗道人岁

---

whole wealthier than borrowers, it does not follow that there were no entrepreneurial lenders or investment-driven borrowing.

<sup>111</sup> Ming-te Pan, “Rural Credit Market and the Peasant Economy (1600-1949): The State, Elite, Peasant and ‘Usury,’” *ProQuest Dissertations and Theses* (Ph.D., Ann Arbor, University of California, Irvine, 1994), ProQuest Dissertations & Theses Global (304081530), <https://search.proquest.com/docview/304081530?accountid=14657>, 151.

<sup>112</sup> Loan Contract between Wang Yonggang, Wang Yongyi, and Xhao Wen, Loans from Individuals, LJMPC, 1.



Originating a loan agreement with Wang Yonggang and Wang Yongyi to defray costs of their mother's funeral. Today they are borrowing from Zhao Wen principal of 2.7 taels of silver, to be paid one year from now. They are not to pay less than the stated amount. In the event other documents are lost, these signatures will serve as proof.

In 1633/4/24, Wang Yonggang [signed]十, Wang Yongyi [signed]十  
Witnesses Zhao Tai [signed]十, Zhang Mei [signed]十, Zhao XiaX [signed]十, Xi Daoren [signed]岁

This contract is a loan for an urgent consumption need. Namely, the brothers Wang Yonggang and Wang Yongyi needed a loan to pay for their mother's funeral. Moreover, the lack of any interest indicates a community effort to help the brothers, rather than for-profit activity. I start with this not only because it is the earliest contract I have, but also to concede that not all the contracts I have reviewed support my thesis. If most loans resembled Contract 1, the story they would tell would be of a kind of moral economy in which loans were meant to relieve emergencies, rather than fund economic activity. My contention is simply that such were not the only, or even the main, kind of loan.

Unlike the Chongzhen-era contract, most contracts record interest payments, usually denominated in money. In other words, they are financial, for-profit relationships between lender and borrower. Contracts 2 and 3 are excellent examples.

**Contract 2<sup>113</sup>:**立取系银交字人

东刘里马村民人马骏较因为缺少使用，不便今  
村贾名下系银十两整同中言定每 XX  
恐后无凭立约存照  
康熙二十四年 九月初一

Originating an agreement to advice silve rot the signatory  
Dongliu li in Sima Village, a Mr. ma Junjiao being shorto ffunds and therefore  
inconvenienced has received a loan from the Jia family of 14 taels of silver. The  
interest is clearly stated at XXX.

---

<sup>113</sup> Loan Contract between Ma Junjiao and Jia family, Loans from Individuals, LJMP, 2.

Oral testimony will not be relied on, [therefore] we are establishing this [written] loan contract as proof.  
1688/9/1

Here we see a loan extended because the borrower, Ma Junjiao, was short on cash. There appears to have been interested collected on it, but that piece of the contract has been destroyed. A third contract, also with Ma Junjiao, retains the monthly interest rate:

**Contract 3<sup>114</sup>:**立取系银交字人

东刘里司马村民人马骏铰因为缺少使用不便今问到本里  
东王村贾名下系银一十四两五钱整，同中言定每月加贰行利  
恐后无凭立约存照  
康熙三十年七月 XX 约人马骏铰十  
中人马瑞麟

Originating an agreement to advance silver to the signatory  
Dongliu li in Sima Village, a Mr. Ma Junjiao being short of funds and therefore  
inconvenienced has gone to receive a loan from Dongwang village in this same  
Li, from the Jia family in the amount of 14.5 taels of silver. The stated interest is  
2% per month.

Oral testimony will not be relied on, [therefore] we are establishing this [written]  
loan contract as proof.

In the 1691/7/XX, Ma Junjiao [signed]十  
Broker Ma Ruilin

Later, in the Jiaqing Reign, we see a similar loan:

**Contract 4<sup>115</sup>:**立借银人马敏中今借到

郑名下元系银二百两整，同中言明每月一分行息，恐口无凭，立约存照  
保人罗小孩

嘉庆二十二年六月廿四日立借约人马敏中十

Originating a loan of silver to Ma Minzhong, who today borrows  
From the Zheng family, 200 taels of yuanxi silver. It is clearly stated that the loan  
shall accrue 1.5% monthly interest. Oral testimony will not be relied on,  
[therefore] we are establishing this [written] loan contract as proof.

Guarantor: Little child Luo

1817/6/24 Ma Minzhong [signed]十

---

<sup>114</sup> Loan Contract between Ma Junjiao and Jia family, Loans from Individuals, LJMP, 4.

<sup>115</sup> Loan Contract between ma Minzhong and Zheng family, Loans from Individuals, LJMP, 15.

In Contract 3 Ma Junjiao is short on cash, and so borrows 14.5 taels of silver from the Jia family at an interest rate of 2% per month. In Contract 4, Ma Minzhong borrows 200 taels of silver from the Zheng family at 1.5% interest per month. Little child Luo served as guarantor of the loan. In some ways, both of these contracts seem consistent with the world described by Huang and Tawney. The interest rate is quite high relative to even pre-industrial England. But in other ways, the picture does not quite add up. Ma Junjiao is borrowing multiple times. If he is so desperate, the Jia family is taking an enormous risk by giving him more credit. Similarly, Ma Minzhong is borrowing at a high interest rate as well; but he is borrowing *two hundred taels of silver*. This is such a considerable sum that it is implausible he is being exploited in some kind of semi-feudal relationship. To repurpose an old saw, “when you owe the landlord two taels, the landlord owns you; when you owe the landlord two hundred taels, you own the landlord.”

Not all loan contracts quoted interest rates per month. A substantial minority of contracts quoted an annual rate—often written as a *changnian* (长年) rate—instead. The earliest such contract, seen in Contract 65 dates from the Qianlong reign in 1770.

**Contract 5:**<sup>116</sup>

立借系银文约人李明谦因为使用不便今借到

王名下本银八钱整，同中言明每年利银一钱四半分，每年封纳籽粒粮三亩如利齐粮完者，别无异说，如纳粮不上者加利付还，如有及言妥中人一面承当，恐口无凭，立借约存照

乾隆卅五年二月十五日立约人李明谦十

证见人李枝生、李兰生、王国顺

Originating a loan contract for Li Mingqian, owing to be short of funds and inconvenienced, is today borrowing from the Wang family a principal of 0.8 taels of silver. It is clearly stated that the loan will accrue an annual interest of 14.5%, and will pay the annual tax on 3 mu of land. The interest and taxes must be paid in full without disagreement. If the tax cannot be paid in full, then the interest will be increased to compensate for it. In the event of disagreement, a mediator will be

---

<sup>116</sup> Loan Contract between Li Mingqian and Wang family, Loans from Individuals, LJMPC, 8.

called to arbitrate. Oral testimony will not be relied on, [therefore] we are establishing this [written] loan contract as proof.

1770/2/15 Contracting with Li Mingqian [signed] 十

Witnessed by Li Zhisheng, Li Lansheng, Wang Guozhen

This loan shows Li Mingqian borrowing 0.8 taels of silver. The rate is quoted per annum, at 14.5%. On top of this, he must render enough seeds to plant 3 mu of land. I do not know what precise taxes were, but the after-tax interest rate was somewhere around 15% per annum.

Contract 5 is anomalous; most loans that quoted annual rates charged extremely low interest. Indeed, with the single exception of Contract 5, I have not seen any *changnian* rate exceed 3% annually. Contract 6 is thus more representative.

**Contract 6**<sup>117</sup>: 立借文约人赵天德今借到

李斧成名下本白银陆拾伍两整，言明每年壹分行息，随便交还，恐后无凭，立约为证

道光元年六月初一日立约人天德十

中见人申治机十、雷超十、张德重十、申开畅十

**Marginalia:** 十月十八日还本银三两，厘学义经手  
二年六月初一日本利银陆两式钱  
三年六月初一日本利银陆两捌钱二分  
道光二年六月初一日借今白银陆两式钱  
三年六月初一日借今银陆两捌钱式分  
除去面银壹两叁钱捌分  
共今银柒拾叁两陆钱肆分  
十一月初三日四分  
张寿奇本白银陆钱肆分

Originating a loan contract with Zhao Tiande, borrowing today from Li Fucheng a 65 taels of silver. It is clearly stated that the loan will accrue an annual interest of 1%, to be paid at any time. Oral testimony will not be relied on, [therefore] we are establishing this [written] loan contract as proof.

1851/6/1 Loan contracted with Tiande [signed] 十

Brokers Shen Zhiji [signed] 十, Lei Zhao [signed] 十, Zhang Dezhong [signed] 十, Shen Kaichang [signed] 十

**Marginalia:** 1852/6/1 Principal and interest of 6.2 taels

---

<sup>117</sup> Loan Contract between Zhao Tiande and Li Fucheng, Loans from Individuals, LJMPC, 16.

1853/6/1 Principal and interest of 6.82 taels  
1852/6/1, Loan of 6.2 taels  
1853/6/1, 6.82 taels  
Net of silver at face value 1.38 taels  
Total of 73.64 taels  
11/3 0.04 taels  
Zhang Shouqi Principal of 0.64 taels

In this contract, Zhao Tiande borrows 65 taels from the Wang family. The loan accrues an interest of only 1% per year, with no maturity. This is, in other words, a long-term low-interest loan. In addition, Zhao Tiande continues to borrow small additional amounts. This suggests that the Wang family was running a kind of rural financial institution, and extending financing to Zhao Tiande in what was something like the Qing-era equivalent of a line of revolving credit.

The *changnian* rate appears more often in contracts from the Daoguang reign. The prevalence of low rates may partly be a result of the Daoguang Depression.<sup>118</sup> But it is not unique to the Daoguang period. Contract 7 was drawn up in the Tongzhi reign.

**Contract 7<sup>119</sup>:** 中人支文德

立揭钱人王学圣揭到许天德名下钱一千文每年一分八厘行息，同中言明如若本利还不上者情愿将自己院上领坡地一段计地一亩三分，其地南北珍，西南至许成院，东至许德姓，北至城，四至分明，如若还不上者钱主管业，恐后无平，有约为照

同治三年正月廿五日立约

Broker Zhi Wende

Originating a contract for a loan to Wang Xuesheng, borrowing from Xu Tiande 1,000 copper cash at an annual interest of 1.8%. It is clearly stated that if principal and interest are not returned, the borrower will willingly surrender his plot of land amounting to 1.3 mu next to his courtyard. The plot stretches from north to south, extends to Xu Cheng's courtyard in the southwest, and to Xu Dexing in the north. The four borders are clearly delineated. In the event of default, the lender shall

---

<sup>118</sup> See Li Bozhong, "The 'Daoguang Depression' and the 'Guiwei Great Flood': Economic Decline and Climatic Cataclysm in Early Nineteenth-Century Songjiang in a New Perspective," *Etudes Chinoises* 34, no. 2 (2015): 89–119.

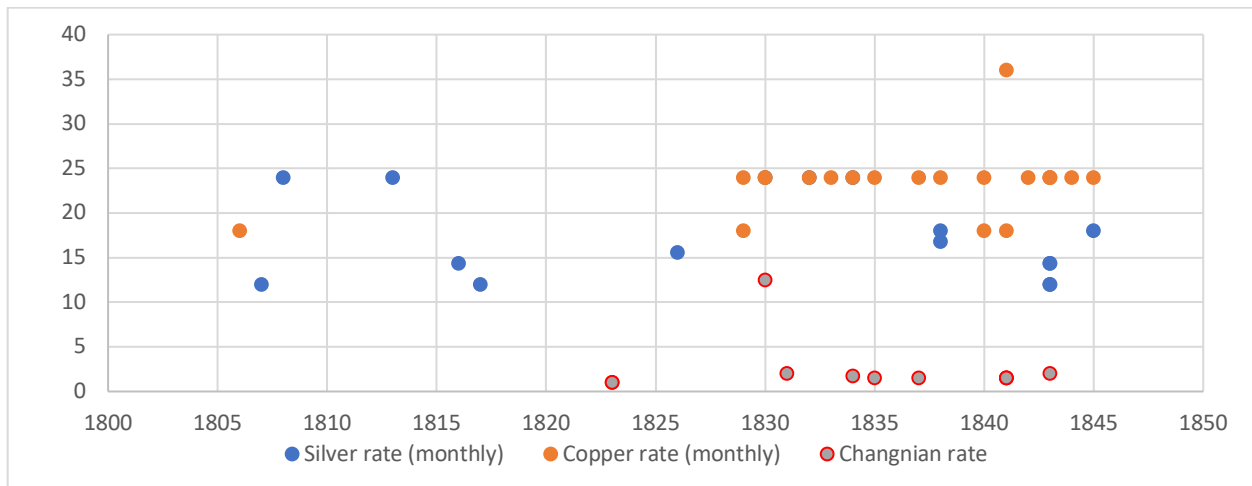
<sup>119</sup> Loan Contract between Wang Xuesheng and Xu Tiande, Loans from Individuals, LJMPC, 134.

take position of this property. Oral testimony will not be relied on, [therefore] we are establishing this [written] loan contract as proof.  
1864/1/25 Contracted

This contract is interesting because it is quoted at the yearly rate, with a plot of land posted as collateral. Thus, it is clearly a loan tied to the rural, peasant economy. Yet the rate is still extremely low, only 1.8% per year—and given on collateral of a mere 1.3 mu, for a loan of only 1,000 copper cash!

*Changnian* loans made up a significant minority of lending, but of course average borrowing costs were much higher than average *changnian* rates. By compiling a database of selected loan contracts between individuals taken from the LJMPC, I have been able to estimate average lending rates between individuals. As seen in Figure 1, the rates are much lower than the 3% per month that is often cited in the literature.

Figure 1. Annualized rates of individual loans from 1800 to 1845, by loan type



Source: Loan Contracts Between Individuals, LJMPC. Note, contracts prior to 1800 have been removed from the chart to preserve space.

Indeed, the average monthly rate is approximately 1.75%. Then there is a further problem of correcting for inflation. Many of these loans were denominated in copper, which was quickly

losing value. If we disaggregate loans by base metal, the silver lending rate goes down to an average of 1.54% per month, while the copper rate goes up to 1.95% monthly. According to Lin Manhong's data, the copper price of silver rose from 1177 to 2025 between 1816 (when annual data become available), and 1845, the date of the latest contract in my selection.<sup>120</sup> Inverting this, we get the silver price of copper declining by 41.88% over the same period, or a monthly 0.15%. This only accounts for about a third of the rate differential. But silver and copper varied enormously regionally. It is impossible to tell if the rest of the differential represents statistical noise, regional variation, or reflects a difference in socioeconomic status of borrowers. With as small and non-random a sample as I have, the default assumption has to be statistical noise. In any case, it is safe to conclude that real rates on loans accruing interest on a monthly basis were certainly not higher than 20% per year, and likely closer to 18%.

However, there is the further issue of longer-term loans accrued interest annually, or calculated at the *changnian* rate. For the selected loan contracts, *changnian* encompass cover fully 18% of all contracted loans. That is a considerable proportion, especially considering these were loans made between individuals in rural Shanxi! These rates ranged between 1% and 14.5% per year, and averaged 2.43%. If we include long-term loans, we get a comprehensive average yearly interest rate of 16.81%.

Table 1. Summary of lending rates by loan type

	<b>Total (monthly)</b>	<b>Silver (monthly)</b>	<b>Copper (monthly)</b>	<b>Changnian</b>
Average rate	21.01	18.48	23.43	2.43
Maximum observed rate	36.00	24.00	36.00	12.50
Minimum observed rate	12.00	12.00	18.00	1.00

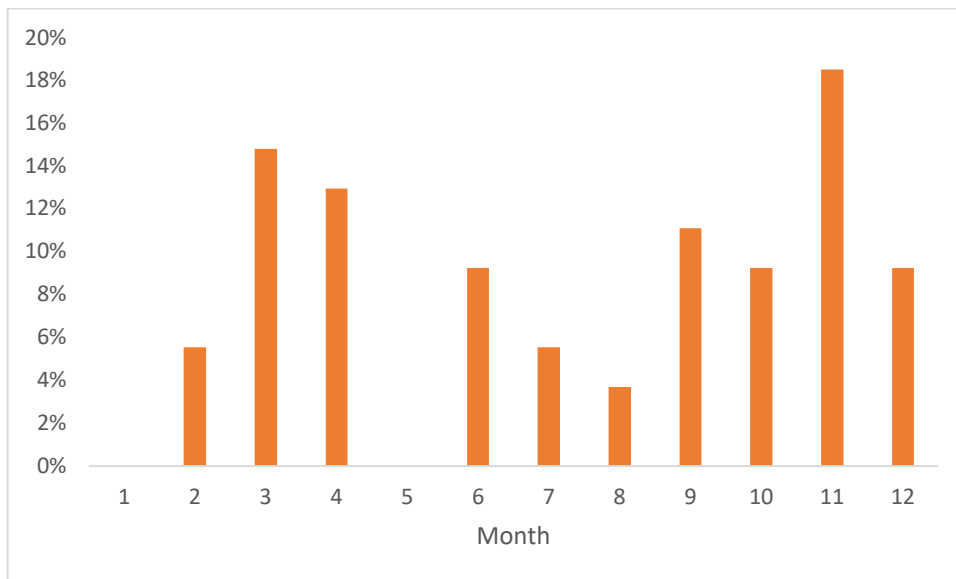
Source: Loan Contracts Between Individuals, LJMPC.

<sup>120</sup> Manhong Lin, *China Upside down: Currency, Society, and Ideologies, 1808-1856*, (Cambridge, Mass: Harvard University Asia Center, 2006).

These are much more reasonable interest rates than what is generally cited in the literature, and less than half of what Philip Huang cites as the normal range! All of a sudden, it does not appear strange to suggest that lending was competitive or that it went to production rather than unavoidable consumption.

Furthermore, the timing of the loans is significant. As Figure 2 shows, five months alone are responsible for nearly 70% of all lending.

*Figure 2. Share of Loan Originations by Month*



Source: Loan Contracts Between Individuals, LJMPC.

By far the highest lending demand fell in the eleventh month, followed by the third and fourth months.

To make sense of this timing, we can turn to the published historical records from the Communist Eighth Route Army. The Eighth Route Army was the predecessor of the People's Liberation Army, and was based in the Shanxi Taihang Mountains. According to its published sources, the communist "border government" distributed agricultural loans in three rounds. The first round of loans was issued between the second half of December and the end of January.



These loans were used largely for purchasing tools and livestock. The time frame does not map directly to the Qing lunisolar calendar, but falls basically in the lunisolar 11<sup>th</sup> month and early 12<sup>th</sup> month. The second round of revolutionary government agrarian lending lasted from the beginning of February to the end of March. These loans went to purchasing fertilizer and maintaining irrigation works. The time period corresponds roughly to the first and second months in the lunisolar calendar. The third round of lending took place in May, and was used for planting.<sup>121</sup> This was roughly the end of the third and the entire fourth month of the old calendar. It will be seen that the first and third rounds of revolutionary-base lending correspond almost exactly to the spikes in Qing-era rural credit. This is hardly dispositive, but it does suggest that much of the lending was used for production purposes. I believe there is another source of eleventh month credit demand as well. Debts were typically settled on Spring Festival, at the end of the 12<sup>th</sup> month; thus, borrowers who needed to roll over their debts had to find new sources of credit prior to the 12<sup>th</sup> month. Moreover, credit demand does not seem to be driven by exceptional events—the funerals, weddings, and other emergencies that are often cited in the literature. If they were, we would expect demand to be more or less randomly distributed. In short, the source of credit demand—or at least fluctuations in credit demand—appears to be agricultural production and financing.

Finally, it is worth pondering who the lenders and borrowers were. The lending contracts that I have from the Daoguang era feature a few names over and over again as creditors. Thus,

---

<sup>121</sup>Henan Sheng (China) and Henan Sheng dang an guan, eds., *Jin Ji Lu Yu Kang Ri Gen Ju Di Cai Jing Shi Liao Xuan Bian. Henan Bu Fen* 晋冀鲁豫抗日根据地财经史料选编: 河南部分 [*Selected Historical Materials Relating to the Finances and Economics of the Shanxi, Hebei, and Henan Anti-Japanese Revolutionary Base Areas*], Di 1 ban (Beijing Shi: Dang an chu ban she : Xin hua shu dian Beijing fa xing suo fa xing, 1985), 66-68.

Zhang Diangong, Jin Mingzhang, Wang Rumei were important lenders in their local communities.<sup>122</sup> Most scholars would no doubt classify such well-to-do lenders as landlords, and that is fair insofar as they certainly would have owned their own land, and probably rented it out to tenants. But the problem comes in assuming that the borrowers and the tenants were necessarily the same people. Over two thirds of borrowers posted collateral, usually land. Oftentimes the loans were collateralized with quite sizeable plots, ranging from one to fifteen and even as many as thirty mu. It does not appear, therefore, that loans were a means of keeping the humblest members of society in a form of debt peonage. Rather, credit was a valuable thing, and mainly available to those who already had some form of capital.

The Lineage Trust, or *tanghao* (堂号)

*Tanghao* (*tang* 堂号), “lineage halls,” or “landed lineage trusts” began to appear in the latter half of the 14<sup>th</sup> Century, patterned after similar institutions that had existed during the Song. These trusts were originally corporate entities formed to manage, expand, and prevent the partition of lineage landholdings. At first, they were managed by their founders, who acted as a kind of CEO. Over time they transitioned to a less centralized system, with different lineage branches exercising a degree of autonomy over their holdings or forming new lineage trusts to hold assets specifically for their branch.<sup>123</sup> In areas with large lineage trust holdings of

---

<sup>122</sup> I have not been able to locate where these contracts were originated. Because they were purchased from dealers on second-hand markets, this information has been lost. The only exception are a collection of contracts from Jin Mingzhang. I believe these came from Yangcheng county in present-day Linfen, or if not, then from Jiaocheng County in present-day Jinzhong.

<sup>123</sup> Joseph Peter McDermott, *The Making of a New Rural Order in South China* (Cambridge: Cambridge University Press, 2013), pp. 235-309.

timberland, lineage trust shares began to trade freely, becoming in essence a futures market in timber.<sup>124</sup> Madeleine Zelin’s seminal study of the Zigong salt merchants similarly identified lineage trusts as the key unit of corporate organization. She writes, “Among the great families of Furong it was precisely the institution of the lineage hall that permitted the consolidation of early economic successes and the development of modern management techniques. The ancestral hall and its accompanying estate became a substitute for the corporate business forms being developed in the West. For at least half a century the lineage trust was the structure within which business property was built up, diversified, and preserved against the ravages of the tax collector, the creditor, and individual family members.”<sup>125</sup> This understanding of the lineage trust maps closely with Yang Bo’s recently published doctoral dissertation. According to Yang, “...The *tanghao* performed the role of independent accounting unit, allowing profits to be held collectively under the *tanghao*...The *tanghao* was a simple form of business organization for lineages. There is little room for further classification of *tanghao*. Rather, *tanghao* differed only in the degree of business activities, with large lineages occasionally operating businesses that would thus use the character *tang* in the name. This form of *tanghao* was in reality simply

---

<sup>124</sup> McDermott, 395. McDermott studies lineage trusts in Huizhou. For a similar phenomenon in Guizhou, see Meng Zhang, “Timber Trade along the Yangzi River: Market, Institutions, and Environment, 1750–1911” (Ph.D., University of California, Los Angeles, 2017), 160. Note that the financial instruments McDermott and Zhang refer to as timber “futures” differ from contemporary futures: Qing-era timber shares were collateralized by real timber, and not merely derivative products. This is not the case with Qing-era financial futures, which, as we shall see in later chapters, evolved into true derivatives markets with all the speculative potential that entails.

<sup>125</sup> Madeleine Zelin, *The Merchants of Zigong: Industrial Entrepreneurship in Early Modern China* (New York: Columbia University Press, 2005), 84.

transferred from the its origins as a lineage trust onto the business institution.”<sup>126</sup> Lineage trusts should be seen, then, as a kind of general-purpose holding company for lineage assets.

In addition to owning land, lineage trusts were crucial holders of financial assets, including loans. They were among rural society’s most important lenders, and indeed provided a host of grassroots financial services.<sup>127</sup> Ming-te Pan recognized lineage trusts as credit suppliers, writing, “Credit service was one form of welfare that the organized lineage provided.” He goes on to clarify what he means by “welfare,” saying that members of a lineage could acquire loans at more advantageous rates than if they were to borrow outside of the lineage.<sup>128</sup> By looking at actual contracts of loans made by linages, I am able to examine lineage lending in finer detail. I find that, in fact, lineage loans were not cheaper than loans from individuals. The admittedly limited evidence suggests they may have been slightly more expensive. However, they seem to have had less exacting collateral requirements. The sample of loans that I have surveyed raise the possibility lineages were a lender to those who lacked the collateral necessary to get loans at the

---

<sup>126</sup> Yang Bo 杨波, “Songdai Yilai Taihangshan Diqu Cunshe Yanjiu 宋代以来太行山地区村社研究 [Study on Village Community (She) in Taihang Mountain Area since Song Dynasty]” (Ph.D. Dissertation, Baoding, Hebei, Hebei University, Center for Song History, 2020), 274. The original passage reads, “堂号作为独立核算单位的表现, 所有收益归这个堂号集体所有。除了极个别行业(如药店)之外, 商号一般不用“堂”作为名字, 堂号是家族性的比较简单的商号形式。只有分化程度很低的这一类家族性的商号才用堂作为名字, 实际上是将家族的堂号直接移用做商号的。” Though not directly relevant to this dissertation, Yang brings up one important caveat that scholars should be aware of: pharmacies and traditional medicine shops, which also frequently had *tang* in the name. Indeed, several examples include popular Chinese medicine brands, such as Tongrentang (同仁堂). I wonder if this is because pharmacies tended to stay within one lineage, but I have yet to find a reference for this.

<sup>127</sup> The rest of these services, including deposits, note-issuance, clearing, and brokerage, are the subject of Chapter 2.

<sup>128</sup> Ming-te Pan, “Rural Credit Market and the Peasant Economy (1600-1949): The State, Elite, Peasant and ‘Usury,’” *ProQuest Dissertations and Theses* (Ph.D., Ann Arbor, University of California, Irvine, 1994), ProQuest Dissertations & Theses Global (304081530), <https://search.proquest.com/docview/304081530?accountid=14657>, pp. 138.

lower individual-lending rates. That said, a caveat is in order: given the limited source material, it is quite possible that this is statistical noise. There may have been little to no difference between individual lending and lineage trust lending.

Evidence of lineage trust loans are ubiquitous in the Shanxi documents. The *LJMPC* collection includes 52 contracts of loans from lineages, along with a number of lineage account books. The contracts show that loans extended to peasants by lineage halls. The earliest such loan contract, Contract 1, dates from the first year of the Xianfeng reign (1850).

**Contract 1:**<sup>129</sup>      立借约人鄯天禧今借到  
多文堂大钱八千整，言明屡年交还，恐口无凭  
立借约为证明  
洋亲笔十  
咸丰元年十月廿九日      定  
Originating a loan to borrower Shan Tianxi, borrowing today from Duowen Hall 8,000 copper cash. It is clearly stated that the loan will be repaid in one year's time. Oral testimony will not be relied on, [therefore] we are establishing this [written] loan contract as proof.  
Signed personally [signed]十  
1851/10/29, Agreed

Contract 1 was taken out on the 29<sup>th</sup> day of the tenth month of the first Xianfeng reign year. It promises a certain Shan Tianxi 8,000 big copper cash from the Duowen Hall”, to be repaid in exactly one year. It further specifies that no receipt will be drawn up, and the contract itself will serve as proof of the loan. No mention of interest is made. The letter is signed with the borrower's “十”, the equivalent in the west of someone with no or limited writing ability signing one's “X” on a contract.

A contract from the fifth Tongzhi Reign year (1866), does show an interest payment.

---

<sup>129</sup> Contract with Duo Wen Hall, Lineage Hall Loans, Liu Jianmin Collection (LJMPC), 1

**Contract 2**<sup>130</sup>: 立揭【借】约人鄯福章今揭【借】到  
存余堂大钱四千整，言明案【按】月加二分 X  
X 行息，如还不到 X 托鄯 X 还，会一个收会 X  
本利六 X 还恐口无凭，立揭【借】月为证明  
亲笔十

同治五年三月初五日 定  
Originating a loan with Shan Fuzhang, to borrow  
Funds from at the Cunyu Hall in the amount of 8,000 copper cash with the spoken  
promise to pay 2.X% monthly interest.  
In the event the loan cannot be paid back, it will be repaid by Shan XXX. XXX  
Principal and interest X. Oral testimony will not be relied on, [therefore] we are  
establishing this [written] loan contract as proof.

Signed in person 十  
1866/3/5 Agreed

Contract 2 includes interest payments that are quite high, over 2% per month (the characters in the decimal place are illegible). We see a similar rate drawn up in a loan from the seventh year of the Guangxu Reign (1882), transcribed as Contract 3.

**Contract 3**<sup>131</sup>: 立揭【借】约人鄯洋今揭【借】到  
广盛堂大钱五千整，言明按月加利式分伍厘行息，如还不到今将自己所托鄯  
士恩宋会收会之银本利交还，恐口无凭立约为证据  
亲笔 十

光绪七年二月十五日立  
Originating a loan to Shan Yang, who on this day is borrowing from  
Guang Sheng Hall, an amount of 5,000 large copper cash. It is clearly stated that  
the loan shall accrue monthly interest of 2.5%. If the borrower is unable to repay,  
the honorable Shan Ensong's silver remittances will be surrendered as payment  
for interest and principal. Oral testimony will not be relied on, [therefore] we are  
establishing this [written] loan contract as proof.

Signed in person 十  
1883/2/5 Contracted

In this intriguing document, the Guangsheng Hall has lent 5,000 cash to Shan Yang. There is no maturity date, and the loan accrues 2.5% monthly interest. Interestingly, the loan is backed by a

---

<sup>130</sup> Contract with Cun Yu Hall, Lineage Hall Loans, LJMP, 2

<sup>131</sup> Contract with Guang Sheng Hall, Lineage Hall Loans, LJMP, 5

silver remittance from a relative of Shan Yang. In other words, the loan is collateralized by a kind of accounts receivable or perhaps by another note that is presumably not yet matured. The interest rate remains high.

Though less common than in interpersonal loans, *tanghao* loans also sometimes quote at the *changnian* rate. Contract 4 provides an excellent example of such a loan.

**Contract 4**<sup>132</sup>: 立借约钱交李伟今借到  
宁瑞堂名下九文钱一十五千文整，言明长年  
一分八厘行息，随便交还，恐口无凭，立约为证  
同治八年三月初十日 立借约人李伟十  
保还钱人张清栋十  
书人安文炳

Originating a loan contract for a copper cash loan to Li Wei, to be lent today  
In the name of Ning Rui Hall, to the amount of exactly 15,000 ben nine wen  
cash , with the clearly stated yearly interest rate of 1.8% to be repaid at any time.  
Oral testimony will not be relied on, so this contract will serve as proof.

On the tenth day of the third month of the eight Tongzhi Reign year  
Contracted Borrower Li Wei 十 [signed]  
Guarantor Zhang Qingdong 十 [signed]  
Notary An Wenbing

In this contract, the interest rate has declined substantially. The Ningrui Hall loan reads:  
*changnian yifenbali xingxi* (长年一分八厘行息), “or accrues interest at a rate of 1.8%  
annually.” The rate is a small fraction—less than one tenth—of the monthly rate. This shows that  
lineage trusts, like individuals, could initiate long-term, low-interest loans. Nor is Contract 4  
unique. Contract 5, from the first year of the Guangxu Reign (1875) read, tells a similar story.

**Contract 5**<sup>133</sup>: 凭券借到  
李光裕堂名下大钱三十五仟，言定每年

---

<sup>132</sup> Contract with Ning Rui Hall, Lineage Hall Loans, Liu Jianmin Collection (LJMPC), 3.

<sup>133</sup> Contract with Ning Rui Hall, Lineage Hall Loans, LJMPC, 4

一分二厘行息，不计年限，交还恐口无凭，  
立此字为据

中人王福有十

光緒元年七月初一日 立借字人梁应升悉

光緒九年八月十四日将本钱利钱还清

In accordance with this certificate, to borrow:  
Under the name of Li Guang Yu Hall, 35,000 wen of big cash, with the agreement to pay annual interest of 1.2%, without recording a maturity date for repayment. Oral testimony will not be relied on, [therefore] we are establishing this [written] loan contract as proof.

Broker: Wang Fuyou 十

First day of the seventh month of the first year Guangxu Reign year.

The fourth day of the ninth month of the 9<sup>th</sup> year of the Guangxu Reign, the principal and interest on this certificate have been paid in full.

This contract is rich in information. First, the interest rate is low, only 1.2% per year.

Once again, it is quoted at a *changnian* rate, rather than a monthly rate. It is also revealing that the loan was originated in the first year of the Guangxu reign, but only repaid in the ninth year. This means it was extended for fully nine years before redemption! This is a case of long-term financial capital being priced extremely low. I do not wish to overstate the importance of this finding. Apart from these contracts, all other lineage trust contracts quote monthly rates. But it is worth noting that the *changnian* rate is seen far more frequently in urban financial markets in the account books of specialized financial institutions. The *changnian* rate fluctuated separately from the short-term, monthly rate, and was almost always quite low. To see *changnian* rates quoted in rural loan contracts is therefore jarring. It should make us hesitant to trust in stories about exorbitant lending rates being the norm in rural China.



The interest rates in the sample of lineage trust loans I have examined are considerably higher than the contracts for interpersonal loans.<sup>134</sup> The average lending rate is 1.99% per month on loans that accrue interest monthly. Moreover, there are fewer loans at the *changnian* rate, only two out of 15. It would be premature to say that lineage trusts were more expensive than interpersonal loans. Possible confounders abound. The lineage trust contracts are mostly for loans in copper cash, could potentially be from different parts of Shanxi province, and the source only starts in the 1851 with the majority of samples coming from the Republic. Thus, at present all we can say is that lineage loans do not seem cheaper than other loans. This further suggests the existence of an integrated, competitive market—rather than a system in which credit was extended to kinsmen as part of a moral economy.

Interestingly, far fewer of the lineage loans contracts include land as collateral when compared to individual loans. More often, the loans are backed by a guarantor or guarantors, a single room or cave dwelling, or a very small plot of around 1 mu. In the one contract I have seen so far with 10 mu posted as collateral, there is no interest required and the loan is short term. In that sense, there is a kernel of truth in the notion that lineages were “welfare” institutions. Lineage trusts seem to have provided loans to peasants without collateral to borrow from individuals; but they also seemed to have charged a premium for it.

Finally, the seasonality seen in individual contracts is even more pronounced in lineage contracts. Nearly seventy percent of lineage loans were originated in the fourth quarter of the year. Another 20% were originated in the third and fourth months, right before planting season. Once again, the drivers of credit demand were agricultural production and financial settlements.

---

<sup>134</sup> This is 15 contracts out of 52; if this analysis is interesting I will enter the rest into the database.

Loans from *Zihao* (字号), “Corporate Entities,” or “Commercial Entities”

*Zihao* (字号), or commercial entities, were ubiquitous in northern China, particularly where Shanxi merchants were active. Starting in the Qianlong reign, stele from Shanxi temples list *zihao*, rather than gentry, as their principal donors. Along Shanxi merchant trade routes, there are tens of thousands of *zihao* listed—even in the deepest, most isolated villages—on rural temple stele.<sup>135</sup> These *zihao* were unlimited liability, and were formed for limited periods of time by investors. For larger *zihao*, a full-time manager might be appointed.<sup>136</sup> Ming-te Pan has shown that *zihao* extended trade credit in the form of *shexiao* (赊销), a kind of accounts receivable, to their customers.<sup>137</sup> This section draws on loan contracts from *zihao* republished in *Jinshang Shiiiao Jicheng* to expand on Pan’s work. It shows that, at least in the north, *zihao* were also active in financial credit. That is, not only did they provide goods on credit, but they also extended money loans to clients and other borrowers in return for money interest. In addition,

---

<sup>135</sup> Yang Bo 杨波. “Songdai Yilai Taihangshan Diqu Cunshe Yanjiu 宋代以来太行山地区村社研究 [Study on Village Community (She) in Taihang Mountain Area since Song Dynasty].” Ph.D. Dissertation, Hebei University, Center for Song History, 2020; Meng Nan 孟楠, and Meng Wei 孟伟. “Cong Guangzhou Dao Shanghai: Yincang Zai Minjian Wenxianzhong de Qingdai Zhongguo Jinrong Guanlian Yu Bianqian: Yi ‘Guangxu Shisi Nian Dongyue Jili Wechanghou Piaohao Shanghai Fenhao Tongnian Jiezhang’ Wei Zhongdian Shizheng 从广州到上海：隐藏在民间文献中的清代中国金融关联与变迁——以《光绪十四年冬月吉立·蔚长厚票号上海分号通年结账》为重点的实证 [From Guangzhou to Shanghai, Using Popular Materials to Uncover Qing-Era Financial Connections and Changes: A Case Study of Weichanghou’s Yearly Account book],” Unpublished.

<sup>136</sup> Liu Qiugen 刘秋根. *Zhongguo Gu Dai He Huo Zhi Chu Tan 中国古代合伙制初探 [An Exporation of Ancient Chinese Partnership Forms]*. Beijing: Ren min chu ban she, 2007.

<sup>137</sup> Ming-te Pan, “Rural Credit Market and the Peasant Economy (1600-1949): The State, Elite, Peasant and ‘Usury,’” *ProQuest Dissertations and Theses* (Ph.D., Ann Arbor, University of California, Irvine, 1994), ProQuest Dissertations & Theses Global (304081530), pp. 165-170. Pan does indeed mention cash loans, but he does not discuss them. Also see Ming-te Pan, “Rural Credit in Ming-Qing Jiangnan and the Concept of Peasant Petty Commodity Production,” *The Journal of Asian Studies* 55, no. 1 (1996): 94-117 <https://doi.org/10.2307/2943638>.

show that *zihao* extended long-term low-interest loans that appear to have mainly productive and/or commercial applications.

A contract from the 52 reign year of the Qianlong (1787) emperor is the earliest example I have of such a loan. I have transcribed it as *zihao* Contract 1.

**Contract 1<sup>138</sup>:** 立约人任广今欠到  
万盛玉记名下培补长支肆拾柒两六钱五分，言定自五十三年起，五年拨还，恐口无凭立欠约存照用

乾隆五十二年五月初一日 立欠约人任十  
中见人 贾进隆  
张怀鹤

Originating a contract for a loan to Ren Guang, borrowing from Wanshengyu Ji to cover a shortage of 47.65 taels of silver, clearly stated to be paid back over a period of five years commencing in 1788. Oral testimony will not be relied on, [therefore] we are establishing this [written] loan contract as proof.

1787/5/1 Borrower Ren [signed] 十  
Brokers Jia Jinlong [signed] 十  
Zhang Huaihe [signed] 十

Contract 1 looks to be in a similar genre to the credit studied by Ming-te Pan. A corporate entity, Wanshengyu, is extending interest-free credit to Ren Guang, most likely a customer. Moreover it is to “make up a shortfall” which suggests that Wanshengyu is extending credit so that Ren Guang can complete a purchase of some kind. We see a similar relationship in Contract 2, again for a loan extended by Wanshengyu.

**Contract 2<sup>139</sup>:** 立欠约人陈永泰今欠到  
万盛玉记名下系收过家居债务银两净欠纹银一百元五两式钱一分，同中言明五年后十年拨还，恐无凭，立约存照。  
乾隆五十四年十月廿二日陈永泰十  
保正李壬汉十、任兆熊十、贾兆麟十、魏育贤十

---

<sup>138</sup> Loans from Zihao, LJ MPC, 1.

<sup>139</sup> Loans from Zihao, LJ MPC, 3.

中人马德元十、闫世富十、杜斗珏十

Originating a debt contract with Chen Yongtai, borrowing from Wanshengyu, this is for receiving home debt with the outstanding amount of 105 silver dollars and 5.21 taels of pure silver. It is clearly stated that this will be repaid beginning in five years, over a time period of ten years. Oral testimony will not be relied on, [therefore] we are establishing this [written] loan contract as proof.

Guarantors Li Renhan [signed]十, Ren Zhaoxiong [signed]十, Jia Zhaolin [signed]十, Wei Yuxian [signed]十

Brokers: Ma Deyuan [signed]十, Yan Shifu [signed]十, Du Doujue [signed]十

In this contract, Wanshengyu is again extending credit. This time it appears to be financing the construction or purchase of a home, or perhaps the purchase of large amounts of furniture. The interest rate is high, at 2.1% per month, though the borrower has ten years to pay it off and Chinese quoted rates are non-compounding. Crucially, the loan is denominated in money, and charges money interest.

Other *zihao* loans were purely financial, and resembled loan contracts between individuals. Contracts 3 and 4, for loans issued by Yongshunxing (永顺兴), reflect such loans.

**Contract 3<sup>140</sup>:**

立揭钱交字人张士春今揭到  
永顺兴记名下钱本二十千整，同众[中]言明  
每月每千一分八厘行息，日欧交还，按月清算，不许短少，限至九月  
内交还，恐后无凭，立约存用  
乾隆五十七年四月初三日厘自正  
中见人宋元清、张正汉

Originating a loan with signatory Zhang Shichun, borrowing from Yong Shunxing, principal of 20,000 copper cash. Stated clearly to accrue an interest of 1.8% per month. After tomorrow, interest will be settled monthly. It is not permitted to be short. The principal is due by the end of the ninth month. Oral testimony will not be relied on, [therefore] we are establishing this [written] loan contract as proof.

1792/4/3 Signed  
Broker Song Yuanqing, Zhang Zhenghan

---

<sup>140</sup> Loan contract between Zhang Shichun and Yongshunxing Co, Loans from Zihao, LJMP, 4.

**Contract 4<sup>141</sup>:** 立欠约人增盛店弓彤今借到  
永顺兴记名下元宝银五十一两四钱二分、碎白银五十两正，  
言明每月八厘行息，限秋后买花用，恐后无凭，立约为证，系本号平  
兑

嘉庆九年三月廿五日 弓彤自证

Originating a loan with signatory Gong Tong of the Zengsheng Store, borrowing from Yongshunxing, to the amount of 51.42 taels of yuanbao silver and 50 taels of crushed silver. It is clearly stated that this loan will accrue interest of 0.8% per month, and its use restricted to purchasing the post-Autumn cotton. Oral testimony will not be relied on, [therefore] we are establishing this [written] loan contract as proof. Measurements shall be used with our own [Yongshunxing's] scale.  
1796/3/25

Gong Tong serving as own broker

These contracts both show loans from a *zihao*, Yongshunxing, to its customers. The first loan is for 20,000 in copper cash with an interest rate of 1.8% per month. It is a short-term loan, for only five months of the year. Presumably, this was the period in which the borrower Zhan Shichun faced his highest capital requirements. In this sense, the loan would have been similar to those examined by Ming-te Pan. The second loan is even more interesting. The interest rate is not high by pre-modern standards. At 0.8% monthly, it translates to roughly 10% per year. Moreover, it is explicitly earmarked for trade credit, that is, for purchasing cotton. This is a clear example of an interest-bearing cash loan used for commercial purposes.

The above examples, admittedly, reflect *zihao* borrowing from other *zihao* and thus may not prove much about the kinds of credit-supplying institutions accessible to peasants. But Contract 5 shows that in addition to lending to support trade, corporates also lent on land.

---

<sup>141</sup> Loan contract between Gong Tong of Zengsheng Store and Yongshunxing Co, Loans from Zihao, 5.

**Contract 5<sup>142</sup>:**

立借文约人赵昌安今借到  
丰裕公宝号本钱二十吊整言明每月一分行息。内当村西孔家营地六亩，东至梁全德，西至裴天赐。限至明年五、六月清还，如日本利不到本到，钱主作业，恐后无平，立约为证。

书人赵培兰十  
道光二十五年十二月初五日立借文约赵昌安十

Originating a loan contract with Zhao Chang'an, to borrow from Fengyugongbao Co. principal of 20 strings of copper cash, with the interest clearly stated as accumulating at 1% monthly. This loan is secured by posting collateral of a plot of 6 mu[1 acre] of the Kong family in the western part of the village. The plot's eastern edge extends to Liang Quande; its western edge extends to Pei Tianci. The loan shall be paid in full in the fifth or sixth month of next year. In the event that the principal and interest are not paid in full at this time, the usufruct rights of this land will transfer to the creditor. Oral testimony will not be relied on, [therefore] we are establishing this [written] loan contract as proof. Measurements shall be used with our own [Yongshunxing's] scale.  
Notary Zhao Peilan [signed] 十  
1845/12/5 Borrower Zhao Chang'an [signed] 十

This is a remarkable document. It shows a loan for 20 strings of cash from a corporate entity called Fengyugongbao Co. to a Mr. Zhang Chang'an at a rate of 1% monthly. The tenure of the loan is five months to half a year. Most interestingly, as security, Zhang Chang'an has put up a 6-mu plot of land, roughly equal to one acre. In this case, the contract specifies that “如日本利不到，钱主作业”，or “In the event that the principal and interest are not paid in full at this time, the usufruct rights of this land will transfer to the creditor.” This tells us that the loans was collateralized by farmland. In other words, peasants with property were able to access the corporate credit market. Nor is this contract unique. Contract 6, from the Xianfeng reign, tells a similar story:

---

<sup>142</sup> Loan contract between Zhao Chang'an and Fengyugongbao Co, Loans from Zihao, LJMPC, 19.

**Contract 6<sup>143</sup>:** 立揭钱文字人田德仓今揭到  
积成号正本大钱四十仟整，同中言明每月二分行息，不许短少，恐口无凭，  
立字为证  
咸丰三年五月十五日立揭钱文字人田德仓书  
后批：六亩地，六亩四分本利不到将地管业，契书未氏  
保人牛永义

Originating a contract for a loan of copper cash to Tian Decang, borrowing from Jicheng Co. principal of 40,000 copper cash. It is clearly stated this will accrue interest of 2% per month, and must be paid in full. Oral testimony will not be relied on, [therefore] we are establishing this [written] loan contract as proof.

1853/5/15 Signed by Tian Decang

Addendum: 6 mu of land. If the principal and interest are not repaid, the lender shall receive usage rights over this 6.4 mu of land.

Guarantor Niu Yongyi.

Once again, we see a landowner able to pledge usufruct rights in return for a loan. If Tian Decang does not make good on his debts, the Jicheng company will be able to work his land. Thus, at the very least Tian Decang is able to hypothecate his own, alienable rights to work the land for credit.

In Contract 7, we get more detail about the kinds of property rights that peasants could use to obtain loans from corporate actors.

**Contract 7<sup>144</sup>:** 立借约人宋德元因手中不便今借到  
义盛长宝号名下本钱十五仟整，言明每月壹分伍厘行息，恐人失信  
今将自己典到村西口上一墩，计地十三亩，又村南地一墩，计地六亩质当在  
内，如有一季利钱不到，许钱主作业，恐口无凭立借为证  
咸丰九年十二月廿五日立借文约人宋德元十  
抽回赵 X 卖借约  
中人张步青书

Originating a contract for a loan to Song Deyuan, own account of him being short of cash and therefore inconvenienced. Song will borrow from: Yishengchang Co. principal of 15,000 copper cash. It is stated clearly that this loan will accrue an interest of 1.5% per month. If the borrower absconds, his *dian*

---

<sup>143</sup> Loan contract between Tian Decang and Jicheng Co, Loans from Zihao, LJMPC, 25.

<sup>144</sup> Loan contract between Song Deyuan and Yishengchagn Co, Loans from Zihao, LJMPC, 41.

of a plot of land at the western mouth of the village totaling 13 mu as well as his *dian* of a plot of land at the southern end of the village totaling 6 mu, shall be pledged as collateral. In the event the interest is late by one season, the creditor shall have usufruct rights over this land. Oral testimony will not be relied on, [therefore] we are establishing this [written] loan contract as proof.

1859/12/25, loan contract originated and signed by Song Deyuan [signed] 十  
Marginalia: Revoking Mr. Zhao's sales contract

Broker: Zhang Buqing, signed

Contract 7 is extremely rich with information. Song Deyuan borrowed 15,000 copper cash from a company called Yishengchang at a rate of 1.5% per month. As collateral, he mortgaged a total of 19 mu of land. But his rights to this land are specifically those of a *dian* holder; that is, they were purchased in a “live sale.” This means that Song Deyuan owned the topsoil rights to the land, but that some other family owned what was essentially a “call” on these rights. Since live sales were the most common way of raising money, it is extremely important that they could be re-hypothecated for loans from corporate entities. This suggests a highly liquid, flexible financial market in which many, many peasants (i.e., *dian*-holders) would have access to corporate credit. Note that this also pressures Taisu Zhang's model.<sup>145</sup> If *dian* could be re-hypothecated for credit, then the institution of live sales does not appear to be an obstacle to greater concentration of wealth. But this wealth is concentrated not in acreage of land, but on the balance sheets of corporate entities and financial institutions.

A similar lending relationship is reflected in Contract 8, drawn up in the second year of the Daoguang reign:

**Contract 8**<sup>146</sup>: 立借银文约人闰生名，因为使用不便今借到泉掌聚茂号元系银式拾五两整，同中言明每月每两壹分五厘行利，其银执当自己上川里永井地一亩二分，系

---

<sup>145</sup> Taisu Zhang, *The Laws and Economics of Confucianism: Kinship and Property in Pre-Industrial China and England*, Cambridge Studies in Economics, Choice, and Society (Cambridge, United Kingdom: Cambridge University Press, 2017).

<sup>146</sup> Loan contract between Lü Shengming and Manager Quan of the Jumao Co, Loans from Zihao, LJMPC, 55.



南北 x, 东至闾五门, 西至杨太平, 南至渠道, 北至渠, 一段系东西 X, 计地四分亦永井地, 东至闾重平西南至渠, 北至闾金元, 两段四至开明, 行轆依旧如付银利不至, 银主赎业, 恐口无凭, 立借约存照  
同治二年九月二十七日立借银文约人闾生名十  
中人闾九 X、闾知三

Originating a loan of silver to Lü Shengming who is short of funds and therefore inconvenienced. He will today borrow from Manager Quan at Jumao Co. principal of 25 taels of yuanxi silver. It is clearly stated that the loan will accrue interest at a rate of 1.5% per month. This silver is backed with a pawn of Lü Shengming's own land. There is one plot near the river on which he enjoys perpetual tenancy rights totaling 1.2 mu. This plot stretches north to south. To the east it extends to the Lü five doors, to the west it extends to Yang Taiping, to the south it goes to the irrigation ditch, to the north it extends to the irrigation ditch. The other plot stretches east to west, and consists of 0.4 mu on which he enjoys perpetual tenancy. To the east, this extends to Lü Zhongping, to the southwest it extends to the irrigation ditch, to the north it extends to Lü Jinyuan. The two plots of land are thus clearly delineated. As usually, if the borrower fails to pay interest, the lender has the rights to redeem this land. Oral testimony will not be relied on, [therefore] we are establishing this [written] loan contract as proof.  
1863/9/27, Contract Originated with Lü Shengming [signed] 十  
Brokers Lü JiuX, Lü Zhisan

This contract shows Lü Shengming borrowing 25 taels of silver from the manager of the Jumao company at a rate of 1.5% per month. As security for the loan, Lü Shengming has pledged two small plots of land, totaling 1.6 mu. The plots are said to be “永井地” (*yong jingdi*), but the middle character *jing* (井), or “well,” is an abbreviation of *geng* (耕), or “till.” Thus, they should be understood as *yonggengdi* (用耕地), that is, rights of permanent tenancy. In the event of default, the borrower can “redeem” the lend, i.e., remove the tenant and himself enjoy the rights of permanent tenancy. This indicates that the permanent tenancy rights are what Cao Shuji has described as “de facto topsoil rights,” in that they can be alienated from the holder.<sup>147</sup> What is

---

<sup>147</sup> Cao Shuji 曹树基, and Liu Shigu 刘诗古. *Chuantong Zhongguo Diquan Jiegou Ji Qi Yanbian 传统中国地权结构及其演变 [The Structure and Evolution of Land Rights in Traditional China]*. Shanghai: Shanghai Jiaotong Daxue Chubanshe 上海交通大学出版社 (Shanghai Jiao Tong University Press), 2014.

important for our purposes is that a peasant of rather humble means is able to access credit markets through a *zihao*. Lü Shengming is a tenant farmer with only 1.6 mu of land, and yet is able to pledge this in return for a loan from a local corporation.

In summary, *zihao* lending is important for two reasons. First, it shows that commercial entities acted as institutional lenders at the grassroots of society. Not only did they extend trade credit to customers or business partners, but they even extended monetary loans collateralized with farmland. Second, the fact that *zihao* were willing to accept land as collateral may also tell us something about the land market. Namely, corporate entities formed for profit were confident that in the event of default they would be able to make good on their capital by taking possession of farmland. This indicates a highly entrepreneurial approach to agriculture.

Finally, there is still the important question of the cost of *zihao* financing. The most rigorous attempt to calculate corporate lending costs to date comes from Pan, who estimates corporate lending costs at 37.5% per year. He backs into this rate by calculating “implicit interest.” This is a concept he borrows from contemporary futures markets. If the S&P is trading at 3,000 (an increasingly fanciful counterfactual, one fears), and next month’s S&P futures are trading at 3,003, this “implies” a monthly interest rate of 1%. This is because market participants can guarantee a risk free monthly return of 1% by buying the S&P and shorting S&P futures. As a result, if interest rates fell below 1%, market participants would borrow at the interest rate, buy S&P indices, and short S&P futures—making a risk-free effortless profit. If interest rates went above 1%, no one would borrow in the money market; instead they would short the S&P and long S&P futures. Thus, arbitrage will cause the price differential between spot and futures prices to have a direct relationship with the risk free rate. (In practice it’s a little more complicated because the S&P yields dividends). Thus, in our toy model of the market, the

implicit interest rate is equal to the forward price minus the spot price divided by the spot price.

This is essentially how Pan performs his calculation:

Peasants paid implicit interest when they purchased leaves in this fashion. The unit for purchasing leaf was the ge (20 catties). On average, the cash purchase price of mulberry leaf during the seventeenth and eighteenth centuries was around 0.05 tael per ge. When peasants purchased leaves on credit, they would pay 0.0625 tael plus 0.00625 tael of "miscellaneous fees" per ge. The 0.01875 tael increment in the leaf price was the implicit interest on the 0.05 tael of leaves. This turned out to be an interest rate of 37.5 percent on the advanced leaf price within a month or even shorter interval.<sup>148</sup>

Pan's calculations are a reasonable back-of-the-envelope approximation of financing costs; but to jump from toy-model finance to projections of real-world historical interest rates is going too far. Unfortunately, commodities are not the same as S&P futures, and future/spot price differentials are determined by more than the interest rate.

In commodities markets spot/futures prices differ by the total cost of carry; not merely by the financing cost of carry. In other words, the return to owning a warehouse or the returns to inventory must be accounted for. A world in which the implicit interest rate truly equals the money interest rate is a world in which no one has any use for storage. I do not know what storage costs of mulberry leaves were, but given their highly seasonal nature, such costs must have been considerable. Indeed, Pan is clearly aware of this. He writes, "However, *sheshao* allowed peasants to plan their production goals in advance and avoid the risks involved in leaf price fluctuations... Even if the purchaser had to pay interest, given the fact that the price of mulberry leaf might double or even triple within a few months from late winter to late spring,

---

<sup>148</sup> Ming-te Pan, "Rural Credit in Ming-Qing Jiangnan and the Concept of Peasant Petty Commodity Production," *The Journal of Asian Studies* 55, no. 1 (1996): 94–117, <https://doi.org/10.2307/2943638>.

purchase on credit was a good way to avoid the market risk.”<sup>149</sup> This tells us two things. First, if price movements within one month were *reliably* on an order of 100% to 200%, then we are no longer dealing with pure financing costs. The leaf suppliers must be providing considerable storage value, or else everyone with spare cash would purchase mulberry leaves to flip them a month later. Note that this all strengthens Pan’s central argument that credit was priced low enough to support productive industry. My only disagreement is his treating 37.5%—which includes services such as storage and the offloading of risk—as if it were cost of credit.<sup>150</sup> Thus, I take issue with Pan’s conclusion that “The interest that peasants paid for obtaining credit was high...peasants had to pay a monthly interest rate which ranged between 10 and 38 percent.” So if Pan has overstated the cost of credit from merchant financing, then what was the real cost?

Fortunately, the Shanxi materials offer direct evidence of the insertion of financial capital into productive commerce and production. Above, I have already provided examples of *zihao* extending loans to peasants and to clients. But what is especially interesting is that *zihao* loans are often quoted at the *changnian* rate. Contract 9 is an example of truly low cost credit being extended from one institutional entity to another:

**Contract 9<sup>151</sup>:**       凭票借到，  
                          阜元宝堂本无色宝银一千两整，言定长年三厘三毫行息，期至来年兑日，在  
                          平交还，勿误此据

---

<sup>149</sup> Ming-te Pan, “Rural Credit in Ming-Qing Jiangnan and the Concept of Peasant Petty Commodity Production,” *The Journal of Asian Studies* 55, no. 1 (1996): 94–117, <https://doi.org/10.2307/2943638>.

<sup>150</sup> The problem with such a methodology becomes especially clear at the extremes. If you ignore risk and storage costs when calculating implied interest, then I could gift you a call option on the futures of any commodity literally for *free*, and it will look like I am extending you a high-interest loan. Pan does not say what the recourse was in the event of *shexiao* defaults, but as long as they were not full recourse then there was considerable optionality at play.

<sup>151</sup> Loan receipt from contract between Fuyuanbao Hall and client, loans from *zihao*, LJMPC, 20.

其平照泰泉茂 50 两红铜码足兑  
左立基经手  
道光二十七年九月初十日立集益公记

Marginalia:

还清，无用讠

To the bearer of this note, a loan shall be issued from Fu lineage Yuanbao Hall a principal of 1,000 taels of colorless silver. The interest is clearly set at an annual rate of 0.33% per annum, with the maturity fixed for one year to this date, to be repaid at the Pingyao County seat. Do not lose this note.

The measurements shall be done according to Taiquanmao's 50 tael red copper scale, and shall be measured fully

Broker Zuo Liji

1847/9/10 contracted [sealed] Jiyigongji

Marginalia:

Paid in full, voided.

In this contract, a corporate entity called the Jiyigong Company has borrowed the princely sum of 1,000 silver taels from the Yuan Bao lineage hall, owned by the Fu Lineage. The contract specifies that the loan should be repaid in Pingyao, indicating that one or both of the parties to the contract had businesses in many locations. In addition, it specifies that the taels will be measured according to a third *zihao*, Taiquanmao's, scale. There is no record of what any of these corporate entities did, but Taiquanmao must have been an important entity. It was clearly operating in Pingyao, and appears also to have had interests in the other Shanxi financial hub of Taigu county. A stele from 1842 commemorating the refurbishment of Taigu's *Daguanlou* (大观楼) lists Taiquanmao as a donor.<sup>152</sup>

This does not form a direct comparison with Pan's loans, as this is an intercorporate loan rather than a loan to a peasant. But it does blur the lines between intra-village/inter-village institutions according to Pan's classification system. The financier is a *tanghao* located in

---

<sup>152</sup> Shi Ruomin 史若民. *Ping, Qi, Tai Jing Ji She Hui Shi Liao Yu Yan Jiu* 平、祁、太经济社会史料与研究 [Pingyao, Qixian, and Taigu Economic and Social Historical Materials and Research]. Edited by Niu Bailin 牛白琳. Di 1 ban. Taiyuan: Shanxi gu ji chu ban she, 2002, 363.

Pingyao. A *tanghao*, if one accepts Pan's typology, should be the epitome of a local, intra-village actor. Yet this *tanghao* is offering credit financing—at enormous volume and at extremely low rates—a merchant enterprise. Moreover, whatever line of business Jiyigong was engaged in, we know it had large geographical scope that went beyond the confines of Pingyao county. Otherwise, the loan contract would not have needed to specify that the loan would be repaid at Pingyao. In short, this contract shows nothing less than the insertion of financial capital accumulated by lineages into interregional commerce.

The low *changnian* rate is typical of corporate loans quoted in terms of annual interest. Another contract from the Xianfeng reign can be seen in Contract 10.

**Contract 10:**<sup>153</sup>      立借银文约号天锡长今借到  
义顺昌号内足色宝银叁佰五拾柒两叁钱五分同中言明长年五厘行息，限至三  
年本利归还清楚，两出清【情】愿并无异说，恐口难凭，立借银文约为证  
咸丰五年二月初三日  
立借银文约号天锡长十  
同中人李贵元、温学诗同证  
书人闫和柔  
Originating a contract with the company Tianxichang, today borrowing from  
Yishunchang Company, 357.35 taels of full color silver. It is clearly stated that  
the loan will accrue an annual interest of 0.5%. The principal and interest shall be  
repaid within three years. The two parties are both willing to agree to this and  
there is no disagreement. Oral testimony will not be relied on, [therefore] we are  
establishing this [written] loan contract as proof.  
1855/2/3  
Originating a loan contract with the company Tianxichang [signed] 十  
Brokers Li Guiyuan and Wen Xueshi both bearing verifying  
Actuary Yan Herou

In Contract 10 the corporate entity Tianxichang is borrowing 357.35 taels of silver from the Yishunchang Company. Once again, the interest rate is extremely low; 0.5% per annum with a

---

<sup>153</sup> Loan contract between Tianxichang Co. and Yishunchang Co, Loans from Zihao, LJMP, 32.

maturity of three years. Most likely, Tianxichang was a customer of Yishunchang otherwise the loan would make little economic sense. It is likely that this is a similar kind of loan to those examined by Pan, but of course the rate is much lower and the loan is a formal financial arrangement, rather than a trade payable. It is impossible to specify exactly what kind of relationship the two companies had, but I can hazard a guess. In the early Republic, Tianxichang was the name of a prominent trading company from Liulin township that dealt in miscellaneous goods or *zahuo* (杂货), particularly in grain and cigarettes. It had branches all over Shanxi.<sup>154</sup> Shunyichang was the name of a venerable, old trading company that specialized in wood products based in Zhangjiakou.<sup>155</sup> It is likely that Shunyichang was given credit to Tianxichang in order to help finance its own sales of products from the overland trade to parts southeastward.

Lest I give the misimpression that low yearly rates were something only available to other corporate entities, or perhaps privileged entities with access to high finance, Contract 11 gives an example from somewhere in the countryside.

**Contract 11**<sup>156</sup>: 立揭钱文约人郭慎行因为使用不便今揭到士升合名下本钱五千文整，同保言明每年三分出利，此本钱指【执】当房院地土一分之业，日后利钱不付，保人耕地耕业，立日地内随粮钱五十文，恐口不凭，立揭为证  
光绪二年十一月初三日立约人郭慎行十  
保钱人郭镇成  
Originating a contract with borrower Guo Shenxing, who is short of funds and inconvenienced, to borrow from the Shisheng Company principal of 5,000 copper cash. It is guaranteed and clearly stated that the loan shall accrue an annual interest of 3%. The principal is collateralized with land near the borrower's courtyard amounting to 0.1 mu. In the event of default on principal and interest, the guarantor shall enjoy usufruct and usage rights over this land. The land tax is 50 copper cash. Oral testimony will not be relied on, [therefore] we are establishing this [written] loan contract as proof.

---

<sup>154</sup> Li Jiulin (李九林), ed., *Liulin County Gazetteer* (柳林县志) (Haichao Press, 1995), 313.

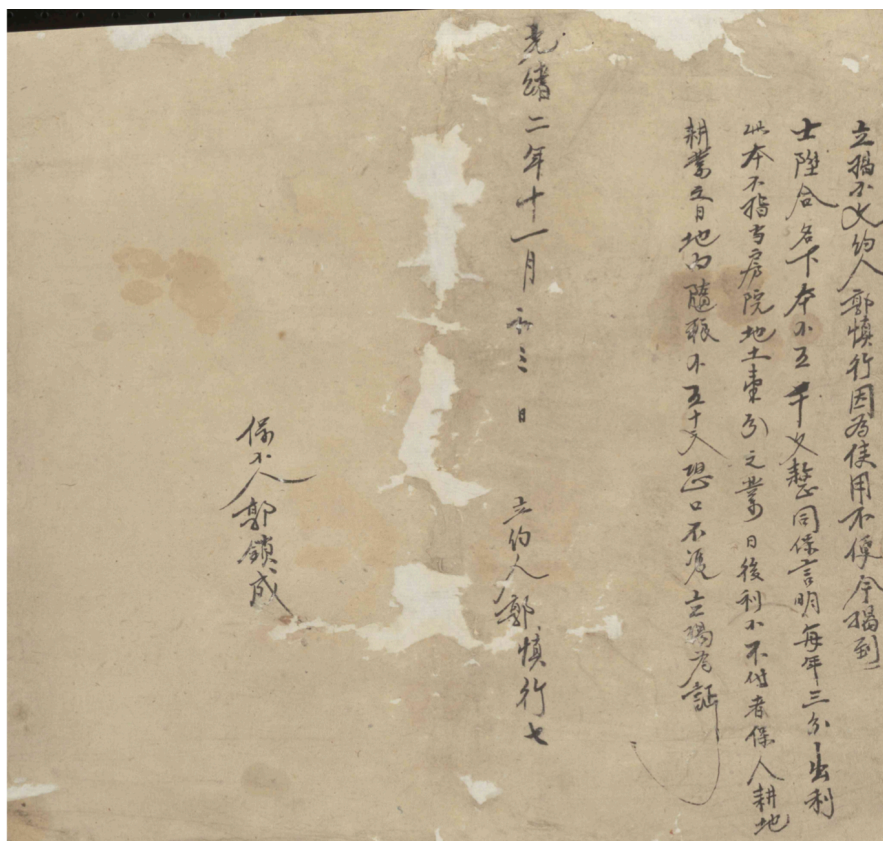
<sup>155</sup> Zhangjiakou Municipal Gazetteer Editorial Committee, ed., *Zhangjiakou Municipal Gazetteer* (张家口市志) (China Translation & Publishing Corporation, 1998), 510.

<sup>156</sup> Loan contract between Guo Shenxing and Shisheng Co, Loans from Zihao, LJMP, 82.

1876/11/3 Contracted with Guo Zhenxing [signed] +  
Guarantor Guo Zhencheng

The contract shows a borrower, Guo Shenxing, putting up an extremely small amount of land as collateral in return for a decent-sized loan, 5,000 copper cash. The interest is quite low, at 3% per year. Moreover, as Image 1 shows, this is not a printed contract, but is written in what appears to be a fairly rustic script.

*Image 1. Loan contract between Guo Shenxing and Shisheng Company*



Source: Loan contract between Guo Shenxing and Shisheng Co, Loans from Zihao, LJMP, 82.

That is, the transaction gives every indication to be occurring in the grassroots agrarian economy, rather than in the realm of high finance.

I believe that corporate entities were nearly all willing to engage in financial operations, as long as such transactions were profitable or made commercial sense. The record shows that



grain merchants made not only loans in kind, but financial loans that accrued cash interest. The *LJMPC* contains a book of client accounts, or *wanglaizhang* (往来账) from the Changshengyuan (昌盛源) grain merchant that was drawn up in the sixth year of the Tongzhi Reign (1867). The account book tells the story of a grain merchant that is almost as much of a financing agent as it is a grain marketer. Thus, one entry reads:

**Entry 1:**<sup>157</sup> 李自亦  
3年十二月廿九日借本钱叁仟玖佰文, 3分  
共欠利银钱叁千贰百四十文  
Li Ziyi  
1864/12/29 loaned principal of 3,900 copper cash. 3%.  
Interest in arrears of 3,240 copper cash.

The following entry is similar, reading:

**Entry 2:**<sup>158</sup> 李自山  
2年四月廿九日借本壹千捌佰文, 3%  
共欠利钱壹千壹百四十八文 (XX五年十二月)  
Li Zishan  
1863/4/29, loaned principal of 1,800 copper cash. 3%.  
Interest in arrears of 1,148 copper cash. (repaid in 1866/12).

These entries show loans to two brothers—or at least two relatives in the same lineage of the same generational year (*beifen* 备份)—named Li Ziyi and Li Zishan respectively. The loans are for principal of 3,240 and 1,800 copper cash, respectively. The interest is steep, at 3% a month. Evidently, the brothers Li had trouble repaying, as their interest was in arrears. The account book abounds with similar entries, with monthly interest rates between 2% and 3%.

In summary, it is clear that the commercial economy, the agrarian economy, and the financial economy were intertwined. Corporate entities received loans from lineages, and

---

<sup>157</sup> Changshengyuan Customer Accounts, 1867, *LJMPC*, 2.

<sup>158</sup> Changshengyuan Customer Accounts, 1867, *LJMPC*, 3

extended loans to one another and also to peasants. Incredibly, they often did so at extremely low rates; from between 1% and 3% per annum. The low-interest annual rates suggest a world far more capable of mobilizing financial capital in support of real economic activity than has previously been suggested. Rates on *zihao* loans charging monthly interest hovered around 2% per month, while the higher proportion of low interest, *changnian* loans significantly brings down the total average lending rate.<sup>159</sup>

### Pawnshops

Pawnshops were another important player in grassroots finance. Valerie Hansen and Ana Mata-Fink found records of a pawn shop from the Tang Dynasty capital in Chang'an that mostly accepted clothing and cloth as collateral.<sup>160</sup> Lu Xun immortalized the pawnshop in his classic "Call to Arms," recalling how, "For more than four years I used to go, almost daily, to a pawnbroker's and to a medicine shop. I cannot remember how old I was then; but the counter in the medicine shop was the same height as I, and that in the pawnbroker's twice my height. I used to hand clothes and trinkets up to the counter twice my height, take the money proffered with contempt..."<sup>161</sup> The popular materials show that pawnshops were quite flexible. Not only did they lend on pawned items, but also frequently lent on land. The contracts drawn up between pawnshops and peasants are often identical in format to those drawn up between *zihao* and individuals. Contract 1 from the Daoguang reign is a case in point.

---

<sup>159</sup> I can also make a database of these loans, but I want to be sure it is interesting first.

<sup>160</sup> Valerie Hansen and Ana Mata-Fink, "Records from a Seventh-Century Pawnshop in China," in *The Origins of Value : The Financial Innovations That Created Modern Capital Markets*, ed. William N. Goetzmann et al. (Oxford ; New York: Oxford University Press, 2005), 54–59.

<sup>161</sup> Lu Xun, "Preface," in *Call to Arms* (Beijing: Foreign Languages Press, Marxists Internet Archive, 1972).

**Contract 1<sup>162</sup>:** 立约人程学礼今借到  
 万镒当名下白银叁拾两整，言明每月壹分五厘出息，利银不到将自己村西地  
 四亩，银主耕种，恐后无平，立约为证。  
 中人田天雨、田天吉  
 道光十二年十二月十三日  
 程学礼十

**Marginalia:** 道光十五年十二月十三日还本银拾壹两  
 道光十八年二月十一日还本银十八两五钱  
 内有契约一账，光绪五年十月廿六日还清无用

Originating a loan agreement for Cheng Xueli to borrow from  
 Wanyi Pawnshop 30 taels of silver. It is clearly stated that the loan will accrue  
 monthly interest of 1.5 %. In the event of default on interest payments, the  
 borrowers own plot of land at the west part of the village totaling 4 mu shall be  
 surrender usufruct rights to the lender. Oral testimony will not be relied on,  
 [therefore] we are establishing this [written] loan contract as proof.

Brokers: Tian Tianyu, Tian Tianji.

**Marginalia:** 1832/12/13 Cheng Xuli [signed] 十  
 1835/12/13 Repaid 11 taels of principal  
 1838/2/11 Repaid 18.5 taels of principal  
 Regarding the contract herein, on the date of 1879/2/11 the loan has been repaid  
 in full and this contract is now void.

Contract 1 shows a contract for a loan from the Wanyi Pawnshop. The Wanyi Pawnshop has the  
 same name of a pawnshop that opened in the 1920s in Hequ County, on the border of present-  
 day Inner Mongolia.<sup>163</sup> Possibly this was where the original, Qing-era Wanyi Pawnshop was  
 from as well, though of course this is impossible to say for sure. If so, it was a sizeable pawn  
 shop in the county seat, with 10 full time employees during the Republic.<sup>164</sup> That would mean  
 peasants were borrowing in a fairly commercialized location. Thus, the representativeness of

<sup>162</sup> Loan contract between Cheng Xuili and Wanyi Pawnshop, Loans from Zihao, LJMPC, 8.

<sup>163</sup> Zhou, Shaoqing, and Hequ xian zhi bian zuan wei yuan hui, eds. *Gazetteer of Hequ County*  
 河曲縣誌. Di 1 ban. Taiyuan: Shanxi ren min chu ban she : Shanxi sheng xin hua shu dian fa  
 xing, 1989.

<sup>164</sup> *Jinshang shiliao quanlan* 晋商史料全览 [Shanxi merchant historical materials]. Taiyuan:  
 Shanxi renmin chubanshe, 2007, 461.

these transactions is open to question. In any case, what is clear is that a peasant named Cheng Xuili was able to receive a loan from the Wanyi Pawnshop for 30 taels, at a rate of 1.5% per month. He has posted his 4 mu of land as collateral.

Nor was this contract unique. Another transaction from the Guangxu Reign, shown in Contract 2, is instructive.

**Contract 2<sup>165</sup>:** 立揭钱文约人永顺张今揭到  
益源当名下实取钱本壹佰仟文整，同人言明每月每千八厘行息，限至一季，  
交还恐后无凭，立约为证  
道光十八年十月十四日立揭钱文约人永顺张十  
Marginalia: 光绪十二年四月十九日同中人抽来不 X 使用 张伯适书  
Originating a loan of copper cash to Yong Shunzhang, borrowing from  
Yiyuan Pawnshop. Verified today receiving an advance of principal 100,000  
copper cash. It is clearly stated that the loan shall accrue a monthly interest of  
0.8%, to be repaid after one quarter. Oral testimony will not be relied on,  
[therefore] we are establishing this [written] loan contract as proof.  
1838/10/14 Borrower Yong Shunzhang [signed]  
Marginalia: 1886/4/19 This has been removed from XXX and is void. [signed] Zhang  
Boshi

Contract two shows another loan from a pawnshop to an individual, Yong Shunzhang. We cannot be certain that Yong Shunzhang is a peasant, and this is a significant sum of money. But the loan is similar to other loans to peasants.

I discuss the important links between pawnshops and lineages later in the chapter. For now, it is sufficient to acknowledge that pawnshops were an important supplier of rural credit.

---

<sup>165</sup> Loan contract between Yong Shunzhang and Yiyuan Pawnshop, Loans from Zihao, LJMP, 9.

## Religious Organizations

Religious organizations have been a source of credit in China since at least the Tang Dynasty. Liu Qiugen attributes the appearance of pawn shops in the Han Dynasty to the arrival of Buddhism. Buddhist monasteries began offering loans, first as a form of charity and later in return for interest, especially during the Song. Monastery finance fell into decline and mostly disappeared during the Ming and Qing.<sup>166</sup> Even as Monastery finance fell into decline other religious organizations rose to take their place. Local religious societies known as *she* became common during the Song Dynasty. By the Ming they were offering loans and mortgages, practices which continued until the Revolution.<sup>167</sup> In the Qing era, religious societies called *hui* began to proliferate as well. There is no real difference between *she* and *hui*; and at least in the countryside the terms were used interchangeably. The most well-known *hui* are the “heaven and earth societies” (*Tiandihui* 天地会), more commonly known in English as Triads. The Triads arose during the High Qing. Their first appearance in the historical record dates from their involvement in a series of rebellions, and they were long thought to be motivated by Ming loyalism. Now, however, scholars believe that they emerged primarily as mutual aid societies held together by an intricate complex of shared beliefs and liturgy.<sup>168</sup> The records indicate that such societies were extremely active in the loan market.

---

<sup>166</sup> Liu Qiugen 刘秋根. *Zhongguo Dian Dang Zhi Du Shi* 中国典当制度史 [*The Institutional History of Chinese Pawnbrokers*]. Di 1 ban. Shanghai: Shanghai gu ji chu ban she : Xin hua shu dian Shanghai fa xing suo fa xing, 1995, 26-32.

<sup>167</sup> Yang Bo (杨波), “Study on Village Community (She) in Taihang Mountain Area since Song Dynasty (宋代以来太行山地区村社研究)” (Ph.D. Dissertation, Baoding, Hebei, Hebei University, Center for Song History, 2020).

<sup>168</sup> In Dian Murray’s words, ““These materials suggest that the Tiandihui emerged as a mutual aid fraternity in response to the demographic and economic crises of the late eighteenth century, and that it was but one of several societies, or hui, to appear at this time.” Dian Murray, *The Origins of the Tiandihui: The Chinese Triads in Legend and History*, ed. Baoqi Qin (Stanford,

Incredibly, explicitly Triad groups extended loans under their own name. Contract 1 shows an excellent example of such a loan.

**Contract 1:**<sup>169</sup>

立借约文字人杜景凤今借到  
六合会名下文银壹拾五两整同中言明每年加贰行利，内立执当东房三间。如  
银不上，银主賙业，恐后无凭，立借约存照  
乾隆三十一年七月十八日立借银人杜景凤十  
中人杜景龍

Originating a loan agreement with Du Jingfeng, borrowing from The Hexad Society, of 15 taels of pure silver. It is clearly stated that the loan shall accrue a yearly interest of 2%, with the three eastern rooms in the lender's courtyard posted as collateral. In the event of default, the lender will have claim these rooms. Oral testimony will not be relied on, [therefore] we are establishing this [written] loan contract as proof.

1766/7/18 Contracted with borrower Du Jingfeng [signed] 十  
Broker Du Jinglong

The lending institution is called the *Liu He Hui* or “Hexad.” This is clearly a variant of the *San He Hui*, or “Triad.” This does not mean that the counterparties were secret Ming restorationists. Rather, it means simply that they belonged to a Triad religious society which also functioned as a provider of credit. The interest rate is extremely low, only 2% per year.

This contract is not unique. Another triad loan, this time under the more conventional triad name of Heaven and Earth Society can be seen in Contract 2.

**Contract 2**<sup>170</sup>: 立借银约人江福先今借到天地会元系银伍两伍钱整，同中言明加壹伍行息，其银当宿典闰差聖西窑式空，如利不上，天地会受业，空口无凭，立借约存照嘉庆七年十一月廿四日立借银约人江福先十

---

Calif.: Stanford University Press, 1994). Also see Dian Murray, “Migration, Protection, and Racketeering: The Spread of the Tiandihui within China,” in *“Secret Societies” Reconsidered: Perspectives on the Social History of Modern South China and Southeast Asia* (Armonk, NY: ME Sharpe, 1993), 177–89. On the importance—and political nature of—Triad liturgy see B. J. ter Haar, *Ritual and Mythology of the Chinese Triads: Creating an Identity* (Leiden: Brill, 1998).

<sup>169</sup> Loan Contract between Dujing Feng and Hexad Society, Loans from Other Institutions, LJMP, 1.

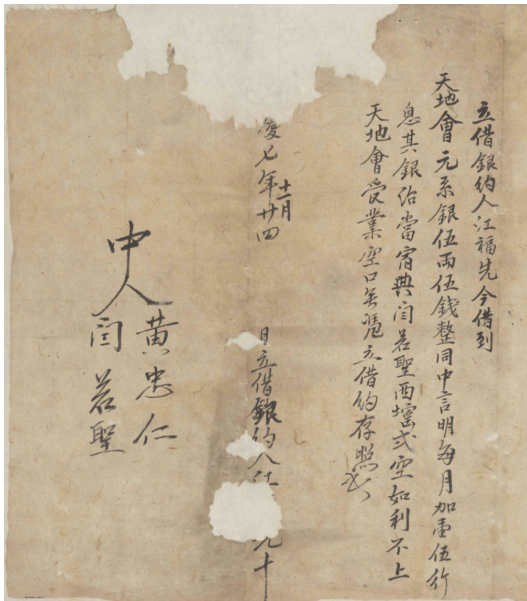
<sup>170</sup> Loan Contract between Jiang Fuxian and Heaven and Earth Society, Loans from Other Institutions, LJMP, 2.

中人黃忠仁、閔差聖

Originating a contract with Jiang Fuxian, borrowing today 5.5 taels of silver from the Heaven and Earth Society. It is clearly stated that the loan will accrue an interest of 1.5%. Yan Chaisheng's *dian* over two cave dwellings in the west shall be posted as collateral. In the event interest is defaulted on, the Heaven and Earth Society shall take position of this property. Oral testimony will not be relied on, [therefore] we are establishing this [written] loan contract as proof.  
1802/11/24, Contracted with borrower Jiang Fuxian [signed] 十  
Brokers Huang Zhongren and Yan Chaisheng

The Heaven and Earth Society is, of course, the most common name for the Triads. Indeed, the fact that *Tiandihui* were writing loan contracts in their own name during the Jiaqing Reign—in the midst of an intense Qing crackdown on such societies!—may strike some scholars as so fantastic that I have included a photograph of this contract, visible in Image 2.

*Image 2. Loan contract between Jiang Fuxian and Heaven and Earth Society*



Source: Loan Contract between Jiang Fuxian and Heaven and Earth Society, Loans from Other Institutions, LJMP, 2.

But what is most important for my purposes is that fact that the triads were lending money to peasants, taking real estate as collateral. In this contract, Jiang Fuxian is using the broker's cave dwellings as collateral in order to receive a loan at 1.5% interest per month. The rate is not

especially high, though one suspects that this is one loan that Mr. Jiang Fuxian would be well advised to stay current on.

The final contract showing a Triad-type group lending to a peasant dates from the Tongzhi reign and can be seen in Contract 3.

**Contract 3**<sup>171</sup>: 立写借银文约人程万贵因为使用不便今借到天地社名下元系银九两正，言明每年壹分行息，其银执当村西北平地壹段，计数一亩三分半，其地东西珍，东至道，西至泽，X南至本业北至呈X，西至分明，无银还不上者银主贖业，恐口难凭，立约为证  
当年短二分  
同治十二年正月廿二日立约人程万贵十  
中人程狗 X

Originating a loan agreement with Cheng Wangui, because he is short of funds and inconvenienced, to borrow today from the Heaven and Earth Society nine taels of silver. It is clearly stated that the loan will accrue a yearly interest of 1%. This loan will be backed by collateral of a plot of land at the northwest part of the village. The land is flat, and amounts to 1.35 mu. The land stretches from east to west. Its east side extends to the road. Its west end extends to the marsh. X Its southern end extends to the X, and its northern end extends to Cheng X. The four borders are thus clearly delineated. In the event no silver is repaid, the borrower will take the land. Oral testimony will not be relied on, [therefore] we are establishing this [written] loan contract as proof.

This year funds are short by 0.2 taels.

1873/1/22 Originated with Cheng Wangui [signed] 十  
Broker Cheng Gou X.

This contract is drawn up between counterparties of humble social standing. The name of the broker is remarkable. The first character of his given name is *gou*, meaning “dog” 狗. The second character looks like a “圭” with a dog radical, but no such character exists. The loan is extremely cheap, accruing interest at only 1% per year.

---

<sup>171</sup> Loan Contract between Cheng Wangui and Heaven and Earth Society, Loans from Other Institutions, LJMPC, 23.



Another loan appears to be from a temple society known as the “Ma Wang Society,” or *mawanghui* (马王会). There was an incense society of this name in Beijing,<sup>172</sup> and a Ma Wang temple in the Yuci County Seat, but the provenance of this particular society is uncertain. The text of this contract is transcribed as Contract 4.

**Contract 4**<sup>173</sup>: 立揭钱人杨自秀因不便今揭到马王会钱两串伍佰文，同中言明每年分半出息，不许托欠，若有托欠，有村东永地二分，南至杨兴北至地主、东西千头，四至分明，许会首人耕种，恐后无凭，字证

道光二十一年十月初六日立

中人赵养参

Originating a loan contract for Yang Zixiu, on account of shortness of funds, to borrow today from the Ma Wang Society an amount of 2,500 copper cash. It is clearly stated that the loan will accrue a biannual interest of 1.5%. In the event of arrears, the Society Chief will have usufruct rights over the plot of land. Oral testimony will not be relied upon, with only these signatures serving as proof.

1841/10/6

Broker Zhao Yangshen

This loan may reflect a transaction made at least partly for charitable reasons as the rate is extremely low; only 1.5% every half year. Nevertheless, it is interesting that the Ma Wang Society demanded collateral, suggesting it did insist on receiving at least some protection of its capital. This contract is unsigned, so presumably one or more of the parties backed out.

By far the most common religious lender seen in these contracts are Guanyin Societies. Guanyin is the Chinese name of the Bodhisattva Avalokitesvara.<sup>174</sup> Every single village in Shanxi province had or has a temple to Guanyin, often known colloquially as “grandmother” or

---

<sup>172</sup> Yuan Bingling 袁冰凌, “Beijing Dongyuemiao Xianghui 北京东岳庙香会 [The Incense Society of Beijing Eastern Yue Temple ],” accessed March 30, 2020, [http://www.xiguan.org/yuanbingling/015.htm#\\_ftn1](http://www.xiguan.org/yuanbingling/015.htm#_ftn1).

<sup>173</sup> Loan Contract between Yang Zixu and Ma Wang Society, Loans from Other Institutions, LJMPC, 4.

<sup>174</sup> Lokesh Chandra, “The Origin of Avalokitesvara,” *Indologica Taurinenaia* 13 (1984): 187–202.

“*nainai*” (奶奶). In my own research in Wuxiang County, we visited a village with a shrine to a “revolutionary martyr” (*lieshi* 烈士) that Professor Meng Wei insisted was a converted Guanyin Temple. Sure enough, an elderly resident of the village confirmed that this was the local “grandmother temple,” or *nainaimiao* (奶奶庙). In a typical village, Guanyin shrines were constructed on the village’s southern border, facing north and demarcating the village’s southern boundary. In villages that were not organized on a North to South axis, or for in which the geography prevented placement of a temple there, the Guanyin shrine would be built wherever the *yin* (阴) or “female,” also known as the *xiashou* (下首) or “down facing,” boundary was determined to lie. These societies were incense or temple societies associated with the local Guanyin temple.<sup>175</sup> A typical loan from one of the Guanyin societies can be seen in Contract 5.

**Contract 5**<sup>176</sup>: 立接银文约人刘叶光因为不便今借到观音会银三两正，同中言明每月一分五分厘行息如银利不到情愿将自己村西院西地一亩将保人查银耕种保人刘以旃，恐口无凭，立文约为证  
保查银邢可正、刘以旃  
咸丰六年正月十六日刘叶光立

Originating a loan contract for Liu Yeguang because he is short of funds, to borrow today from the Guanyin Society 3 taels of silver. It is clearly stated that the loan will accrue a monthly interest of 1.5%. In the event of default on the interest, the borrower’s own property at the west part of the village west of the courtyard, amounting to one mu of land, will be given to the guarantor Liu Yizhan to enjoy its usufruct rights. Oral testimony will not be relied on, [therefore] we are establishing this [written] loan contract as proof.

Guarantors Xing Kezheng, Liu Yizhan  
1856/1/16 Originated with Liu Yeguang

---

<sup>175</sup> Meng Wei told me this in person and over Wechat; and demonstrated in an almost miraculous way how reliable this is when we conducted field work in Wuxiang County. I don’t have a formal citation because Meng Wei never publishes anything.

<sup>176</sup> Loan Contract between Liu Yeguang and Guanyin Society, Loans from Other Institutions, LJMPC, 5.

Interestingly, the interest rate on this loan is the same 1.5% seen on so many other loans, including normal interpersonal loans. Apparently, the “Bodhisattva of Mercy” had the good sense not to let her compassion interfere with earning a market interest rate. Once again, land is posted as collateral for the loan.

Other Guanyin Societies were less exacting. In Contract 6, we see a Guanyin Society that lent money at the annual rate.

**Contract 6<sup>177</sup>:**立揭银人刘以旒揭到观音神社元系银肆两三钱六分，又二分，同中言明每年壹分五厘行息，如利银不至，情愿将自己南北 X 平底式亩保人查银贖业，恐口补平，立文约存照  
咸丰八年正月二十一日立  
保查银人刘振兴

Originating a loan contract for Liu Yizhao to today borrow from the Goddess Guanyin Society 4.6 taels of silver (latter added another 0.2 taels). It is clearly stated that the loan will accrue an annual interest of 1.5%. If the interest is defaulted on, the borrower will willingly surrender his own plot of land that stretches from north to south and is flat, amounting to two mu, to the guarantors. Oral testimony will not be relied on, [therefore] we are establishing this [written] loan contract as proof.  
1858/1/21 Originated  
Guarantor Liu Zhengxing

In this contract the borrower is Liu Yizhao. He is almost certainly part of the same Liu family and same generation as Liu Yizhan in the previous contract. They share both the generational marker *yi*, as well as the radical *fang* (方) in their given names. Liu Yizhao borrowed 4.8 taels from the Guanyin Society at a very low rate of 1.5% per year. Collateralizing the loan were two mu of good land. The low rate indicates a charitable purpose, but may also derive from the high quality of the collateral: two mu of flat land is more substantial than one mu.

---

<sup>177</sup> Loan Contract between Liu Yizhao and Guanyin Society, Loans from Other Institutions, LJMPC,10.

There are dozens of similar contracts, with Guanyin or related cult-like deities (such as the “white robed god society” or “*baiyi shenhui*” (白衣神会) by far the most common, but with plenty of other incense societies as well. It would be impossible to reprint them all in this space. But two additional contracts from the Republic may be of interest. Contract 7 shows a loan from the temple of a local Dragon God.

**Contract 7<sup>178</sup>:** 立借大洋文约人李楞 X 因为不便今借到隆神庙官大洋五十元整，同保言明年满二分行息，其元内愿将自己村东北常家渠上平底壹段，其地东西畛，计他三亩，东至张长顺，西至渠，南至渠，北至业，四至分明，土木相行，流依旧今立契质当官中期至表羊十月十五日付利如利不上保人查元贖业，银主不得阻挡，恐口不凭，立字为证  
民国十八年十月廿八日立字人李楞 X  
保查人韩文盛、花银顺

Originating a loan of silver dollars with the Borrower Li LengX, owing to his being short of cash and inconvenienced, who will today borrow from the Dragon God Temple ¥50 of official silver dollars. It is clearly vouched that the loan will accrue a yearly interest of 2%. The borrower has willingly pledged his own plot of land, which lies flat east to west, at the northeast part of the village near above the Chang family’s irrigation ditch and amounts to three mu. Its easternmost border extends to Zhang Changshun; its westernmost edge extends to the irrigation ditch; its southern edge extends to the irrigation ditch; its northern edge extends to the end of the property. The four borders are thus clearly demarcated. If by the fifteenth day of the tenth month the interest has not been paid, the guarantors shall take possession of the land, and the lender shall face no obstructions in working it. Oral testimony will not be relied on, [therefore] we are establishing this [written] loan contract as proof.

1929/10/28 Signed with Li Leng 十  
Guarantors Han Wensheng, Hua Yinshun.

I cannot make out the second character in the borrower’s name, but the overall content of the contract is clear. Li LengX borrowed 50 silver dollars from the local Dragon God Temple, at a relatively low rate of 2% per year. As collateral, he pledged a middling plot, 3 mu of land right

---

<sup>178</sup> Loan Contract between Li LengX and Dragon God Temple, Loans from Other Institutions, LJMPC, 51

next to a number of irrigation ditches. Unfortunately, it is still not possible to locate this contract geographically as too many villages have temples to the dragon god. Note that Republican-era contracts, even in rural Shanxi, reflect the increased use of silver dollars as the unit of account.

The importance of unit of account becomes even more apparent in Contract 8, drawn up just a few years after Contract 7.

**Contract 8<sup>179</sup>:** 立借约人王豫今借到  
公和渠名下本库平72钱现银大洋捌拾元整，言明按月二分五行息，限期明年闰五月初七日为X至期，倘有金融变迁，无论周行何种纸币，本利准以库平72钱现银大洋归还，决不以其他纸币代还，如不能履行，此特约情愿许承还保人将质押之产，自田处分本利，执还出三面，甘愿决不翻悔，恐口立此为证十  
质押自己云菽道白地一段计地壹拾贰亩，楼行四至有硃契证明随带原老契一张十

借钱人王豫  
承还保人王履中十  
中证人史国俊十  
民国廿一年阴十二月初七日立

Originating a loan contract with borrower Wang Yu to borrow today from the Gonghe Qu principal of ¥80 kuping 72 cash silver dollars. It is clearly stated that the principal shall accrue a monthly interest of 2.5%, with principal and interest due on the seventh day of the leap fifth month. If there is a change in the financial situation, no matter what paper money is in circulation, the principal and interest shall be repaid in kuping 0.72 silver dollars. It will absolutely not be repaid in paper money. In the event of breach of contract, it is explicitly stated that the borrower will willingly cede to the guarantor his pledged assets, with principal and interest taken out of the borrower's land. The pledge to repay has three aspects and will be surrendered willingly without any renegeing. Oral testimony will not be relied on, [therefore] we are establishing this [written] loan contract as proof.

Borrower has pledged his own plot of white land by the Yunchu Road amounting to 12 mu. The registry has a copy of his red sealed contract and the original contract can be produced at any time. [signed] 十  
Borrower Wang Yu [stamped thumb print]

---

<sup>179</sup> Loan Contract between Wang Yu and Gonghe Irrigation Society, Loans from Other Institutions, LJMP, 52

Guarantor Wang Luzhong [signed] 王  
Witness Shi Guojun [signed] 石  
1932/Lunar Calendar 12/7

Contract 8 originates a loan in which Wang Yu borrowed principal of ¥ 80 from the Gonghe Irrigation society. The loan is denominated in silver dollars or *yuan* (元). The interest rate is quite high, charging 2.5% per month. In addition, the borrower has pledged a significant plot of land, 11 mu or nearly two acres. Moreover, the his title to the land is vouchsafed by a “vermillion contract,” meaning a deed that has been sealed by the local magistrate or some other official operating with notary powers of the state. These were considered safer than “popular” contracts, which were signed by the buyers and sellers but not sealed. Its significance can be likened to present-day title insurance, giving the lender an extra layer of security.

But what is most interesting is the stipulation about currency. The contract is denominated in kuping 0.72 silver dollars. I believe this refers to Mexican silver dollars, as these had a weight of 0.72 kuping taels. (It could potentially be a reference to silver dollars of the same weight minted by certain southern provincial governments starting with Zhang Zhidong in Guangdong, but this seems less likely).<sup>180</sup> The contract specifies that paper money will not be accepted in lieu of physical 0.72 kuping tael silver dollars. The covenant is both a ringing endorsement of Mexican dollars, as well as a dismal indicator of Shanxi paper money. This is understandable. Between 1928 and 1930, to resist Chiang Kai-shek’s Northern Expedition, Yan Xishan’s provincial bank expanded its circulation of paper silver dollars by a factor of eight.

---

<sup>180</sup> Ji Zi 季子, *Zhongwai Jinrong Da Cidian 中外金融大辭典 [Chinese and Foreign Finance Dictionary]* (Taipei: Lianjing Press, 2014), 549.

With the defeat of the Northern warlords, Shanxi notes fell to 1/30<sup>th</sup> of their face value.<sup>181</sup> In 1932, with the country at relative peace, Yan Xishan announced a plan to circulate new Shanxi currency.<sup>182</sup> This clearly left rural lenders nervous, thus the insistence on hard silver rather than paper notes. Finally, read against the grain, this contract reveals the extent that paper money had penetrated rural Shanxi. If the Gonghe Irrigation Society felt the need to specify that they would not accept paper money, this indicates that other loans had been repaid with paper in the past.

### Mutual Credit Societies

Mutual Credit Societies, or *hehui* (合会), also known as Rotating Savings and Credit Associations or “ROSCAs,” were another extremely important source of credit. These consisted of societies of peasants in which members would alternate making contributions or receiving contributions. Thus, as they “rotated” members would alternate between being savers or borrowers. ROSCAs were found virtually everywhere in pre-industrial Asia,<sup>183</sup> and continue to operate in the Chinese diaspora community to this day.<sup>184</sup> Sidney Gamble believed they were the single most important source of credit in rural China,<sup>185</sup> while Ming-te Pan sees them as an

---

<sup>181</sup>Xu Kai 许凯, “Yan Xishan de Jinrong Xing Sheng Shijian 阎锡山的金融兴省实践 [The Financial Measures of Yan Xishan],” *People’s Daily Online*, April 21, 2014, [http://paper.people.com.cn/gjjrb/html/2014-04/21/content\\_1417129.htm? fina](http://paper.people.com.cn/gjjrb/html/2014-04/21/content_1417129.htm? fina).

<sup>182</sup>Yang Erxia 杨二霞, “Qianlun Minguo Shiqi Jinchao Faxing Dui Shanxi Jingji Shehui de Yingxiang 浅论民国时期晋钞发行对山西经济社会的影响 [A Brief Exposition on Republican-Era Shanxi Note Issuance and Its Effects on Shanxi Economy and Society],” *Jingji Shi 经济师*, no. 5 (2012).

<sup>183</sup> Clifford Geertz, “The Rotating Credit Association: A ‘Middle Rung’ in Development,” *Economic Development and Cultural Change* 10, no. 3 (1962): 241–63.

<sup>184</sup> Xiaoyu, Wu, and Teresa D. Hutchins, “Immigrants Financing Immigrants: A Case Study of a Chinese-American Rotating Savings and Credit Association (ROSCAs) in Queens.,” *New York Economic Review* 46 (2015): 21–34.

<sup>185</sup> Sidney Gamble, “A Chinese Mutual Savings Society,” *The Far Eastern Quarterly* 4, no. 1 (1944): 41–52, <https://doi.org/10.2307/2048986>.

important vehicle to “mobilize funds at the intra-village level.”<sup>186</sup> I discuss the mutual credit society in greater depth in chapter three. At present, it is enough to register that this was yet another possible source of credit for rural borrowers.

#### The Dianzu (典租), or “Mortgage,” Market

As other scholars have shown, for land-holding peasants in need of cash, “live sales” or *huomai* (活卖), known in most parts of the country as a *dian* (典), were the most important source of liquidity for property-owning peasants. Philip Huang explains the utility of institution, writing, “Rather than losing his land on account of nonpayment...a *dian* maker would retain his right to redemption.”<sup>187</sup> Zhang Taisu’s description of the *dian* is worth quoting in full: “The great majority of Qing and Republican land transactions were *dian* sales, sometimes translated as “conditional sales,” in which a landowner “sold” property but reserved the right to redeem it at a later time—it was, in effect, a mortgage in which the mortgagee obtained temporary title and use over the collateral until the mortgagor repaid.” He goes on to state that, “The *dian* buyer’s interest in lending money under such an arrangement was therefore not monetary interest, but rather whatever profits the land could yield before redemption. He was often protected...by

---

<sup>186</sup> Ming-te Pan, “Rural Credit Market and the Peasant Economy (1600-1949): The State, Elite, Peasant and ‘Usury,’” *ProQuest Dissertations and Theses* (Ph.D., Ann Arbor, University of California, Irvine, 1994), ProQuest Dissertations & Theses Global (304081530), <https://search.proquest.com/docview/304081530?accountid=14657>, pp. 144

<sup>187</sup> Huang’s entire account of how *dian* rights were incorporated to the KMT civil code is required reading for scholars seeking to understand the long-lasting legacies of Qing economic institutions on Chinese development; see Philip C. Huang, *Chinese Civil Justice, Past and Present*, Asia/Pacific/Perspectives. (Lanham, Md.: Rowman & Littlefield, 2010), pp. 236-238. Also see his earlier work on *dian* at 1940- Huang Philip C., *Code, Custom, and Legal Practice in China: The Qing and the Republic Compared*, Law, Society, and Culture in China (Stanford, Calif.: Stanford University Press, 2001), 94-98, along with the explanation for how *dian* differed from a mortgage.



contractually establishes ‘guaranteed-usage periods,’ usually called *xian*, of one or more years. The seller could...redeem at ‘any time after the guaranteed-usage period had expired.’<sup>188</sup> These are excellent descriptions of the basic meaning of *dian* as a form of property right. *Dian* did not yield interest, but they carry an implicit cost of capital; the rental stream from the property under *dian* divided by the cost of the *dian*. In most cases, this is impossible to calculate.

But other variations of *dian* operated more like true mortgages, and thus carried an explicit interest rate in kind or in money. One frequently finds peasants originating *diandang* (典当) and *dianzu* (典租) contracts. *Diandang* is composed of the characters *dian* meaning “live sale” and *dang*, meaning “post as collateral.” Strictly speaking, *dang* contracts—in which a landholder or dianholder pledges their property as collateral for a loan is most similar to a mortgage in the modern sense. Such contracts, or *dangqi* (当契) abound in southern China, with interest sometimes payable in cash and sometimes payable in kind.<sup>189</sup>

*Dianzu* is composed of the characters for *dian*, or “live sale” and *zu* or “lease,” and is another form of credit transaction. *Dianzu* can stand for two distinct kinds of transactions, though the underlying economics are the same. First, it can mean a *dian*-leaseback agreement. That is, a buyer purchases a *dian* over a plot of land, and leases it back to the original holder. This means that in reality the *dianholder* has the rights not to work or manage the land, but to a stream of

---

<sup>188</sup> Taisu Zhang, *The Laws and Economics of Confucianism: Kinship and Property in Pre-Industrial China and England*, Cambridge Studies in Economics, Choice, and Society (Cambridge, United Kingdom: Cambridge University Press, 2017), pp. 36-37.

<sup>189</sup> Cao Shuji 曹树基 and Li Feiji 李霏霏, “Qingzhonghou Zhenan Shanqu de Tudi Diandang: Jiyu Songyangxian Shicangcun de ‘Dantianqi’ de Kaocha 清中后期浙南山区的土地典当——基于松阳县石仓村‘当田契’的考察 [Land Mortgage in Mountainous Regions of Southern Zhejiang during the Mid- and Late Qing: A Study Based on ‘Land Mortgage Contracts’ from Shicang Village, Songyang County],” *Lishi Yanjiu 历史研究 [Historical Research]*, no. 4 (2008): 40–54.

rental income. *Dianzu* can also mean a direct purchase of the rights to receive rent; that is, a live purchase of a landlord's "bones-of-the-land" rights or topsoil rent-bearing rights.<sup>190</sup>

Cao Shuji has recently studied a selection of *dianzu* contracts in which a landlord—either of topsoil or subsoil rights—sells their right to receive a stream of rents. Sometimes, the stream of rent was purely notional. That is, no physical plot of land existed, with the contract serving as a derivative on local land rents. Derivative *dianzu* were known as *dangkong* (当空), which character for character translates to something like *dang*, or “posting as collateral,” and *kong*, or “empty.” (Interestingly, *kong* was used the same way in high finance to denote short sales and derivative purchases of marketable securities, or *maikongmaikong* (卖空买空). There appears to have been a similar form of derivative in northern China, but I am still gathering material on this. As with all rental contracts, the execution of a *dianzu* agreement gives rise to an implicit interest rate. But for historians, *dianzu* are especially useful since, unlike a lease contract, they actually allow us to calculate that rate (a lease contract stipulates rent payments, but does not mention the market value of the property). Cao Shuji has calculated interest rates on *danzu* at an average rate of 12.6% across 36 contracts.<sup>191</sup>

---

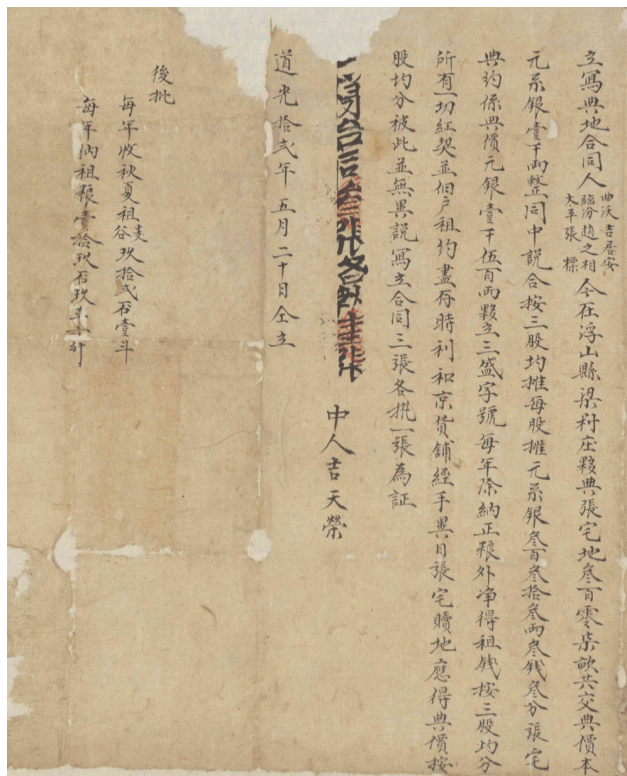
<sup>190</sup> Sometimes called the “big rent” and “small rent,” depending on which stratum of the soil was entitled to the highest rent. Cao Shuji 曹树基, “Chuantong Zhongguo de Diqun Jiegou, Tudi Shichang Yu Tudi Gaige: Yi Qiyue Wenshu Yu Xianji Dang’an Wei Yiju 传统中国的地权结构、土地市场与土地改革——以契约文书与县级档案为依据 [Land Reform and the Structure of Traditional Land Rights and Land Market: An Analysis of Contracts and County Archival Materials]” (Unpublished). For obvious reasons, such distinctions are more relevant in the rice-growing south, than in the north with its less productive agriculture.

<sup>191</sup> Cao Shuji, “Live Sales and Rents: Land Markets and Financial Markets in Qing-Era Southern Fujian (典地与典租：清代闽南地区的土地市场与金融市场),” *The Qing History Journal (清史研究)*, no. 4 (2019).

Cao's findings are astonishing. All of a sudden, it appears that the interest rate on *dian*—by far the most common way of raising money—was lower than US mortgage rates in the early 1980s. This is hardly indicative of a society without a functioning credit market. With this finding, the distance between pre-industrial rural credit rates in China and Europe appears far less significant than previously believed. That said, Cao Shuji is looking at contracts from Fujian province. To get a sense of how representative his findings are, it is worth examining similar contracts from Shanxi Province.

First, we can examine one striking document from the Daoguang reign. Contract 1 shows a *dian* for the Zhang family's entire estate, or the Zhang *zhai* (张宅). It such a stunning document that in addition to a transcription I have included a photograph, visible in Image 3.

Image 3. Lease Contract for Sanyi Company *Dian* over Zhang Estate



Source: Lease Contract for Zhang Estate, Leases and *Dian* Contracts, LJMP, 16.

**Contract 1**<sup>192</sup>: 立写典地合同人曲沃吉居安、临汾赵之相、太平张标今在浮山县梁村庄伙典张宅叁佰零柒亩共交典价本元系银壹仟两整，同中说合按均摊每股元系银叁佰叁拾叁两叁分，张宅典约系典价元银壹仟伍佰两。伙立三盛字号，每年除纳正粮外，净得租钱按三股均分。所有一切红契并佃户租约，尽存时利和京货铺经手。异日张宅赎地，应得典价按股均分被[配]，此并无异说，写立合同三张，各执一张为证

[章]

中人吉天荣

道光十二年五月二十日同立

后批

每年收秋夏租麦、谷玖拾式石壹斗

每年纳租银壹拾玖石玖斗六升

Originating a contract for a *dian* with Quwo Ji Ju'an, Linfen Zhao Zhixiang, Taiping Zhang Biao, who will today purchase as a consortium a *dian* over the Zhang Estate totaling 307 mu in Fushan County, Liang Village. They will deliver as consideration for the *dian* 1,000 taels of silver. It is stated that the payment shall be prorated by share, with each share paying 333.33 taels of silver. The contract will place the total *dian* value of the Zhang compound at 1,500 taels of silver. The consortium establishes the Sansheng Company to manage the *dian*. Every year, after paying taxes, the after-tax net rental income shall be prorated amongst the three shares. Every and all legal rents and leases accruing to the lands held under the *dian* shall all be invested in interest-bearing investments or in shops dealing in Beijing goods. If after this date the Zhang family estate is redeemed, the payment for the *dian* price shall be prorated amongst the three shares. This is all agreed upon. Three contracts shall be issued, with one to each of the *dian*holders to serve as proof.

[sealed]

Broker Ji Tianrong

1832/5/20 Contract is established

Addendum:

Yearly Autumn and Summer rental income of wheat and millet amount to 92.1 *dan*

Yearly tax payments amount to 19.96 *dan*.

This contract shows a deal between four parties. Three purchasers, Ji Ju'an, Zhao Zhixiang, and Zhang Biao formed a consortium, under the corporate umbrella of the Sansheng Company, to purchase a *dian* on the Zhang estate located in Liang village in Fushan County, today a part of Linfen Municipality. The estate totaled 307 mu (~50.6 acres) of land. The cost of the *dian* over

---

<sup>192</sup> Lease Contract for Zhang Estate, Leases and *Dian* Contracts, LJMP, 16.

the land was 1,000 taels of silver. The buildings of the Zhang compound cost another 1,500 taels, bringing the total price to 2,500 taels.

An addendum to the contracts specifies the rental income at 92.1 *dan* of grain. This may be gross income, but it at least gives some visibility into the kind of return the consortium got on their investment. Academia Sinica’s “Database of Qing-era Grain Prices” has data on Pingyang Prefecture wheat prices by month for the 19<sup>th</sup> Century. I thus convert the grain rents into silver at a rate of 2.3 taels per *dan*. This allows me to back into a capitalization rate, shown in Table 2.

Table 2. Capitalization Rate on Rents

Capitalization Rate on Rent Income	Values
Price of Dian on Land	1,000.00
Price of Dian on Compound	1,500.00
Total principal (A)	2,500.00
Rental income ( <i>dan</i> of grain) (B1)	92.10
Average grain price (taels per <i>dan</i> ) (B2)	2.30
Rental income (silver taels) (B1 * B2) (B)	212.06
Capitalization Rate (B / A)	8%

Source: Lease Contract for Zhang Estate, Leases and Dian Contracts, LJMPC

The consortium’s return on capital is 8%. If this is a gross return, then taxes and management costs might have brought returns considerably lower. On the other hand, it is possible that the consortium thought they could do a better job than the Zhang family, and raise rental incomes. In any case, the 8% capitalization rate on the consortium’s rents also represents a borrowing rate for the Zhang family. The Zhangs were clearly quite wealthy and the enormous property involved serves as security for the consortium.

Nor is this even the most interesting part of the contract. The borrowers hail from three different counties—Quwo, Linfen, and Taiping Village (next to Linfen county)—and have

formed a consortium to conduct a massive land purchase in yet a fourth county, Fushan! Moreover, they clearly have business interests in Beijing, thus the stipulation allowing them to reinvest the rental income in Beijing commerce. Thus, this contract is nothing less than an instance of commercial capital hailing from all over Shanxi Province, investing in the rural agrarian economy, and then recirculating income from land back into the commercial economy. It is direct evidence of regional integration of capital, land, and commercial markets.

The next contract comes from another fascinating account book. The account book is entitled “Zhangquanyong Co. Accounts of Dian Prices.” It is an account book drawn up by a corporate entity, the Zhangquanyong Company (漳泉涌记). Zhangquanyong was established specifically to invest in land in Shanxi province. The account book is known as a *chaoben* (抄本), meaning the entries are not original contracts, but copies of contracts done in fine calligraphy as well as summarized and standardized into a common format. The contracts involve various kinds of land investments, including *dian*, leases (*zulin* 租赁), and loans (*jiyue* 借约). After being copied into the account book, each entry is then chopped with the company seal. One such entry is transcribed as Entry 1.

**Entry 1<sup>193</sup>:** 任有福四年十二月十一日取钱捌仟文  
有典租约月 1.3, 欠租钱四千四百四十八文  
至六年三月初九日承种小寺领地三亩  
Ren Youfu on the eleventh day of the twelfth month of the four year of the Xianfeng Reign (1854/12/11) received an advance of 8,000 copper cash  
Executed a *dianzu* contract of 1.3% per month. Currently owes rents in arrear of 3,8780 coper cash. As a result, on the 1856/3/9, we have taken possession of the small temple land of 3 mu.

---

<sup>193</sup> Fuquanyong Co. Register of Dianholdings, LJMPC, 40.

This contract shows a peasant named Ren Youfu, who sold a *dian* on a stream of rents from a 3mu plot of land that he himself had received from the local “small temple.” Interestingly, the *dianzu* is quoted as an interest rate, rather than as the nominal stream of rents. Moreover, the rate is quite low; only 1.3% per month. Mortgage rates in the United States have been almost as high in my own life time.

Entry two shows an example of a similar transaction. This is not, strictly speaking, a *dianzu* but it is a loan in which I believe the interest is paid in rent rather than cash interest.

**Entry 2<sup>194</sup>:** 道光十七年十二月十四日典到  
宋富贵永沟背白地一代拾亩，东西至渠，南至山顶，北至宋居仁，地内良良  
[纳粮银]式钱八分  
当取典价钱壹佰仟文  
本日又借钱壹拾贰仟文，承种平城沟地一代  
至十九年秋又欠租米壹石六斗，又欠黑豆六斗  
1837/12/14, purchased a *dian* on  
Song Fugui’s plot of white land on Yong Ditch, amounting to 10 mu. It extends to  
the east and west until the irrigation ditches. It extends to the south to the  
mountain peak. It extends to the north to Song Juren. Land taxes are 0.28 taels of  
silver.  
The *dian* price is 100,000 copper cash.  
On this date we are also extending a loan of 12,000 copper cash, for which the  
borrower contracts the plot of land by the city ditch.  
As at Autumn of 1839, rents in arrears are 1.6 *dan* of millet and 6 *dou* of black  
soybeans.

The contract shows that the Zhangquanyong Company purchased a *dian* over 10 mu of land from the peasant Song Fugui. Annual tax liabilities on the land totaled 0.28 taels of silver and the price of the *dian* was 100,000 copper cash. In addition, the company extended a loan to Song Fugui with a principal of 12,000 copper cash, collateralized by a plot of land by the city ditch. The account then notes that there are rents in arrears worth 1.6 *dian* of millet (*mi* 米 in this part of

---

<sup>194</sup> Fuquanyong Co. Register of Dianholdings, LJMPC, 50.

Shanxi refers to 小米 or millet, rather than rice) and 0.6 *dan* of black soybeans. In short, this is a *dian*-leaseback, along with a loan to Song Fugui.

Entry three shows a more pure lending contract, with no *dian* of land involved.

**Entry 3<sup>195</sup>:** 宋昌林  
二十二年六月廿六日取钱壹拾陆仟文，有约一，欠利钱五千陆百零五文  
十一月十七日取钱壹拾仟文有约一分  
至二十五年四月初四日承种老余上白地一块六亩三家系伙，三合全本钱  
15000、宋富魁钱 25000  
地内租票三家按钱本均分  
Song Changlin  
1842/6/26, received an advance of 16000 copper cash, contracted at 1%. Interest payable is 5605 copper cash.  
1842/11/17 received advance of 10,000 copper cash, contracted at 1%.  
As of 1845/5/5, contract out Venerable Yu's upper white plot of land of three mu in a consortium with three parties. Sanhequan's principal in this will be 15,000 copper cash; Song Fuikui's principal is 25,000 copper cash.  
Rents on the land will be pro-rated by cash investment.

The first part of this contract is straightforward. The borrower, Song Changlin, has received two loans from the Zhangquanyong Company in the amounts of 16,000 and 10,000 copper cash respectively. The interest rate is low, at only 1% per month. Once again, this suggests the scholarship has overestimated the interest rate in rural China. The final part of the entry is also intriguing. It indicates that the company is purchasing a plot of land with Song Changlin and Song Fukui

Another more typical *dianzu* relationship can be seen in Entry 4, from a contract drawn up in the 21<sup>st</sup> year of the Daoguang Reign.

**Entry 4<sup>196</sup>:** 安秉信  
道光二十二年十二月初四日取典价钱壹佰零伍仟文，有典租约  
每年除神例、良艮净出租麦子式石五斗、谷式石  
An Bingxin

---

<sup>195</sup> Fuquanyong Co. Register of Dianholdings, LJMP, 52.

<sup>196</sup> Fuquanyong Co. Register of Dianholdings, LJMP, 61.



1842/2/4, disbursed dian payment of 105,000 copper cash, contracted for a dianzu  
The yearly rental income after tithes and taxes is 2.5 *dan* of wheat and 2 *dan* of  
millet.

This contract means that the Zhangquanyong Co. has purchased a dian on An Bingxin's stream  
of rental income. For the price of 105,000 copper cash, Zhangquanyong receives net rents of 2.5  
dan and 2 dan of wheat and millet respectively. The *shenli* (神例) refers to payments that the  
land owes to the local temple, something like a tithe. The *liangyin* (粮银; the characters are  
written as *lianggen* but this is shorthand for *liangyin*) refers to the land tax. Converting the rents  
in kind to cash values, this implies a capitalization rate of 19%.

Entry 5 is an example of dianzu from the Xianfeng reign, during the Taiping Rebellion.

**Entry 5:**<sup>197</sup> 秦福星  
欠租钱贰拾三千贰百七十七文  
九年十一月初六日取钱叁拾仟文，有典租约一，4200  
自十年二月十八日同闹更年面算净欠租钱贰拾肆仟叁佰廿七文，另立租约  
Qin Fuxing  
Rents payable of 23,277 copper cash  
1859/1/6, made advance of 30,000, with one contract for a dianzu at interest of  
4200.  
From 1860/2/18 Settled rents in arrears of 24,327 copper cash, drew up new lease

Here the Zhangquanyong Company has purchased a stream of rental income from Qin Fuxing.

The 4200 represents rental income on the land. Thus, the rate on this mortgage is 14% per year.

The fact that a company like Zhangquanyong was going around purchasing land, making  
loans on land, and buying up streams of rent is significant in its own right. Liu Xinlong has done  
yeomen's work in sorting through the entire account book, and finds that it purchased 916.91  
mu, or 151 acres, over the course of 71 years of operation.<sup>198</sup> This is of course a far cry from an

---

<sup>197</sup> Fuquanyong Co. Register of Dianholdings, LJMPC, 77.

<sup>198</sup> Liu Xinlong 刘新龙, "Wanqing Fenxian Shanghao Zhanquanyong Tudi Jingying Yanjiu 晚清  
沁县商号漳泉湧土地经营研究) [Research on the Land Management of Zhangquanyong in

English manor, but it is direct evidence of land consolidation by a commercial entity. I do not wish to overstate the significance of Zhangquanyong. There is no evidence to suggest that it was managing its holdings directly or realizing economies of scale. It should be thought of, rather, as an example of commercial capital entering the land market; as a kind of mortgage bank. In this respect, the very fact that it was entering contracts into a *chaoben* is itself meaningful.

Bookkeeping is the technology of managerial entrepreneurship. There is no need for a *chaoben* unless Fuquanyong was actively managing its investments; that is, it is treating them as portfolio assets valued for their cash return, rather than as valuable in their own right. In other words, rural credit markets were not merely demand-driven by desperate borrowers. They were also supply driven, with entrepreneurial commercial entities seeking to make loans and purchase land at profitable rates. Finally, this section has shown that the rates in the land-based financial markets that Fuquanyong invested in were not at all high. They ranged from 1% per month to 18% per year.

#### Rural lending and the grassroots capital market

This section posits the existence of a capital market that bridged different institutional lenders at the grassroots of society. By this I mean that institutional lenders injected financial capital wherever the return was highest. As a case in point, I cite correspondence and account books that show lineages extended capital to pawnshops, and vice versa. But the importance of this finding goes well beyond pawnshops and lineage trusts. I demonstrate that lending was truly

---

Qinxian County in Late Qing Dynasty],” *Gujin Nongye* 古今农业 [Ancient and Modern Agriculture], no. 3 (2019): 79–88.

a competitive market, with financial institutions willing to allocate capital to wherever the return was highest. In other words, the financial system was finding opportunities in the economy, and thus increasing productivity, trade, and aggregate demand. In making this claim, I also overturn a long-standing assumption that finance was neatly divided into distinct grassroots- and high-finance spheres, and that each had their own supply and demand parameters. Pan provides the clearest description of this model, writing:

This study makes a crucial distinction between "formal" and "informal" rural credit markets. The "formal" credit market refers to rural financial institutions regulated by either the government or the community: granaries and pawnshops are the most important examples. Within the informal rural credit market, we can further distinguish the intra and inter-village rural credit market. These two markets functioned according to their distinct logic— one was reciprocal, the other profit maximizing. The institutions in the "informal" rural credit market in this study were the landlord/merchant (moneylender), and the clan/neighbor. These markets were informal, unregulated, and usually personalized. Local customs superseded laws and government regulations.<sup>199</sup>

In short, the theory posits that Qing-era grassroots financial markets resembled a kind of vacuum chamber, in which custom, political power, and reciprocal (or kin) relations prevented the more plentiful capital of market-oriented high finance from entering rural markets. By showing that putatively “formal” and “informal” financial institutions dealt frequently and in large scale with one another—often across considerable distances—I question these distinctions. The evidence suggests that capital market functioned even at the very grassroots of society.

The correspondence I review is from a book of letters written in the 1870s between the manager and shareholders of the Hengyu Pawnshop (恒裕当) found in the *LJMPC*. Once again, the book is a *chaoben* (抄本), meaning a clerk has hand copied original letters into the book to

---

<sup>199</sup> Ming-te Pan, “Rural Credit Market and the Peasant Economy (1600-1949): The State, Elite, Peasant and ‘Usury,’” *ProQuest Dissertations and Theses* (Ph.D., Ann Arbor, University of California, Irvine, 1994), ProQuest Dissertations & Theses Global (304081530), <https://search.proquest.com/docview/304081530?accountid=14657>, 10.

serve as a record and a reference. The correspondence contains a wealth of information on business conditions and on the operations of the firm. The Hengyu Pawnshop was based in Daming County, in Zhili province. Daming was a commercial hub with a large financial industry. The Daming Republican-era gazetteer published in 1933 lists twelve financial institutions in the county seat, including an office of the Bank of China and a still-operating Hengyu Pawnshop.<sup>200</sup>

The managers and shareholders of the Hengyu Pawnshop were Shanxi merchants, with the shareholders hailing from Jiexiu County, now a county-level sub-municipality of Jinzhong. Jiexiu was renowned for its merchants, and even today prides itself on its “Shanxi merchant culture.” In the late Ming, the Fan family inaugurated Jiexiu’s merchant tradition with its entrance into the overland trade centered around Zhangjiakou. In the Kangxi reign the Fans rose to become important salt merchants, began to import copper and other goods from Japan, and also started marketing grain to the military. The Hou family, also from Jiexiu, invested in some of Shanxi’s most successful *piaohao* and *zhangju*, including Weitaihou and Tianchengheng.<sup>201</sup> Apart from these illustrious examples, Jiexiu also produced numerous employees for the Shanxi merchant firms that conducted trade and finance through the Qing empire.

In the case of the Hengyu Pawnshop, the shareholders were not Jiexiu individuals, but *tanghao*, or lineage trusts. Wang Zhongliang and Yang Xiaomin count a total of 14 lineage trusts

---

<sup>200</sup> Hong Jialu 洪家禄, ed., *Daming Xian Zhi* 大名縣志 [*Daming County Gazetteer*] (Daming: s.n., 1934), Volume 10.

<sup>201</sup> Li Maosheng 李茂盛 and Wang Jin 王谨, eds., “Qixian Qiaojiabao Qiaoshi Jiazhu 祁县乔家堡乔氏家族 [The Qiao Family of Qi County’s Qiao Family Compound],” in *Jinzhong Shangye Jiazhu* 晋中商业家族 [*Merchant Families of Jinzhong*] (Taiyuan: Sanjin Press, 2019), 115–256, 350–401.

amongst the shareholders.<sup>202</sup> In addition to providing equity, the shareholders lent excess cash into the pawnshop. Thus, in one letter, the manager informs the shareholders that “启者, 咱典四维堂借贷约于今年归还”<sup>203</sup>, or, “Respectfully, we have agreed to repay our loans from the Siwei Hall this year.” Another letter ends by specifying that, “另及信成后四维堂至典咱已还过本银 3000 两, 下余四千两, 仍照 7 厘转票。”<sup>204</sup> This translates to, “In addition, since the arrival of your letter we have repaid principal of 3,000 taels to Siwei Hall. The remaining 4,000 taels we will roll over in notes at 0.7% monthly interest.” In other words, the Siwei Hall deposited 7,000 taels of silver in its investee company, the Hengyu Pawnshop. Hengyu Pawnshop repaid 3,000 of this, and rolled the rest over with interest-bearing notes at 0.7% monthly. It seems likely that the Siwei Hall was a lineage of trust of precisely the great Jiexiu Fan lineage.<sup>205</sup>

The account books of *tanghao* also show frequent transactions between lineage trusts and specialized financial institutions, including both *qianpu* (钱铺) or “money shops” and pawnshops. The oldest lineage trust account book I have seen is a record of loans from the Jishan Hall, drawn up in the eleventh reign year of the Jiaqing emperor (1806). The majority of loans are to individuals or households. But some entries, such as Entry 1, show financial institutions.

---

<sup>202</sup> Wang Zhongliang 王中良 and Yang Xiaomin 杨小敏, “Xin Faxian de Jinshang Hengyudian Wanglai Xingao de Zhengli Ji Yanjiu Jiazhi 新发现的晋商恒裕典往来信稿的整理及研究价值 [Collation and Research Value of the Newly Discovered Hengyu Pawnshops’ Letters of Jin-Merchants],” *Shanxi Dang’an* 山西档案, no. 4 (2016).

<sup>203</sup> Hengyu Pawnshop Correspondence between manager and shareholders, LJMPC, 6.

<sup>204</sup> Hengyu Pawnshop Correspondence between manager and shareholders, LJMPC, 8.

<sup>205</sup> Fan Guoqian 范国强, “Fanshi Tanghao Da Quan 范氏堂号大全 [Comprehensive List of Fan Lineage Halls],” April 3, 2018, [http://www.360doc.com/content/18/0304/11/13924396\\_734142727.shtml](http://www.360doc.com/content/18/0304/11/13924396_734142727.shtml).

**Entry 1:**<sup>206</sup> 七年五月廿八日借来  
 合成当元系银二百两本 X 平兑，每月每两九厘行息  
 当年十二月廿八日还本元系银伍十两 XX，付利银十九两三钱  
 1802/5/8 Borrowed from  
 Hecheng Pawnshop 200 taels of silver, measured with [illegible] scales. The loan  
 accrues a monthly interest of 0.9%.  
 1802/12/28 received repayment of principal of 50 taels was repaid, and payment  
 of interest of 19.3 taels.

The entry continues, but the handwriting becomes difficult to read. In any case, for our purposes  
 the important information is simply the fact that this *tanghao* was providing loans to a pawnshop.

Entry two shows a similar relationship with a money shop.

**Entry 2:**<sup>207</sup> 三年五月初六日借  
 协盛钱铺元系银二百两整  
 年满一分行息，每平短八分  
 1798/5/6, Extended a loan to  
 Xiesheng Moneyshop of 200 taels of silver  
 Yearly interest of 1%. The taels of their scales are 8% smaller than ours.

The entry continues with repayment details, but is again hard to make out. The important thing is  
 that the *tanghao* was providing low-interest, long-term financing to a money shop. These  
 examples are illustrative of typical lineage trust interactions with specialized financial  
 institutions. Indeed, I have not found a single *tanghao* ledger without at least a few mentions of  
 pawnshops as either borrowers or financiers.

The account books of pawnshops themselves show frequent interactions with *Tanghao*.  
 The best preserved account of borrowings and loans, or *jiedaizhang* (借贷帐) comes from the  
 Yuqing Pawnshop (裕庆当) and was composed in 1931. As Table 3 shows, the overwhelming  
 majority of the accounts listed here are *tanghao*.

Table 3. Accounts of Yuqing Pawnshop, 1931

Date	Account	Account (Eng)	Interest	Rate	Principal	Unit
12/20/30	慎修堂	Shenxiu Hall	Yearly	1.2	400	Copper cash
				140		Silver
3/16/31	敬记	Jing Co.	Yearly	元	1000	dollars
3/29/31	张福田	Zhang Futian	Yearly	0.7	500	Silver taels

<sup>206</sup> Jishan Hall, 1806, Lending Accounts, LJMP, 12.

<sup>207</sup> Jishan Hall, 1806, Lending Accounts, LJMP, 15

3/31/31	固本堂	Guben Hall	Yearly	1	200	Silver dollars
4/15/31	务本堂	Wuben Hall	Yearly	1.4	600	Silver dollars
6/6/31	河神社	River God Society	Yearly	1	500	Silver dollars
6/9/31	公义堂	Gongyi Hall	Monthly	1	300	Silver dollars
9/11/31	梁养源堂	Liang Yangyuan Hall	Yearly	1	1000	Silver dollars
2/14/31	王道生堂 媛记	Wang Daosheng Hall (Yuan Co.)	Yearly	1	300	Silver dollars
12/4/31	王道生堂	Wang Daosheng Hall	Yearly	1	250	Silver dollars
12/16/31	王道生堂	Wang Daosheng Hall	Yearly	1	300	Silver dollars
12/16/31	王道生堂	Wang Daosheng Hall	Yearly	1	300	Silver dollars
9/9/31	昌龄堂	Changling Hall	Yearly	1.46	812.514	Silver dollars
1/14/32	宜成堂	Yicheng Hall	Monthly	1	400	Silver dollars
2/1/32	梁承启堂	Liang Chengqi Hall	Monthly	1	300	Silver dollars
2/11/32	四箴堂	Sizhen Hall	Monthly	1	700	Copper cash
Loans for interest						
12/20/31	高等学堂	Higher level School	Monthly	1.2	123.08	Silver dollars
1/29/32	高等学堂	Higher level School	Monthly	1.2	307.73	Silver taels
1/29/32	女子学堂	Women's school	Monthly	1.2	98.98	Silver taels
1/29/32	河汾学堂	Hefen School	Monthly	1.2	63.7	Silver taels
Borrowings						
9/30/31	信记	Xin Co.	Yearly	1.5	500	Silver dollars

2/5/32	庞思忍堂	Pan Siren Hall	Monthly	1.5	700	Silver dollars
2/5/32	庞思忍堂	Pan Siren Hall	Monthly	1.5	4000	Copper cash

Source: Yuqing Pawnshop, Loans and Borrowings Accounts, 1931, LJMPC.

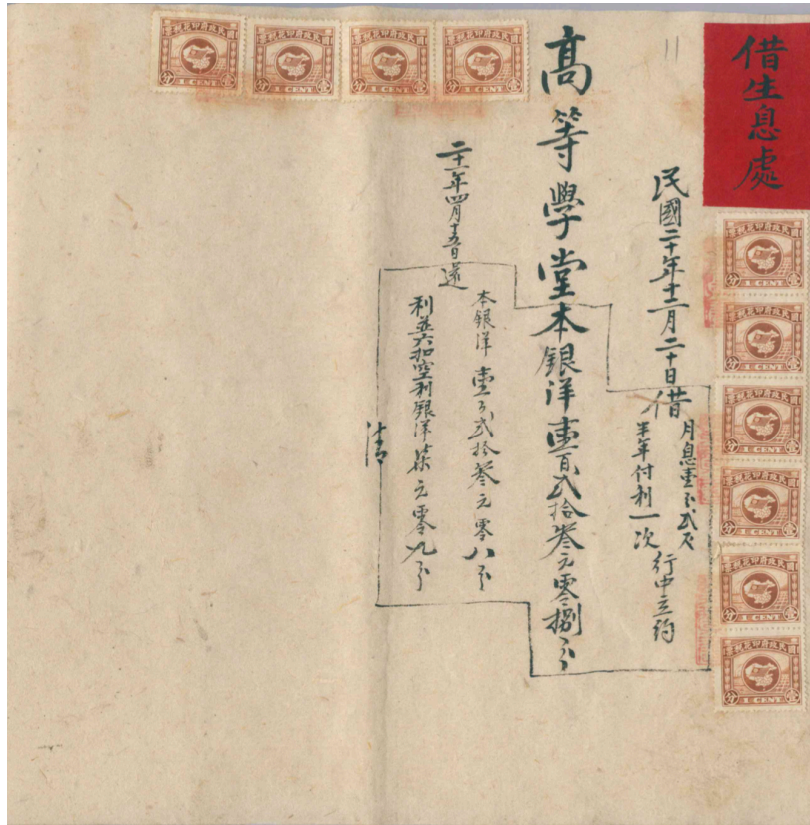
One glance is enough to cast serious doubt on the notion that formal pawnshops existed in a separate market form informal lineage trusts. Not only are most of the accounts for lineage trusts, but one of them is even a low-interest loan to the River God Society! Trying to classify lenders as operating in distinct formal and informal markets is to mistake the Qing legal code for social reality, and to project China's contemporary political-financial economy onto the past.

That said, it is important not to read the wrong information out of this account book. This is not a comprehensive list of clients; most of its borrowers were surely peasants and not corporate entities. Rather, this account book reflects something like the pawnshop's "capital markets" department. It represents lower-cost loans and borrowings with other, low-risk corporate entities. This explains why the interest rates are so low, as well as why none of the customers are actually pawning anything. The loans are a kind of capital markets rate akin, perhaps, to the present-day repo market.

The account book also says much about arrangements between borrowers. It breaks out certain loans under section headings labeled *jie shengxi chu* (借生息处), or "loans for interest department" and *waijie* (外借), or "borrowings." These separations can be seen in Image 4.



Image 4. Yuqing Pawnshop Loans, “Interest-yielding loans.”



Source: Source: Yuqing Pawnshop, Loans and Borrowings Accounts, 1931, LJMPC.

Interest-bearing, or *shengxi*, is the critical distinction made by the Yuqing pawnshop. This classifier indicates that a loan was extended on the basis of a higher, monthly rate. Non-interest bearing loans also had an economic rationale, but appear to represent surplus cash that an investor might place with an investee company, or perhaps a buyer place with a supplier in order to fund production. This can be seen clearly from the Hengyu Pawnshop correspondence referenced above. A letter from the Hengyu shareholders to the pawnshop manager states that, “所说四维堂生息之借贷，今众东共商又定位四维堂借贷，并生息借贷均按 1300-1400 作钱价”， meaning, “The referenced for-interest loans from the Siwei Hall were discussed today. The shareholders agreed to peg the exchange rate of Siwei Hall’s loans, including its for-interest

loans, at 1300 to 1400 copper cash per silver tael.”<sup>208</sup> In other words, the *tanghao* had both borrowings and for-interest loans with its pawnshop investees.

Ultimately, this brings us back to the distinction between the *changnian*, or “annual” rate and the *yuexi*, or “monthly rate.” Fully 75% of the loans in the Yuqing account book that are not classified as *shengxi* are quoted at the *changnian* rate. Indeed, as seen in Entry 3, Yuqing literally uses the same wording “*changnian*” as found in *zihao* lending contracts.

**Entry 3<sup>209</sup>:** 民国二十年三月二十九日借（言定长年七厘行息，立摺）张福田本市平银五百两正  
1931/3/29, Loaned (clearly stated interest rate at 0.7% per annum, receipt issued) to Zhang Futian 500 taels of silver at the market weight.

The Yuqing account book explains in granular detail what is meant by “non-interest bearing” loans. Non-interest bearing loans were not literally free money. They were simply extremely low interest, generally long-term financing similar to those seen between other corporate entities. Both the pawnshop loans shown here, and the corporate *changnian* loans seen above, might be likened to a modern day industrial corporation, such as Apple or General Motors, providing subsidized loans to a components suppliers—or perhaps to a consumer goods company offering low-cost financing to distributors. The difference in interest rates is substantial. Non-interest bearing loans cost between 1% and 1.5% per annum; interest-bearing loans accrue interest at a rate of 1.2% per month.

In sum, the materials presented from the Hengyu and Yuqing pawnshops demonstrate that putative distinctions between “formal” and “informal” financial institutions are more apparent than real. That is, lineage trusts and pawnshops were dealing in the same capital market, with

---

<sup>208</sup> Hengyu Pawnshop Correspondence between manager and shareholders, LJMPC, 8-9.

<sup>209</sup> Yuqing Pawnshop, Loans and Borrowings Accounts, 1931, LJMPC, 4.

pawnshops serving as lenders and borrowers to both of them. Meanwhile, lineage trusts were important sources of equity and debt financing for pawn shops.

## Conclusion

This chapter has provided evidence of long-term, low-interest lending that penetrated the very grassroots of society. Such lending was provided by all classes of institutional lender, and was most common in loans provided by corporate entities, or *zihao*. The chapter also offers evidence of a capital market that existed to channel financing to those institutions that could deploy it most profitably. Lineages parked excess funds with pawnshops and other financial institutions at a low, *changnian* rate, while also providing funding at the monthly rate when loan demand was high. At the same time, lineage trusts in need of funds could borrow from specialized financial institutions. In addition, the interest rates charged on these funds were a good deal lower than has frequently been alleged in the literature. Interest on most lending probably did not exceed 20% on an annual basis. More importantly, the loans were borrowed not only out of desperation, but also to fund agricultural production and to roll over previous debt. Given the existence of low-interest debt, capital markets, and deployment of credit for productive purposes, the multitude of institutional actors in grassroots finance takes on new implications. It suggests that these actors were in competition with one another on both sides of the ledger, that is, both for capital and for borrowers. The wide array of grassroots credit suppliers—including individuals, lineages, corporate entities, religious organizations, and pawnshops—neither enjoyed monopoly rents nor operated with inelastic supply and pricing fixed by custom. Rather, they participated in a rural credit market.

This new interpretation of grassroots finance prompts us to rethink not only rural credit markets, but grassroots society more broadly. Rural lending in imperial China is often conceived

of as a relationship between landlord—or, perhaps, merchant—and peasant. It calls to mind sour-faced literati doling out a few short-changed strings of copper to half-starved peasants. The Marxist literature portrays this kind of relationship especially colorfully. Hinton writes, “Weighed down by high interest rates, harassed by heavy taxes, caught in the snares of a rigged market, many landowning peasants went bankrupt, sold out their holdings strip by strip, and ended up with the yoke of rent around their necks, or left for the city hoping to find some work in industry or transport that would keep them alive.”<sup>210</sup> In popular media, this trope reached its apex in the “White-haired Girl,” one of the eight great operas of the Cultural Revolution. When a poor peasant cannot repay his loans, the covetous landlord demands his daughter as a concubine. The daughter flees to the mountains, where her hair turns white. There, she awaits the revolution. The message is clear: “The old society turns people into ghosts, while the new society makes ghosts into people.”<sup>211</sup> Even contemporary art has made ironical use of this trope. Cai Guoqiang’s exhibit at the Guggenheim, “I want to believe,” features an installation entitled “Rent Collection Courtyard”—a reference to the museum of landlord Liu Wencai, constructed in Sichuan during the Cultural Revolution—with sculptures of abacus-wielding landlords lording it over groveling peasants.<sup>212</sup> The image of peasants trapped in semi-feudal dependencies on landlords or greedy merchants is a stirring one. But it is not true.

---

<sup>210</sup> William Hinton, *Fanshen: A Documentary of Revolution in a Chinese Village* (Berkeley: University of California Press, 1997).

<sup>211</sup> Jinxuan Yan, Chengwu Fan, and Shanghai ba lei wu tuan guan xian yue dui, *The White-Haired Girl*, electronic resource (Hong Kong: Naxos Music Library, 2004), <http://uchicago.naxosmusiclibrary.com/catalogue/item.asp?cid=82012>.

<sup>212</sup> Cai Guoqiang, “Rent Collection Courtyard” in “I Want to Believe.” February 22, 2008, Exhibit, Guggenheim Museum, New York.

## Chapter Two: Deposits And Credit Money At The Grassroots

On May 26, 1909, three cousins from Mudong Township north of Chongqing gave testimony at the Ba County magistrate's office. Nie Hu Shi said that her cousin Hu Xiaoxian owed her 125 taels of silver in pledged deposits (*yajin* 押金), and another 150 taels of silver in deposits (*cunkuan* 存款), but that he had been stalling and refusing to pay. Two third parties, Hu Yulin and Hu Keyi were asked to arbitrate. They decided that Hu Xiaoxian would draw on his account with another cousin, Hu Shen Shi. Hu Shen Shi owed Hu Xiaoxian 230 taels in outstanding loans, accumulated interest of 15 taels, and another 29 taels in deposits. But there was a problem; Hu Xiaoxian had lost his contract with Hu Shen Shi. Before paying, Hu Shen Shi wanted written assurance that "if the lost contract were to turn up, it would be void."<sup>213</sup>

At the magistrate's office, a new contract was drawn up stating that Hu Xiaoxian's account with Hu Shen Shi was settled. Hu Shenshi then repaid Hu Xiaoxian's loan and redeemed his deposit slip of 29 taels. Hu Xiaoxian, in turn, used this silver to clear his obligations to Nie Hu Shi. The episode is fascinating for a number of reasons. First, two of the principal actors are women, suggesting a lively female participation in the financial and commercial life of a Sichuanese market town. Second, the characters involved in this case are individuals, not banks or pawn shops, yet they are issuing and dealing in "deposit slips" and paper notes—and in

---

<sup>213</sup> Case number, 006-007-0458, "Xuanton Yuannian Renlijiuli Huzezhi yi jieyintaohua, nipian bu yu oushang" (宣统元年仁里九甲胡责之以借银讨还, 逆骗不与凶殴伤), Ba County Archives (BCA).

significant amounts. Moreover, these deposits are not circulating in a treaty port or major city, but in a Sichuanese township 90 *li*<sup>214</sup> away from the county seat!<sup>215</sup>

This chapter investigates one of the most important problems in the social history of modern China: the nature of credit and finance at the grassroots of pre-modern Chinese society, with a focus on the late Qing and early Republic. It argues that most Chinese peasants lived in a thoroughly financialized society. Moreover, rural finance was as a general rule competitive, profit-maximizing, and subject to the same laws of supply and demand that governed grain markets. This conceptual argument rests on the empirical claim that institutional actors functioned as a kind of proto-bank, issuing credit money and providing settlement services at the very grassroots of rural society. In the previous chapter I demonstrated that a number of rural institutional actors supplied credit to rural lending markets. In this chapter, I show that institutional actors such as *tanghao* (堂号), or “lineage trusts,” and *zihao* (字号), or “corporate entities,” also took deposits. A system of loans and deposits allowed rural institutions to issue “credit money” as a medium of exchange. This money consisted of both “account book” money transfers, and of paper notes. This freed rural economies from hard copper and silver constraints. It also gave rural actors access to a proto-checking system that facilitated settlements, and thereby promoted trade and agriculture production.

This chapter has a total of six sections, including this introduction. Section two reviews the relevant literature. Section three goes on to discuss the deposit market, with a focus on

---

<sup>214</sup> Roughly 45 kilometers.

<sup>215</sup> Case number, 006-007-0458, “Xuantong Yuannian Renlijuli Huzezhi yi jieyintaohua, nipian bu yu oushang” (宣统元年仁里九甲胡责之以借银讨还, 逆骗不与凶殴伤), Ba County Archives (BCA).

lineage trusts as a key deposit-taking institutional actor. Section four details the use of credit money. Section five investigates how the grassroots financial system was connected to the Skinnerian marketing system. The final section is a conclusion.

## Literature Review

This chapter builds on two distinct bodies of scholarship. First, it addresses an older, English-language literature on financial institutions in China. This earlier scholarship focuses on the economies of treaty ports and other commercial hubs. They assume that complex banking and settlement systems were restricted to major urban centers. This chapter shows that sophisticated financial systems—including credit money, settlements, and brokerage—penetrated to the grassroots of society. Second, I build on an exciting body of scholarship coming out of China. Cao Shuji, Meng Wei, and others have begun to analyze the financial instruments in the rural and commercial Qing. These scholars pay particular attention to how financial instruments moved through the economy, both regionally and temporally. They recognize the importance of credit money in the form of paper notes. I build on this scholarship by situating the paper notes studied in the Chinese scholarship within the larger financial system that created such notes.

Scholars of Chinese finance have long recognized the existence of specialized financial institutions prior to the introduction of western banking. Susan Mann's classic study of Ningbo *qianzhuang* (钱庄) identified the existence of credit money in imperial Chinese society. In Ningbo, both *qiantie* (钱帖) and “transfer tael,” or *guozhangyin* (过账银), circulated in lieu of hard copper and silver. The former were paper notes issued by *qianzhuang* while the later were a

kind of account-book currency that could be transferred between parties through the use of passbook entries, similar to a modern-day check drawn on a deposit account. The *qianzhuang* supported this system with a clearing house for settling interbank accounts. Mann believes that this system helped integrate Ningbo with the rest of the prefecture, and with Shanghai.<sup>216</sup> Andrea McElderry built on Mann in her research on Shanghai *qianzhuang*, by far the largest and historically important group of *qianzhuang*. McElderry focused on the political economy of *qianzhuang* relationships with foreign banks and the Chinese state. Nevertheless, her monograph drew attention to the importance of credit money in the form of *qianzhuang*-issued banknotes or “*zhuangpiao*” (庄票), and to the circulation of Shanghai notes in other, nearby ports.<sup>217</sup> George Selgin examined a similar system of credit money in Fuzhou, and argued that self-regulating systems of credit can be more stable than those under the aegis of a central-bank.<sup>218</sup> More recently, the Chinese literature has seen a number of studies of credit money issued by silver furnaces (*yinlu* 银炉) in Yingkou. The Yingkou money market grew to be the most important money market in Dongbei, linking northern China (especially Dongbei, Shandong, and Zhili) to Shandong, Shanghai, Guangdong, Japan, and Russia.<sup>219</sup> Hence, the existence of deposits, and of

---

<sup>216</sup> Susan Mann, “Finance in Ningpo: The ‘Ch’ien Chuang,’ 1750-1880,” in *Economic Organization in Chinese Society*, ed. W. E. Wilmott (Stanford: Stanford University Press, 1972), 47–77.

<sup>217</sup> Andrea Lee McElderry, *Shanghai Old-Style Banks (Ch’ien-Chuang), 1800-1935: A Traditional Institution in a Changing Society*, Michigan Papers in Chinese Studies, no. 25 (Ann Arbor: Center for Chinese Studies, University of Michigan, 1976).

<sup>218</sup> George Selgin, “Free Banking in Foochow,” in *The Experience of Free Banking*, ed. Kevin Dowd (New York: Routledge, 1992).

<sup>219</sup> Wang Yan (王昉), Yan Hongzhong (燕红忠), and Gao Yu (高宇), “The Development of Currency Market Regionalization in the Late Qing: A Study of Yingkou ‘Guoluyin’ 晚清区域货币市场发展研究——以营口‘过炉银’为中心,” *Historical Research (历史研究)*, no. 3 (2016) and Yan Hongzhong (燕红忠) and Gao Yu (高宇), “The Crisis and Adjustment of the Yinlu System at the End of the Qing Era (清末时期的过炉银危机与制度调整),” *Researches in*



credit money in the form of account transfers and paper notes, in urban commercial hubs is well established by no later than 1850.<sup>220</sup>

These studies on credit money draw from a wide, but overwhelmingly urban, source base. Susann Mann's article relies mainly on the published historical materials of the Shanghai *qianzhuang*, Republican-era financial publications, and a few excellent Japanese monographs. The studies of Yingkou draw on reports from the Yokohama Specie Bank and other Japanese living in Yingkou. Selgin's older comes is taken largely from the accounts of British observers. Thus, all of these studies are told from the point of view of large, urban markets. The extent to which the financial mechanisms they describe extended beyond major commercial hubs and trade routes into rural markets and everyday peasant life remains a matter of contention. Some scholars believe financial institutions and credit money were deeply entrenched in rural society. Akinobu Kuroda argues that the proliferation of Chinese paper notes was precisely a response to increasing rural markets activity.<sup>221</sup> Niv Horesh disagrees, and is convinced paper notes did not circulate in rural areas. He further doubts whether the practice of circulating credit money was

---

*Chinese Economic History* (中国经济史研究), no. 2 (2017). The Yingkou *yinlu* are also central to the Dongbei great power conflict between Tsarist Russia, Imperial Japan, and a modernizing Qing state. They would be an excellent subject for a monograph. Unfortunately, the most important historical material on them is in the Duzhibu (度支部) Archives at the First Historical Archives in Beijing, and is at present not open to public review.

<sup>220</sup> George Qiao finds that paper money circulated not only within cities, but were also critical to financing the long-distance overland trade in Mongolia. George Qiao, "The Rise of Shanxi Merchants Empire, Institutions, and Social Change in Qing China, 1688-1850 /" (Ph.D., Stanford, 2017), <http://purl.stanford.edu/bg803zm7823>.

<sup>221</sup> Akinobu Kuroda, "Too Commercialized To Synchronize Currencies: Monetary Peasant Economy in Late Imperial China in Comparison with Contemporary Japan," in *Session 106* (XIV International Economic History Congress, Helsinki, 2006). Also see Richard Von Glahn, "Cycles of Silver in Chinese Monetary History," in *The Economy of Lower Yangzi Delta in Late Imperial China: Connecting Money, Markets, and Institutions*, ed. Billy K. L. So (New York: Routledge, 2013), 50–151. Von Glahn's explanation of the Qing copper depreciation seems to assume that paper notes were replacing copper in rural markets.

widespread even in urban areas apart from a few important commercial centers, at least until the entry of western banks.<sup>222</sup> Both Kuroda and Horesh base their conclusions on indirect evidence. Kuroda draws causal inferences from the correlation between market growth and paper money. Horesh bases his findings on reports of foreign observers.

Recent work coming out of China promises a breakthrough in our understanding of how China's rural economy functioned. Cao Shuji and Yang Qiming draw on hundreds of popular documents from southern China<sup>223</sup> to show that the rural economy was absolutely flush with *pingpiao* (凭票)—a kind of paper proto-money akin to an interest bearing promissory note. Cao Shuji's research centers on *pingpiao* found in two sets of *minjian* historical materials. The first set of materials were discovered in Shicangcun, a village in modern day Songyang County, Zhejiang Province, roughly 180 kilometers west of Wenzhou. These contain over 200 *pingpiao*. The second set of materials come from a Hakka family in Gan County, Jiangxi Province.<sup>224</sup> These collections contain 200 and 153 *pingpiao*, respectively. *Pingpiao* are little pieces of paper with the characters 凭票 scrawled on them, as can be seen in Image 5.

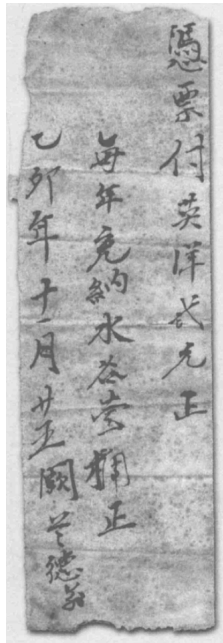
---

<sup>222</sup> Niv Horesh, *Chinese Money in Global Context: Historic Junctures between 600 BCE and 2012* (Stanford, California: Stanford University Press, 2013). Manhong Lin, *China Upside down: Currency, Society, and Ideologies, 1808-1856*, (Cambridge, Mass: Harvard University Asia Center, 2006), whom Horesh cites, has an even stronger view. She sees paper notes as basically a state endeavor, and her larger argument rests on the claim that rural financial institutions were not competitive.

<sup>223</sup> These documents have been published and are available to the public in Cao Shuji 曹树基, Pan Xinghui 潘星辉, and Que Longxing 阙龙兴, eds., *Shicang Qi Yue 石仓契约*, Di 1 ban. (Hangzhou: Zhejiang University Press, 2010).

<sup>224</sup> These materials have been published and are available in Cao Shuji 曹树基 and Chen Zhiping 陈支平, *Ke jia zhen xi wen shu cong kan 客家珍稀文书丛刊 [Collection of rare Hakka materias from]* (Guangdong ren min chu ban she, 2019).

Image 5. Pingpiao from Fujian Province



Source: Cao Shuji 曹树基, Pan Xinghui 潘星辉, and Que Longxing 阙龙兴, eds., *Shicang Qi Yue* 石仓契约, Di 1 ban. (Hangzhou: Zhejiang University Press, 2010), 242.

Note the characters *pingpiao* (凭票) in the upper right hand corner. It means “pay to the bearer of this note, 2 Mexican silver dollars.”

According to Cao and his colleagues, *pingpiao* should be considered a kind of circulating credit. He stops short of calling them money, but it is clear they served as a medium of exchange. The very name means “redeemable to the bearer of this note”. That is, *ping* means “bearing” and *piao* means “note.” After these characters, one generally finds an amount owed. Republican-era banknotes continued to feature these characters, indicating that bank money should be considered on a continuum of *pingpiao*. Cao Shuji and Yang Qiming break *pingpiao* down into several categories. The most basic distinction is between *benpiao* (本票), *zhipiao* (支票), and remittances (*hui* 汇票), a distinction borrowed from the modern PRC’s “Law of the People’s

Republic of China on Negotiable Instruments”(《中华人民共和国票据法》).<sup>225</sup> Benpiao refer to notes payable by the party who issues the bill, while *zhipiao* (in laymen’s terms, “checks”) refer to notes payable by a third party. Though *pingpiao* predate this law by over a century, the distinction is still a useful one. Remittances refer to a note redeemable in a different location, possibly by a different institution altogether. Cao then goes on to offer a second classification system by type of collateral. This classification distinguishes between three kinds of notes: (1) notes backed by grain (including by streams of rent or interest payable in grain), (2) monetary notes, and (3) notes backed by draught animals. Cao defines monetary notes as those that originated as a form of cash loan or to discharge a cash obligation (ie, they were used as a replacement for hard copper or silver). Monetary notes were also the most common note, comprising 61% of the Gan County notes. They were backstopped by collateral—usually land—and paid interest. Some notes had a maturity date, others circulated in perpetuity as a kind of local perpetuity bond. Other notes had no collateral specified.<sup>226</sup>

The discovery of such notes would be enough to radically alter our perception of the Qing grassroots economy. But Cao goes beyond this, to interpret the marginalia written on the back of these notes. He finds that these record transactions between different holders. What is especially intriguing is the transactions contain a price, which fluctuates around but not

---

<sup>225</sup> *Law of the People’s Republic of China on Negotiable Instruments* (Beijing: Zhongguo fa zhi chu ban she, 2007).

<sup>226</sup> Cao Shuji 曹树基 and Yang Qiming 杨启明, “Qingday Dongnan Difang Xiao Shichang Zhong de Pingpiao Yu Xinyong 清代东南地方小市场中的凭票与信用 [Pingpiao and Credit in Qing-Era Southeast Regional Markets],” *Zhongguo Jingjishi Yanjiu 中国经济史研究 [Researches in Chinese Economic History]*, no. 6 (2020): 102–17.

equivalent to the face value of the notes. In other words, these notes traded in a discount market.

Cao and Yang choose as an example a note reading:

**Main text:** 凭票交七零番银二元正，见票即交，至期加三行息，随月照算不误，此票存照。即日随缴当租批壹纸，为当付照。

**Marginalia:** 光绪二十八年五月二十日立票人徐端锡押，己笔 丁未三十三年十一月十三日 承翰收回票内七钱番一元 端星手收回。

They go on to explain that this note has two kinds of text. There is the original note, stating the principal, interest, and the issuer situated in the center of the note. This tells us the note was originated by Xu Duanxi with a face value of 2 silver dollars, payable on sight, with a monthly interest of 3%. But there is also marginalia in the upper left-hand corner. The marginalia tell us that on 11/13/1907, the note was purchased by Li Chenghan for 1 silver dollar. In other words, the note traded at a significant discount. Similar examples abound of notes trading at a discount or premium to par. In other words, rural China featured a discount market.<sup>227</sup> These notes mainly circulated within a village, but could occasionally move further afield, to the county seat.<sup>228</sup>

An article under review by Cao Shuji and Meng Wei and Shanxi University goes beyond the village level to explore how credit circulated regionally. This article examines Shanxi in the north of China, rather than the south. At the village level, notes are also ubiquitous, although the terminology changes somewhat. Rather than *piao* (票), Shanxi is more likely to use the term *tie* (帖). Scholars have long known that financial institutions issued silver notes and copper notes

---

<sup>227</sup> Cao and Yang, 21-24. Cao also finds evidence of “live sale” ownership rights being converted into interest-bearing notes. See Cao Shuji 曹树基, “Diandi Yu Dianzu: Qingdai Minnan Diqu de Tudi Shichang Yu Jinrong Shichang 典地与典租：清代闽南地区的土地市场与金融市场 [Live Sales and Rents: Land Markets and Financial Markets in Qing-Era Southern Fujian],” *Qingshi Yanjiu 清史研究 [The Qing History Journal]*, no. 4 (2019).

<sup>228</sup> Cao and Yang, 24.

(*qiantie* and *yintie*) for long-distance trade and commerce, but this is often to be assumed a “high finance” phenomenon.<sup>229</sup> But Shanxi villages also had village notes, or *cuntie* (村帖) analogous to the Fujian and Jiangxi *pingpiao* studied by Cao Shuji. Cao Shuji, Meng Wei, and Xu Junsong have found village notes from quite a few Shanxi villages.<sup>230</sup> They conclude that, “In Shanxi, there was widespread finance at the village or township level.”<sup>231</sup>

The article goes on to trace some important differences in Shanxi and the south. In general, it finds that finance was more developed in Shanxi. In Shanxi, notes even at the village level were often issued by an institution, usually the general store (*zahuodian* 杂货店). This has interesting parallels to “scrip” issued by general stores on the American frontier.<sup>232</sup> By the late-Qing, most of these notes were *benpiao*, that is, they functioned like banknotes rather than

---

<sup>229</sup> George Selgin, “Free Banking in Foochow,” in *The Experience of Free Banking*, ed. Kevin Dowd (New York: Routledge, 1992); Liu Qiugen 刘秋根, “15-18 Shiji Zhongguo Zijin Shichang Fayu Shuiping Lici 15—18 世纪中国资金市场发育水平蠡测 [Speculations on the Level of Chinese Capital Market Development between the 15th and 18th Century],” *Renwen Zazhi* 人文杂志 [*The Journal of Humanities*], no. 1 (2008): 160–69; George Qiao, “The Rise of Shanxi Merchants Empire, Institutions, and Social Change in Qing China, 1688-1850” (Ph.D., Stanford, 2017); Niv Horesh, Paper Money in Qing China: Exactly How Common and Reliable Was It by the Early Twentieth Century?” in *Chinese Money in Global Context: Historic Junctures between 600 BCE and 2012* (Stanford, California: Stanford University Press, 2013): 121-147.

<sup>230</sup> Namely, Dou Village in Wutai County, Qingzekou Village in Zhao'an County, Niuling Village in Zhao'an County, Mizhi Village in Zhao'an County, Wangdong Village in Changzhi County, Wangliu Village in Fanzhi County, Morning Glory Village in Yu County, Xiangting Village in Xiangyuan, Dengzhuang Village in Xiangyuan, Wangwu Village in Jiye, Locing Village in Qin County, Xishagou Village in Lishi County, Handian Village in Changzhi, Taihuai Town in Wutai County, Dongye Town in Wutai County, and Hongdao Town in Wuyi County.

<sup>231</sup> Cao Shuji and Meng Wei, “Shanxi Copper Notes: A Comparison between Qing-Era Shanxi Merchants’ Checks, Banknotes and Credit, and Southeastern Pingpiao (山西钱帖：清代晋商的支票、本票与信用——与东南地区凭票比较)” (Unpublished).

<sup>232</sup> Erling A. Erickson, “Money and Banking in a ‘Bankless’ State: Iowa, 1846-1857,” *The Business History Review* 43, no. 2 (1969): 171–91; Richard H. Timberlake, “The Significance of Unaccounted Currencies,” *The Journal of Economic History* 41, no. 4 (1981): 853–66; and Richard H. Timberlake, “Private Production of Scrip-Money in the Isolated Community,” *Journal of Money, Credit and Banking* 19, no. 4 (1987): 437–47.

checks. Moreover, they were generally non-interest bearing and had no maturity date. Cao and Meng conclude, “This is to say, *benpiao* style copper notes manifested as the result of demand for liquid capital. Capital at its most liquid is nothing less than transformation of credit into capital: that is money.” In other words, they believe the appearance of money notes is a response to liquidity preference. They also believe that demand for liquidity brought about a true money market in the modern sense of the term, as distinct from the “credit market” in the south. They believe notes circulated widely, and find evidence of general store notes from a market town in Zhao’an county passing current as far away as Taiyuan, 100 km away.<sup>233</sup> Moreover, the ability to circulate does not seem to be directly related to the kind of community that the note hailed from, but to the credit and standing of the issuing institution.<sup>234</sup>

Cao Shuji, Yang Qiming, Meng Wei, and Xu Junsong’s scholarship raises a number of critical questions. First, their studies are limited to paper notes. This is a key form of credit money, but it is not the only form of credit money. The extent to which other forms of credit money such as deposits and account-bank currency circulated in the countryside is a key question. Similarly, a system of credit money necessitates a of settlements, or else the credit

---

<sup>233</sup> Cao and Meng.

<sup>234</sup> Cao Shuji 曹树基 and Xu Junsong 徐俊嵩, “Qindai Shanxi de Qianti Yu Xinyong: Yu Dongnan Diqu Bijiao 清代山西的钱帖与信用:与东南地区比较 [Qing-Era Shanxi Monetary Notes and Credit: A Comparison with the Southeast Region],” *Shi Lin 史林 [Historical Review]*, no. 6 (2020). Note that this differs from Lou Min, who finds a spatially-determined hierarchy of notes. In later chapters, I argue that the spatial hierarchy became increasingly important during the Republic. Lou Min 娄敏, “Jindai Zhongguo Changjiang Shangyou Diqu de Shangye Xingyong Piaoju: Yi Baxian Yu Jiangjin Wei Li 近代中国长江上游地区的商业信用票据:以巴县与江津为例 [Modern Chinese Commercial Bills in the Upper Yangzi: A Case Study of Ba County and Jiangjin],” *Zhongguo Jingjishi Yanjiu 中国经济史研究 [Researches in Chinese Economic History]*, no. 6 (2020): 118–32.

money is useless.<sup>235</sup> Thus, we are still left with the question raised by the earlier, English-language literature. That is, to what extent did a system of deposits, account-book money, and inter-bank settlements take root in rural markets? Finally, in discussing the problem of catchment area, Cao and Meng raise the question of the grassroots financial system's relationship to the rural marketing system.

This chapter addresses these questions. It provides evidence for the existence of multiple forms of credit money, and of a system of settlements, at the grassroots of rural society. Moreover, it singles out lineage trusts, or *tanghao* (堂号) as critical providers of credit money and of settlement services. Exploring the link between grassroots finance and the marketing system is more difficult. But drawing on an account book from a Shanxi *qianzhuang*, I am able to show that marketing fairs were critical points of issue and redemption for paper notes. This complicates Horesh's argument that foreign banks were responsible for the widespread use of credit money in Qing China. Moreover, it puts the earlier English-language financial history into dialogue with the recent Chinese scholarship. That is, it shows how the kinds of institutions studied by Mann and Selgin (and more recently Yan Hongzhong and his colleagues) extended to the countryside, and were vital components of the rural credit-money systems studied by Cao Shuji, Yang Qiming, Meng Wei, and Xu Junsong.

---

<sup>235</sup> For example, the difference between putting cash in bank deposits and putting cash in a safety deposit box is that deposits can be used for settlements in the form checking or direct account transfers. That is why bank deposits are credit money, but dollar bills in a safety deposit box—or buried in your backyard—is not.



## The Lineage as protobank: Deposits in rural markets

This section examines one of the most important institutions of rural finance: the lineage trust, or *tanghao* (堂号). In the previous chapter, I showed that lineage trusts were key sources of rural lending. This chapter goes much further, and demonstrates that lineage trusts functioned as a full-service proto-bank serving the grassroots of imperial Chinese society. By this I mean that it took interest-bearing deposits, issued credit money in the form of paper notes and account-book currency, and performed settlements and brokerage services on behalf of customers. This means that trade in rural Chinese society did not depend entirely on physical stocks of silver and copper. Moreover, it means that rural financial institutions had to compete for funding by offering interest-bearing deposits. This, in turn, establishes the fact that supply, demand, and costs of rural finance were determined through competitive markets—and not through “custom” or monopoly pricing.

Landed lineage trusts (*tanghao* 堂号) began to appear in the latter half of the 14<sup>th</sup> Century, patterned after similar institutions that had existed during the Song. These trusts were originally corporations formed to manage, expand, and prevent the partition of lineage landholdings. At first, they were managed by their founders, who acted as a kind of CEO. Over time they transitioned to a less centralized system, with different lineage branches exercising a degree of autonomy over their holdings.<sup>236</sup> In areas with large lineage trust holdings of timberland, lineage trust shares began to trade freely, becoming in essence a futures market in

---

<sup>236</sup> Joseph Peter McDermott, *The Making of a New Rural Order in South China* (Cambridge: Cambridge University Press, 2013), pp. 235-309.

timber.<sup>237</sup> Madeleine Zelin’s seminal study of the Zigong salt merchants also identified lineage trusts as the key unit of corporate organization. She writes, “Among the great families of Furong it was precisely the institution of the lineage hall that permitted the consolidation of early economic successes and the development of modern management techniques. The ancestral hall and its accompanying estate became a substitute for the corporate business forms being developed in the West. For at least half a century the lineage trust was the structure within which business property was built up, diversified, and preserved against the ravages of the tax collector, the creditor, and individual family members.”<sup>238</sup> Kenneth Pomeranz, building on Zelin, discovered that lineage trusts were also important investors in corporate entities, deploying capital in both equity and more liquid, interest-bearing notes and deposits.<sup>239</sup> Lineage trusts should be seen, then, as a kind of general-purpose investing company.

An important activity of lineages, as well as a critical source of lineage funding, was deposits. This has gone unnoticed in the literature.<sup>240</sup> This is almost certainly a problem of

---

<sup>237</sup> McDermott, 395. McDermott studies lineage trusts in Huizhou. For a similar phenomenon in Guizhou, see Meng Zhang, “Timber Trade along the Yangzi River: Market, Institutions, and Environment, 1750–1911” (Ph.D., University of California, Los Angeles, 2017), 160. The financial instruments McDermott and Zhang refer to as timber “futures” differ from contemporary futures: Qing-era timber shares were collateralized by real timber, and not merely derivative products. This is not the case with Qing-era financial futures, which, as we shall see in later chapters, evolved into true derivatives markets with all the speculative potential that entails.

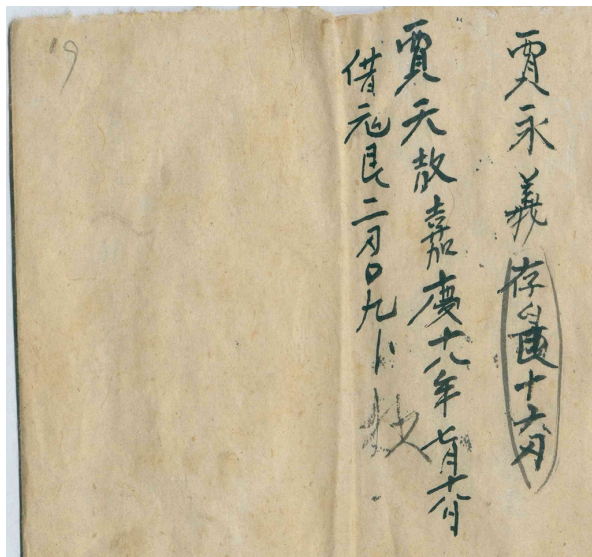
<sup>238</sup> Madeleine Zelin, *The Merchants of Zigong: Industrial Entrepreneurship in Early Modern China* (New York: Columbia University Press, 2005), 84.

<sup>239</sup> Kenneth Pomeranz, “‘Traditional’ Chinese Business Forms Revisited: Family, Firm, and Financing in the History of the Yutang Company of Jining, 1779-1956” 18, no. 1 (1997): 1–38, <https://doi.org/10.1353/late.1997.0008>.

<sup>240</sup> However, some Chinese scholars are aware of the phenomenon. I was attuned to the likelihood of lineage hall deposit taking by Cao Shuji, who found evidence in Jiangxi of landlords taking interest-bearing deposits on behalf of tenant farmers. Zhu Yingui has shown that it was also quite common for large, non-financial Chinese corporations to raise interest-bearing deposits. See Zhu Yingui 朱荫贵, “Shilun Jindai Zhongguo Zhengquan Shichang de Tedian 试论近代中国证券市场的特点 [A Study on the Characteristics of the Stock Market in Modern

sourcing: too much of our knowledge on rural financial markets comes from court cases and other legal sources. When one looks at the account books of lineage trusts, a vibrant market in deposits becomes visible. One of the older lineage trust account books that I have access to dates from the Jiaqing Reign era (1796-1820). An excerpt can be seen in Image 6.<sup>241</sup>

Image 6. Private account book, Jiaqing Reign



Source: “Jiaqing 22 Private lending account book silver and copper accounts” (嘉庆二十二年私人借贷账册银钱账), LJMPC, p. 9.

Most of the entries in this account are for loans extended to counterparties. But as shown in Image 6, the account also shows evidence of deposits. The entry on the right side of the page reads “贾永义存白银十六两”, or “Jia Yongyi deposits 16 taels of silver. The circle around the

---

China],” *Jingji Yanjiu 经济研究 [Economic Research Journal]*, no. 3 (2008). Zhang Zhongmin suspects deposits may have funded early cotton mills such as Dasheng. See Zhang Zhongmin 张忠民, “Wanqing Dashengshachang de Zaoqi Qiye Zhidu Tezheng 晚清大生纱厂的早期企业制度特征 [The Characteristics of Enterprise System of Early Dasheng Cotton Mill in the Late Qing Dynasty],” *Qingshi Yanjiu 清史研究 [The Qing History Journal]*, no. 3 (August 2016).

<sup>241</sup> “Jiaqing 22 Private lending account book silver and copper accounts” (嘉庆二十二年私人借贷账册银钱账), LJMPC, p. 9.

entry indicates it has been redeemed. Unfortunately, this book does not record interest. But since deposits must compete with private-market loans, we can surmise that the “spread” was not exorbitant and that the lineage hall had to operate in some kind of competitive deposit market.

Another notebook from the Si De Tang lineage trust (思德堂) record’s the trusts lending and interest accounts with various counterparties, and dates from the 13<sup>th</sup> Daoguang Reign Year (1833). Entry 1 is representative of most of the trust’s accounts.<sup>242</sup>

**Entry 1:**

王德永  
十三年四月初七日借镜宝银一百两，公平，月 1.1 分  
十四年四月初七日收满 97 扣利白银十二两八钱  
九月廿六日收还竞宝银一百零一两五钱七分  
十月初九日收 97 扣利白银四两二钱五分

Wang Deyong  
4/7/1833 lent 100 taels of jingbao silver<sup>243</sup> at the public scale at a rate of 1.1% monthly.  
4/7/1834 received in full interest of 12.8 taels  
9/26 received repayment of 101 taels of jingbao silver  
10/9 received interest of 4.2 taels of silver.

This is straightforward enough. The Si De Tang lineage trust lent Wang Deyong 100 taels of silver, accruing interest at 1.1% monthly. It collected one year of interest a year later and let Wang Deyong roll the principal until the end of the ninth month. In the ninth month the principal was repaid, with the remaining interest was paid two weeks later (as was common amongst Shanxi merchants). Note that the indentation stands in for two sides of the ledger, with the left

---

<sup>242</sup> “Daoguang 13, Si De Hall account book of loans in silver and copper” (道光十三年思德堂记借贷银钱账), LJMPC, p. 12.

<sup>243</sup> Jingbao (镜宝) silver was a very high quality of silver generally used as a standard of account in Shanxi. Its name comes from the fact that it was so pure it looked like a mirror. Shanxi merchants often abbreviated the character by leaving off the “jin” radical, or by writing at is *jin* (尽), which sounds different in Mandarin but in Shanxi-ese is homophonous with “jing.”

indented text standing in for receipts, and the right indented text for payments. In the original document receipts are on top and payments on the bottom. This is clear in Image 7.

Image 7. Side hall account book, Wangyichuan account, 1833.

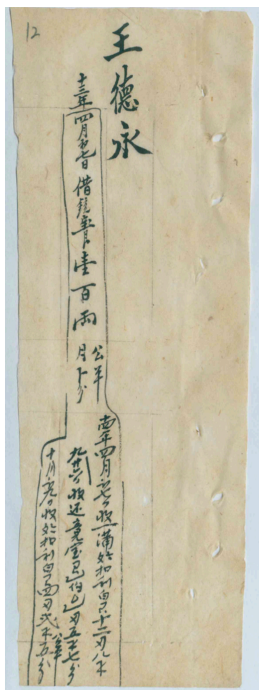


Image 7 is representative of most entries in the account book. But a few entries are reversed.

Thus, Entry 2 shows the indentation for principal and interest flipped around.<sup>244</sup>

**Entry 2:**                      万亿川  
 十三年三月十八日收借宝银五十两，市平，月 6.5 厘  
                                     八月十六日还去竞宝银五十两（永盛泰），市平  
                                     十一月初九日付去 98 扣白利银一两五钱四分，市平  
 四月初五日收借宝银九十九两一钱四分，市平，月 6 厘，九月还  
                                     九月十七日还去镜宝银一百两，市平  
                                     十一月初九日付去 98 扣白利银二两五钱三分，市平  
 六月廿七日收借宝银五十两，市平，月 8 厘，十月还  
                                     十月十一日还去竞宝银五十两，市平  
                                     十一月初九日付去 98 扣白利银一两三钱三分，市平  
 十五年二月初六日收借镜宝银一百五十两，7 厘，八月还，公平

<sup>244</sup> “Daoguang 13, Si De Hall account book of loans in silver and copper” (道光十三年思德堂记借贷银钱账), LJMPC, 13.

七月廿八日还去竞宝银一百五十两，公平  
付去白利银五两久钱（费咱加过平色银 1.5 两），公平，短过 1.5 钱

Wanyichuan

3/18/1833, received loan of 50 taels of jingbao silver, market scale, 0.65% monthly

8/16 repaid principal of 50 taels to Yongshengtai, market scale

11/9 paid interest at 98% fineness of 1.54 taels, market sale

4/5, received loan of 99.14 taels of jingbao silver, market scale, 0.6% monthly, due in the ninth month

9/17, repaid principal of 100 taels, market scale

11/9 paid interest at 98% fineness of 2.54 taels, market scale

6/27, received loan of 50 taels of jingbao silver, market scale, 0.8% monthly, due in the tenth month

10/11 repaid principal of 50 taels of jingbao silver, market scale

11/9 paid interest at 98% fineness of 1.33 taels, market scale

2/6/1835, received loan of 150 taels of jingbao silver, 0.7% monthly, due in the eighth month, public scale

7/28, repaid principal of 150 taels of jingbao silver, public scale

Paid interest of 5.9 taels of silver (we added 1.5 taels of silver to compensate for weight and fineness) (short by 0.15 taels).

This page is for a corporate account with an commercial entity named

“Wanyichuan.” Note that the language is similar, but the line item is *shoujie* (收借), rather than simply *jie* (借), in other words this is a “loan received,” or a deposit. The first deposit was received in the 8<sup>th</sup> day of the third month of the 13<sup>th</sup> Daoguang Reign year (1833) for 50 taels. No maturity is specified. Interestingly, when the principal was repaid only five months later, it was repaid to a third party, Yongshengtai (永盛泰), another corporation. The account book shows that Yongshengtai also had an account at the lineage hall, and was indeed a major borrower.<sup>245</sup> This suggests that no cash was changing hands at all, but that a credit was made to the account of Yongshengtai. In other words, the first line item was a kind of demand deposit,

---

<sup>245</sup> “Daoguang 13, Si De Hall account book of loans in silver and copper” (道光十三年思德堂记借贷银钱账), LJMPC, 1-2.

that could also be transferred to other corporate accounts at the lineage, similar to a modern-day check. The other line items are also borrowings received, but specify maturities of four to six months after the origination date. That is, they were time deposits.

More tangible evidence of deposit-taking come under an account in the name of “Paternal uncle” (叔父 *shufu*). This is recorded as Entry 3.<sup>246</sup>

**Entry 3:** 十三年三月十八日，取镜宝银五十两，万亿川借银，市平  
十月廿日取白银十两取 X 银十两，公平，张泰 X，利银  
十五年三月十五日同人算清结

3/18/1833, withdrew 50 taels of jingbao silver, lent to Wanyichuan,  
market scale

10/20 withdraw 10 taels of silver, public scale, Zhang Tai X,  
interest payment

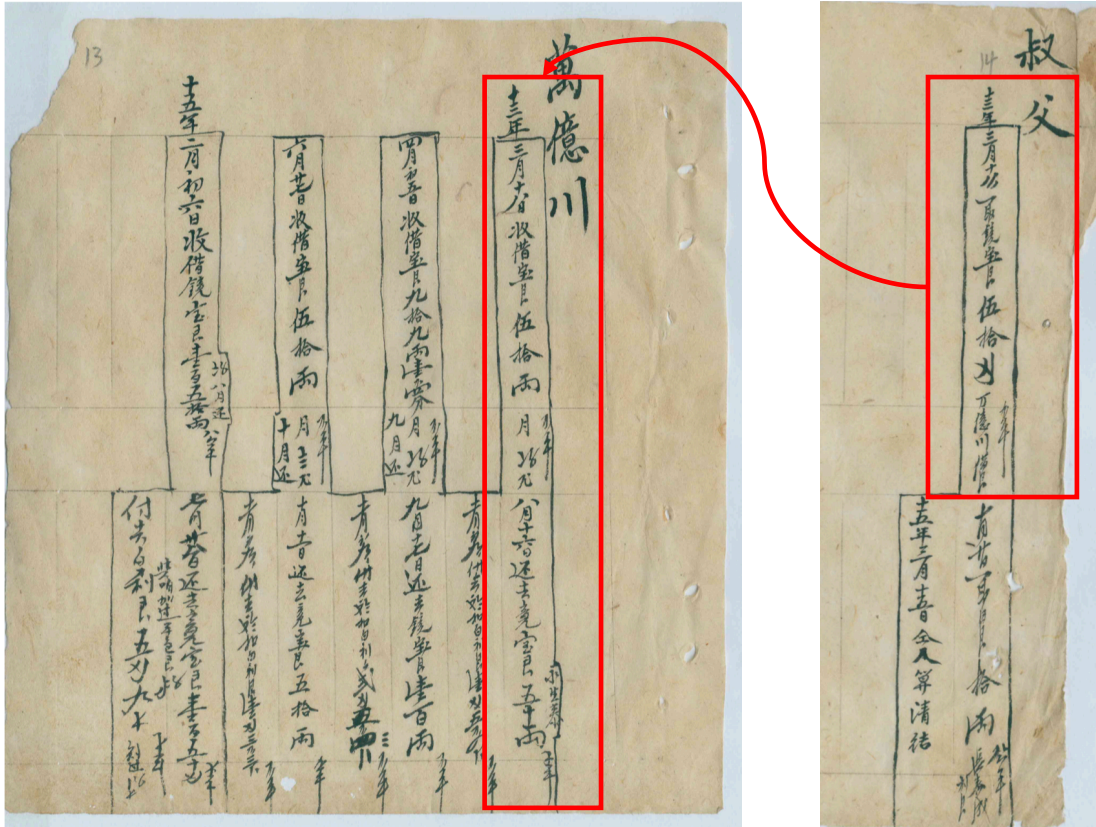
3/15/1835, account settled by same

The language here has changed again. Instead of “借” meaning “loan,” “borrow,” or “credit,” we have “取” meaning “withdraw.” An uncle from the lineage made a withdrawal from his deposit at the lineage trust. The withdrawal was not paid in cash to the uncle, but was credited to the account of Wanyichuan as a loan from the uncle to Wanyichuan. Image 8 depicts the relationship between the two accounts visually.

---

<sup>246</sup> “Daoguang 13, Si De Hall account book of loans in silver and copper” (道光十三年思德堂记借贷银钱账), LJMPC, 14.

Image 8. Side Hall Account Book, Daoguang Reign



Source: “Daoguang 13, Si De Hall account book of loans in silver and copper” (道光十三年思德堂记借贷银钱账), LJMP, 14.

Later account books continue to show evidence of deposit-taking at the grassroots of society. A ledger from a Wang Shitai ji (王时泰记), probably the accounts of a landlord named Wang Shitai, is transcribed in Entry 4.<sup>247</sup>

**Entry 4:** 咸丰四年托，  
 王四掌柜  
 十月廿日，借来东钱一百八十五千，月利 1.5%  
 八月廿日还去本利钱二百一十二千七百五文

咸丰五年八月廿日借来  
 裕泉号 本钱一百八十吊，1.2  
 六年正月十八日还去本利钱一百九十八千

<sup>247</sup> “Daoguang 19, Wang Shitai lending accounts” (道光十九年王时泰借贷账), LJMP, 8.



1854/3/19, entrusted:

Manager Wang Si

10/20, borrowed from shareholders, 185,000 copper cash, accruing 1.5% monthly.

1855/8/20, Repaid Principal and Interest of 212,700

1855/8/20, Borrowed

Yuquan Co. Principal of 185,000 copper cash, accruing 1.2% monthly.

1856/1/18, Repaid principal and interest of 198,000 copper cash.

The two entries are made to two a Manger Wang Si, and the Yuquan company, respectively. The language in both entries resembles the language in the other account book. In this case, *jielai* (借来), meaning “loans received,” represents a deposit. Moreover, the accounts are settled by a (还去), or repaid to. This is distinct from other entries in the account book which are simply *jie*, and which are settled by a *shoubenli* (收本利) or “loaned” and “received principal and interest,” respectively. The difference indicates that a simple *jie* is a loan, while the *jielai* is a deposit.

Equally interesting is that the kind of financial relationship visible in these accounts. The *tuo* (托) character in the title of the account indicates that the account is entrusted on behalf of another party. Manager Wang Si was probably the manager of the Yuquan Co. Wang Shitai borrowed money through Manager Wang Si, from the shareholders of the Yuquan Co. This is similar to a brokered deposit. Moreover, note that the repayment of the account to Wang Si occurs on the same date that principal is re-borrowed from the Yuquan Co. This suggests that Wang Shitai was not actually repaying the deposit, but rather rolling over the principal with a new loan directly from the Yuquan Co.

Another account book from the De Fu Hall (德福堂) lineage trust seems to consist almost entirely of deposits. This account book dates from the first reign year of the Xianfeng Emperor (1851). The book's first entry, transcribed as Entry 5, is instructive.<sup>248</sup>

**Entry 5:** 胡国稳兄

元年四月初一日存钱八十千文  
二年腊月付利钱八千文  
三年腊月付钱三千九百五十文，面钱  
四年二月付钱一千四百八十五文，面钱  
四月十四日付纹银三钱与裴足元托银，X 下钱价 2600  
十一月十九日付钱四千文  
五年四月十八日付钱三千文  
十二月初十日付钱二千文  
六年四月付钱三千文  
十月付钱二千文  
七年后五月廿六日付钱二千文  
补二十五日付钱八百三十文，总该 XX 钱

每月 8 厘行息  
有约一纸便还

将约抽回

十二月廿四日付钱八百文  
廿七日付钱二千文  
八年十一十六日付钱五千文，共付利钱 38, 845  
9 年十月十五日付本钱二十千  
又付利钱二十三千，此二宗约上注讫，至 9 年四月初一日，取利钱清去

Mr. Hu Guowen<sup>249</sup>

4/1/1851 Deposited copper cash 80,000 wen  
12/1852 Paid interest copper cash 8,000 wen  
12/1853 Paid copper cash 3,950 wen, *mianqian*  
2/1854 Paid copper cash 1,485 wen, *mianqian*

<sup>248</sup> “Xianfeng 1, De Fu Hall, miscellaneous accounts” (咸丰元年德福堂杂记账), 1

<sup>249</sup> I reluctantly translate *xiong* (兄) as “Mr.” It literally means older brother, but that would be a preposterously literal translation. In Qing-era business writing it is an honorific for a respected adult who is not yet an elder (*ye* 爷).

4/14/1854, Paid silver 0.3 taels, entrusted to Fei Zuyuan, copper cash price of 2600 [copper cash per silver tael]  
11/19 Paid copper cash 4,000 wen  
4/18/1855, Paid copper cash 3,000 wen  
12/10, Paid copper cash 2,000 wen  
4/1856, Paid copper cash 3,000 wen  
10[/1856], Paid copper cash 2,000 wen  
5/26/1857 Paid copper cash 2,000 wen  
Added: [5/25/1857], Paid copper cash 830 wen

Monthly interest of 0.8%

There is one receipt for repayment, to be reclaimed on settlement

12/24, Paid copper cash 800 wen  
[12/]27, Paid copper cash 2,000 wen  
11/15/1858, Paid copper cash 5,000 wen (in total paid 38,845  
10/15/1859, Paid copper cash 20,000 wen  
In addition, paid interest of copper cash 23,000. These two items have been settled as of 4/1/1859. All interest has been withdrawn.

As at 10/15/1859, Net principal of deposits are copper cash 60,000 wen  
4/27/1860, Paid principal of 60,000

Entry 5 shows a deposit, followed by a series of interest payments, and finally a withdrawal of the principal. The stated interest rate 0.8%. But the payments clearly do not reflect a constant rate. This thus raising questions about how exactly it was calculated and what it made it possible for both borrower and depositor to trust this calculation. Unfortunately, there is not enough information to figure this out. Nevertheless, the effective IRR works out to 0.65% compounded monthly. Chinese interest rates were quoted as non-compounding, which would bring the quoted 0.8% monthly rate extremely close to the IRR—in other words, though it is hard to figure out how they were timing the payments, the quoted deposit rate was clearly in force.

Entry 6 suggests that peasants could make deposits not only in the form of copper, but also in kind. Hence, De Fu Hall has an account under the name of a Yan Luming.

**Entry 6:**<sup>250</sup>

闫鹿鸣  
 7年四月十五日取钱二十千文  
 同治六年腊月底收浮借钱三十千文  
 又收高粮三石六斗，平斗共作钱 17000，内多费咱钱 4500，，内 X 五  
 月六斗  
 又收柴一百个小升  
 补收柴一个升  
 九年二月十二日收柴一百个升  
 共钱 6000  
 当日付脚钱四百文  
 廿一日取钱一十五千文  
 三月初六日取钱 XX 五千文  
 取钱兑三千，代付锦成典，是支钱

This entry is easier to follow if we convert it to a left/right ledger as in modern account books.

Note that these account books mainly use cash accounting, so *shou* 收 and *fu* 付 are treated as “receipts” and “payments” rather than as income and expenses. Finally, the entries in the original Chinese account are non-chronological. This is confusing, and so I have reordered them chronologically in Table 4.

Table 4. De Fu Hall Customer Account, Yan Luming

Date	Item	Receipts	Payments
12/31/1867	Short-term borrowings received	30,000	
12/31/1867	Sorghum received (3.6 dan)	17,000	
12/31/1867	Firewood received (100 small sheng)		
	Additional firewood received (1 sheng)		
4/15/1868	Copper cash withdrawn		20,000
2/12/1870	Firewood received (100 sheng)		
	Total firewood cash value	6,000	
2/12/1870	Delivery expenses paid		400
2/21/1870	Copper cash withdrawn		15,000

<sup>250</sup> “Xianfeng 1, De Fu Hall, miscellaneous accounts” (咸丰元年德福堂杂记账), LJMP, 3.

3/6/1870	Copper cash withdrawn	15,000	
3/6/1870	Copper cash withdrawn (entrusted to Jin Chengdian)	3,000	
	Total	53,000	53,400

Source: “Xianfeng 1, De Fu Hall, miscellaneous accounts” (咸丰元年德福堂杂记账), LJMPC, 3.

The financial relationship is quite clear. In December of 1867, Yan Luming made a short-term deposit of 30,000 copper cash, along with 23,000 copper cash worth of sorghum and firewood. He shortly withdrew 20,000 copper cash, and then withdrew the rest of his balance in 1870. Or rather, the remainder of his balance was paid as consideration to another party, Jin Chengdian. Payments and receipts do not quite balance, but only because the lineage trust covered the delivery expenses of the firewood.

This simple account reveals much about grassroots economic relations. The lineage trust functioned not only as a bank, but also as a kind of agent. Yan Luming was able to convert his harvest to cash simply by “depositing” in sorghum and firewood in kind. Presumably the lineage trust got some margin for storing this. Critically, this shows that the lineage was not merely a moneylender, but a true bank. That is, it was able to expand the supply of money to meet local demand. At harvest time, Yan Luming could cash in, without physical copper, but with a De Fu Hall deposit slip.

Table 5 shows another account, this time from Guang You Gong (广佑公). The account registers a series of deposits and interest payments.<sup>251</sup>

*Table 5. De Fu Hall Customer Account, Guang Yougong*

Date	Item	Receipts	Payments	Unit
12/1866	Deposits received	60		Silver Taels

<sup>251</sup> “Xianfeng 1, De Fu Hall, miscellaneous accounts” (咸丰元年德福堂杂记账), LJMPC, 咸丰元年德福堂杂记账, 4.

Note: Interest due for 1868 still unpaid			
3/1867	Deposited interest	24	Silver Tael
3/1867	Deposits received	7,133	Copper cash
Note: Short-term loans entrusted for 1868			
5/27/1870	Deposited interested withdrawn	10	Silver Tael
11/26	Interest paid	5	Silver Tael
4/28/1871	Interest paid	10	Silver Tael
4/28/1871	Copper cash paid	6,133	Copper cash
5/16/1875	Interest paid	30	Silver Tael

Source: “Xianfeng 1, De Fu Hall, miscellaneous accounts” (咸丰元年德福堂杂记账), LJMPC, 咸丰元年德福堂杂记账, 4.

This account shows a deposit of 60 taels in 1866, on which the lineage hall pays 24 taels of interest. Guang Youngong does not withdraw the interest, but redeposits it with the lineage hall along with 7,133 wen in copper cash as a non-accumulating deposit (that is, a “short-term loan”).<sup>252</sup> The interest is paid out over time, beginning in 1870 and 1871. The original Chinese indicates that the deposited interest has been settled, but that the original deposit from 1866 is still accumulating, and paying interest. The final payment in 1875 is simply the most recent payment on the original deposit. Thus, it appears that the deposit is a kind of time deposit that returns roughly 50% at long, yearly intervals but there is not enough information to determine its exact terms. What can be determined, is that this entry once again proves that the lineage halls were taking interest-bearing deposits. More than that, even the interest payments could be

---

<sup>252</sup> Note the similarity here with the non-*shengxi* loans observed in Chapter 1. Non-interest bearing short-term loans was a convention, and a useful custom for deploying idle funds.

redeposited at the lineage hall, thus sparing the customer the inconvenience of carrying around physical silver or copper.

### Credit Money, Brokerage, and Transfer Services

This section argues that checking-like services existed at the grassroots of rural Shanxi, provided by local lineage trusts. These services took two forms; there was *guozhangyin* (过账银) or “account book money,” which functioned similar to modern-day deposits, as well as paper notes—known as *piao* (票) or *tie* (帖)—which functioned much like modern day banknotes. Such financial technologies resemble those found by previous historians in major commercial ports in the Jiangnan area.<sup>253</sup> In addition, the Chinese-language scholarship has recently established the prevalence of paper notes in rural areas throughout the country.<sup>254</sup> But these findings are largely unknown in the English-language literature. Moreover, the extent to which “account book money” penetrated rural society has remained an open question. This chapter seeks to resolve this question by showing how lineage trusts could create credit for customers, and that peasants and corporates who had an account at the lineage hall could use their deposit accounts as money to pay one another and settle debts. Even the very grassroots of society could run on credit money and had access to checking-like banking services. These systems have gone unnoticed because there are no foreign accounts of rural finance. But a close reading of lineage account books firmly establishes the use of account-book transfers in Qing China.

---

<sup>253</sup> Susan Mann, “Finance in Ningpo: The ‘Ch’ien Chuang,’ 1750-1880,” in *Economic Organization in Chinese Society*, ed. W. E. Wilmott (Stanford: Stanford University Press, 1972), 47–77; Selgin, 1992; Wang Yan, Yan Hongzhong, and Gao Yu, 2016; Yan Hongzhong and Gao Yu, 2017.

<sup>254</sup> Cao Shuji and Yang Qiming; Cao Shuji and Meng Wei; Cao Shuji and Xu Junsong.

The first clue that this system existed comes in a ledger drawn up by the Tui Bao Hall (推保堂) in the 19<sup>th</sup> year of the Guangxu Reign era (1893). Transcribed as Entry 1, it reveals much about these “interbank” relationships. This account book is a “rough receipts and payments” book (银钱草账). It would have been used as a temporary record for payments and receipts before they were recorded into the general ledger. The Tui Bao Hall’s accounts are full of transactions with other lineages, both in extending and receiving loans.<sup>255</sup> The very first account records a series of mortgages (more precisely, “live sales,” or *dian* 典) to Zhi Rong Hall (致荣堂). I have transcribed it as Entry 1.

**Entry 1:**      入收致荣堂典钱七千文  
                     出典钱七千文  
                     入收致荣堂典钱七千文  
                     出典钱七千文  
                     Received Zhi Rong Hall *dian* of 7,000 cash  
                     Paid *dian* cash of 7,000  
                     Received Zhi Rong Hall *dian* of 7,000 cash  
                     Paid *dian* cash of 7,000

This means that the Tui Bao Tang lineage made a live sale to the Zhi Rong Tang lineage trust in order to raise money of 7,000 copper cash. It then “rolled over” the live sale, before ultimately redeeming its land.

The second account appears to have been from an even larger lineage trust client, Shuangyi Hall (双义堂). Shuangyi Hall has two separate accounts. I have transcribed these as Entry 2 and Entry 3.<sup>256</sup>

**Entry 2:** 双义堂欠(陈通三)银十三两四钱三分

---

<sup>255</sup> “Guangxu 29, Tui Bao Hall Payments and Receipts Draft Accounts” (光绪二十九年推保堂出入银钱草账), LJMPC.

<sup>256</sup> “Guangxu 29, Tui Bao Hall Payments and Receipts Draft Accounts” (光绪二十九年推保堂出入银钱草账), LJMPC, 2.



出银 50 两，2.3 分  
出银 50 两，2.4 分  
出银 100 两，2 分  
出银积银 50 两  
出银十两，2.5 分  
    存利银四十六两  
出闫余生借本廿两  
出李殿元借本银廿两  
出李殿元借本银 10.52 两  
出李殿元借本银 13 两  
出李殿元借本银 13 两  
出相伟全借本银 10 两  
出乔万春借本银 10 两  
出臧永福借本银 10 两  
出百寿堂经手银 1 分  
    存利银 51 两

九年五月，取大洋 55 元作 X96.2 两，汇，支平  
取大洋 43 元，寄家  
取大洋 1.3 元，XX  
取大洋，4.6 元，55 元之息

以上共得用利银九十三两七钱  
取银三两三钱付过三平

Shuangyi Hall, loans outstanding (Chen Tongsan), 13.43 tael

Paid 50 tael, 2.3%  
Paid 50 tael, 2.4%  
Paid 100 tael, 2%  
Paid accumulated silver, 50 tael  
Paid 10 tael, 2.5%

Deposited interest of 46 tael.

XX/1882, Loaned Yan Yusheng principal, 20 tael

09/1882, Loaned Li Dianyuan principal, 20 tael

    Loaned Li Dianyuan principal 10.52 tael

09/1882, Loaned Li Dianyuan principal 13 tael

09/1882, Loaned Li Dianyuan principal 13 tael

11/1882, Loaned Xiang Weiquan principal, 10 tael

10/1882, Loaned Qiao Wangchun principal, 10 tael

    Loaned Zang Yongfu principal 10 tael

    Paid to Baishou Hall brokerage fees of 0.1 tael

    Deposited interest of 41 tael

It is not immediately clear what kind of financial transaction this account represents. But after reading through countless such account books, a rough idea emerges. The key to understanding this account is in the character choice. *Qian* (欠), which denotes the kind of entry in the first line item. This should be understood as an outstanding balance. The name Chen Tongsan (陈通三) is scribbled between *qian* and the account amount. This means that the balance is not actually owed to Tuibao Hall, but to Chen Tongsan. The subsequent five *chu* (出) entries are payments that appear to have been made in 1882. But there is no accompanying *fu* (付) character as in previous accounts. In addition, they are accompanied with marginalia that represent interest rates. This indicates that these are loans being extended, but not on behalf of Tuibao Hall itself. Rather, these are loans that Tuibao Hall is extending on behalf of Shuangyi Hall. It is analogous to Shuangyi Hall having a brokerage account at Tuibao Hall through which it extends and receives loans from third parties.

This becomes especially clear in the line item:

存利银四十六两  
Deposited interest of 46 taels.

This means that Shuang Yi Hall was collecting interest through its account at Tuibao Hall. Rather than receive the interest in hard silver, it simply credited it to its deposit at Tuibao Hall.

The following ten line items from the entry make the broker-client relationship even clearer:<sup>257</sup>

八年十 X 日，出闫余生借本廿两  
八年九月，出李殿元借本银廿两  
    出李殿元借本银 10.52 两  
九月，出李殿元借本银 13 两  
九月，出李殿元借本银 13 两

---

<sup>257</sup> “Guangxu 29, Tui Bao Hall Payments and Receipts Draft Accounts” (光绪二十九年推保堂出入银钱草账), LJMPC, 3.

冬月，出相伟全借本银 10 两  
十月，出乔万春借本银 10 两  
出减永 X 借本银 10 两  
出 XX 堂经手银 1 分  
存利银 51 两

XX/1882, Loaned Yan Yusheng principal, 20 taels  
09/1882, Loaned Li Dianyuan principal, 20 taels  
    Loaned Li Dianyuan principal 10.52 taels  
09/1882, Loaned Li Dianyuan principal 13 taels  
09/1882, Loaned Li Dianyuan principal 13 taels  
11/1882, Loaned Xiang Weiquan principal, 10 taels  
10/1882, Loaned Qiao Wangchun principal, 10 taels  
    Loaned Zang Yongfu principal 10 taels  
    Paid to Baishou Hall brokerage fees of 0.1 taels  
    Deposited interest of 41 taels

These nine line items are loans, as indicated by the characters *jie ben* (借本), which literally translates to something like “loan of principal.” They all include the name of a borrower after the character *chu*. This means that Shuangyi Hall is lending to these nine borrowers through its account with Tuibao Hall. The final entry, “Deposited interest of 51 taels” indicates that the borrowers paid their interest to Tuibao Hall, who credited it to Shangyi Hall’s account.

The final six line items in the Shangyi Hall account are withdrawals, as indicated by the character *qu* (取). This means Shang Yi Hall made cash withdrawals, in this case of silver dollars, from its account at Tuibao Hall. The last entry is interesting because it relates to the very first entry:

取银三两三钱付道三手  
Withdrew 1.3 taels of silver paid to Daosan

Recall that the first entry was a loan outstanding that Shangyi Hall owed to Chen Daosan; this appears to be some kind of repayment from Shangyi Hall to Chen Daosan.

The next account is also from Shuangyi Hall. But this appears to be more like a simple checking account, rather than a brokerage account. That is, it represents the cash flow of a deposit made by Shuangyi Hall at Tuibao Hall for which Tuibao Hall was liable.

**Entry 4:** 双义堂

存银 252.5 两，除利付 X  
出付银一百两  
出付银一十两  
出付银一十七两九钱八分  
出付银本利银三十两  
出付银十三两久钱五分  
出付钱二十八千文  
出付银六两八钱九分  
出付银三两五钱五分  
出付钱一千六百六十八文

至此挽清

Shuangyi Hall

Deposited 252.5 taels, ex: interest paid of X  
Paid 100 taels  
Paid 10 taels  
Paid 17.98 taels  
Paid principal and interest of 30 taels  
Paid 13.95 taels  
Paid 28,000 copper cash  
Paid 6.89 taels  
Paid 3.55 taels  
Paid 1,668 taels.

Account cleared

This account shows that Shuangyi Hall kept a considerable balance in deposits at Tuibao Hall. I suspect that this is similar to the modern convenience of keeping brokerage accounts and bank accounts with the same financial institution. The payments represent payments of both principal and interest from Tuibao Hall to Shuangyi Hall in consideration for its deposit..

The next account is worth exploring in even more depth. This account is from Li Dianyuan (李殿元), and the transactions between Li Dianyuan and Tuibao Hall can be seen in [Table 6](#). Note that 1887 is missing; I have no explanation for this, but judging from the

accumulated interest it was probably the most important year. Possibly it was recorded in another entry, and cleared separately.<sup>258</sup>

*Table 6. Tuibao Hall Customer Account, Li Dianyuan, 1886-1888*

Date	Item	Amount (tls)
	Principal	57
1886	Previous interest balance	17.5
1886	Accumulated interest	14.25
1888	Accumulated XXX	10
Total three years of accumulated interest		51.3
Accumulated interest plus previous interest balance		68.8
Interest outstanding minus fees		44.55
Note: Principal and interest paid in notes		

Source: “Guangxu 29, Tui Bao Hall Payments and Receipts Draft Accounts” (光绪二十九年推保堂出入银钱草账), LJMPC, 5.

Here we see in detail the loan that went from Shuangyi Hall, through TuibaoHall, to Li Dianyuan! The principal, 57 taels, is rounded up from the 56.2 taels that we saw on the Shuangyi Hall account. This proves that rural Chinese society was creating money not only by fashioning strings of copper cash, but simply through accounting entries. These entries—deposits—could be used to transfer financial assets or settle accounts with counter parties; in this case between Shuangyi Hall and Li Dianyuan.

The Tongxin Hall (同心堂) account offers an even clearer example of Tui Bao Hall providing checking services. This account dates from the third month of the third year of the Guanxu Reign (1877). It is transcribed as Entry 5.<sup>259</sup>

<sup>258</sup> “Guangxu 29, Tui Bao Hall Payments and Receipts Draft Accounts” (光绪二十九年推保堂出入银钱草账), LJMPC, 5

<sup>259</sup> “Guangxu 29, Tui Bao Hall Payments and Receipts Draft Accounts” (光绪二十九年推保堂出入银钱草账), LJMPC, 6.

**Entry 5:** 同心堂三年三月  
存银六十两零五钱正  
三月廿八日出郭殿清借银 32 两  
出曹全兴借银 28.5 两  
入郭殿清 6 个月利银 5.2 两，存恒昌永  
Tong Xin Hall, 03/1877

Deposited 60.5 taels

3/28 Paid to account of Guodian to repay loans of 32 taels

3/28 Paid to account of Cao Quanxing, extending loan of 28.5 taels

Received Guo Dian's 6 months of accumulated interest of 5.2 taels, deposited with Hengchangyong.

This means that in the third month of 1877, the lineage trust Tongxin Hall made a deposit with the Tuibao Hall lineage trust for 60.5 taels of silver. At the end of the month, Tong Xin Hall drew on this account to pay 32 taels to repay a loan to Guo Dian (郭殿). It drew down the remaining 28.5 taels of silver to extend loans of its own to Cao Quanxing (曹全兴). Another 5.2 taels were then paid by Tongxin Hall to Guodian, which was transferred to a corporate account under Hengchangyong (恒昌永), thus clearing the account. In other words, Tuibao Hall was acting as a kind banker's bank—lineage's lineage?—allowing clients to use balances at Tuibao Hall to clear accounts and transfer funds with one another.

We can get a more granular sense of the mechanics by scrolling further through the account book. As expected, Guo Dian has an account of his own, transcribed as Entry 6.

**Entry 6:**<sup>260</sup> 郭殿乡 (同心堂)  
三年三月揭「借」 银三十二两正, 2.7 分  
收六个月利银 5 两 2 钱正, (拨恒昌永)  
清讫  
Mr. Guo Dian (Tongxin Hall)  
3/1877, Loaned 32 taels at 2.7% [per month]  
Received six months of accumulating interest, 5.2 taels, (Transferred to Hengchangyong)  
Account cleared

---

<sup>260</sup> “Guangxu 29, Tui Bao Hall Payments and Receipts Draft Accounts” (光绪二十九年推保堂出入银钱草账), LJMPC, 7.

The dates and the amounts match exactly the dates in the Tong Xin Hall account. In small characters next to the interest line item a note is written “拨恒昌永” or *bo Hengchangyong*. Once again, *bo* (拨) refers to settlements by transferring credit money in an account book. That is, the interest was simply credited to Hengchangyong. This is proof that the funds in question refer primarily to credit money being transferred through accounting entries rather than through transactions of real metal.

We also find the same mechanism at play in a loan granted to Cao Quanxing, transcribed as Entry 7.

**Entry 7:**<sup>261</sup>           曹全兴（经手同心堂）  
                          揭银二十八两五钱正，2.5  
                          归清

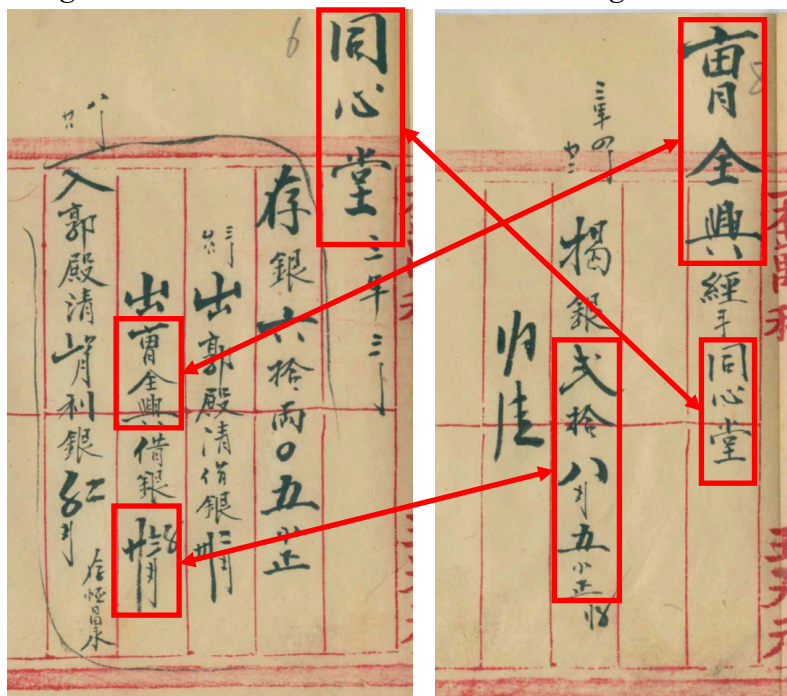
In English:  
                          Cao Quanxing (from Tong Xin Hall)  
                          Borrowed 28.5 taels, at 2.5% monthly interest  
                          Repaid in full

When Tongxin Hall drew down on its account to make a loan to Cao Quanxing, it did not withdraw physical silver. Rather, Tuibao Hall simply credited a loan account with Cao Quanxing. The relationship can be seen clearly in images of the original texts. Image 9 offers a visual depiction of how funds flowed between entities with accounts at Tuibao Hall.

---

<sup>261</sup> “Guangxu 29, Tui Bao Hall Payments and Receipts Draft Accounts” (光绪二十九年推保堂出入银钱草账), LJMPC, 8.

Image 9. Tuibao Hall Customer Accounts, Tongxin Hall and Cao Quanxing



Source: “Guangxu 29, Tui Bao Hall Payments and Receipts Draft Accounts” (光緒二十九年推保堂出入銀錢草賬), LJMP.

The image shows how the entries in Tong Xin Hall’s account were reflected in entries to Cao Quanxing’s account. This is similar to how if in modern banking, if you deposit a check at a bank, no hard cash need change hands. Rather, the transaction is reflected through balancing entries into your deposit account and the account of the payer.

### Grassroots Finance and the Marketing System

If villages had markets for notes, then we would expect to see them integrated into a larger market, likely through the Skinnerian marketing system.<sup>262</sup> In some sense, this is what Cao

<sup>262</sup> Skinner himself hints at this, saying credit also flowed through the marketing system. G. William Skinner, *Marketing and Social Structure in Rural China* (Ann Arbor: Association for Asian Studies, 1974).



Shuji and Meng Wei’s article, as well as Lou Min’s findings suggest. That is, the existence of circulating credit at the grassroots—tiered either according to issuing institution or by issuing locale—indicates market integration. That said, market integration is not a binary. There are still important questions of how many intermediaries there were and what fees they charged; that is, what exactly were frictional costs? The connection between the financial system and the Skinner marketing system is appealing for theoretical reasons, but is difficult to prove. Fortunately, one account book from the Shanxi popular materials is suggestive.

Fushengchang (复盛长), a qianzhuang from Yuci, has left us a *pingtie hao zhang* (凭帖号帐), or “record of issued *pingtie*,” compiled in 1891. Today, Yuci is a district, or sub-municipality, of Jinzhong City in Shanxi Province. It lies between Taiyuan, the provincial capital, and the Qing-era financial centers of Pingyao, Qixian, and Taigu. During the Qing, Yuci was a major commercial center in its own right. It had traditionally held an enormous temple fair in the fifth month, with merchants from all over and especially from neighboring Taigu doing business.<sup>263</sup> During the Kangxi reign, it became a critical part of the overland trade. The Changs of Yuci (*Chang jia* 常家), one of the great Shanxi merchant families, emerged at this time dealing in cloth, medicine, and other products. In the 18<sup>th</sup> century, with the signing of the Treaty of Kyakhta, they became active in the overland tea trade.<sup>264</sup>

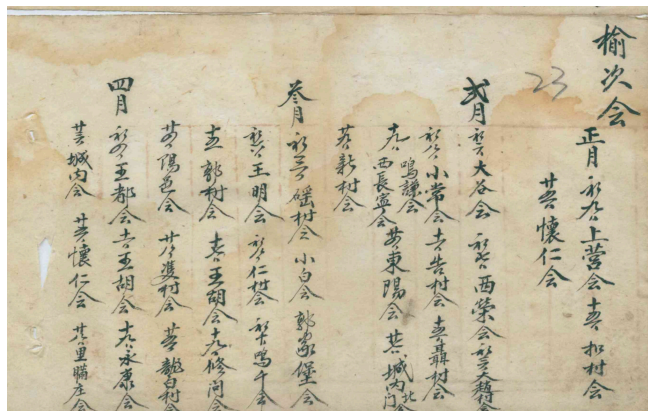
---

<sup>263</sup> “Fifth month temple fair” in *Guangxu Gazetteer of Yuci County*, vol. 4, 1885: p. 147.

<sup>264</sup> Shanxisheng jinshang wenhua jijinhui 山西省晋商文化基金会, ed., *Jinzhong Shangye Jiazu 晋中商业家族 [Merchant Families of Jinzhong]* (Taiyuan, Shanxi: Sanjin chubanshe, 2019), 1-23.

The account book contains a list of serial numbers with the corresponding *qiantie* that it issued, the face value of the *qiantie*, and then the date that the *qiantie* was redeemed. The final page contains a schedule of local markets, as seen in Image 10.

Image 10. Fushengchang Customer Account book, Yuci Marketing Schedule



Source: “Guangxu Year 17, Fushengchang Co. Account of Notes issued in the First month: (光绪十七年复盛长记凭帖号帐新正月吉号), LJMP.

At first glance, the issue dates do not seem to line up exactly with marketing dates. For example, there are numerous issuances on 03/18, and throughout the second half of the fifth month and first half of the sixth month. But a Republican era gazetteer from Yuci county gives a more complete list of Yuci markets. After these are factored in, one realizes that the reason for the profusion of issuances in May and June has to do with the Yuci City God fair. This was the largest fair in Yuci county, and lasted a full month.<sup>265</sup>

After dates found in the gazetteer are considered in tandem with the marketing schedule in the account book, virtually all dates of note issue correspond to important marketing dates in Yuci county. This is seen clearly in Table 7.

<sup>265</sup> Linshu Chang and Jinghao Zhang, eds., *Republican-Era Gazetteer of Yuci County*, 20 vols., 1942.

Table 7. Fushengchang Note Issuance by Date

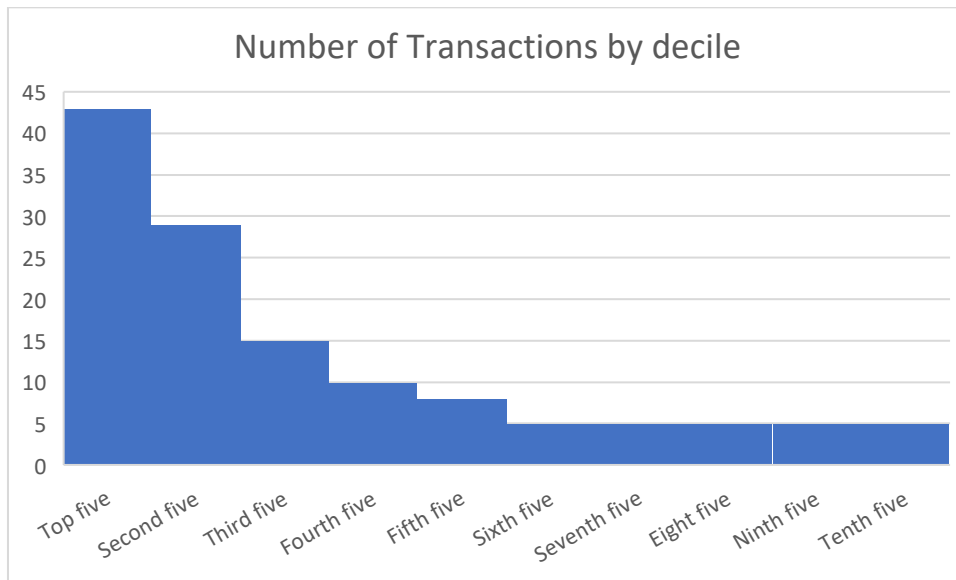
Issue date	Market	Issue amount
3/15	Xishuang Village	12,000
5/17	Yuci City God	3,500
5/18	Yuci City God	4,000
5/25	Yuci City God	2,000
5/26	Yuci City God	4,000
5/29	Yuci City God	15,500
6/12	Yuci City God	17,800
6/15	Yuci City God	24,000
6/16	Yuci City God	4,700
8/30		1,000
3/1		17,000
3/15	Gao Village	11,000
2/29	Xin Village	10,000
2/12	Dongyang village	10,000
8/17	Mingqian Village	14,500
9/20	Shentie Village	16,000
10/29		20,000
11/4		22,500
XXX		7,000

Source: “Guangxu Year 17, Fushengchang Co. Account of Notes issued in the First month: (光绪十七年复盛长记凭帖号帐新正月吉号), LJMP.

As Table 7 shows, the greater majority of notes were issued precisely on Yuci regional market days. I hypothesize that the qianzhuang was sending an employee to attend these important markets, and issue credit in the form of notes as demand required.

The account book also tells us when the notes were redeemed. Redemptions are harder to interpret because they are scattered over more dates. There are a total of 130 redemptions falling over 50 discreet dates (there are fewer redemptions than issues, since some notes appear not to have been redeemed). I order the fifty dates by number of transactions (i.e. number of redemptions on that given date), and then group them into bins of five dates. Since there are 50 discreet dates where the full date is recorded, this also makes for neat deciles. Figure 3 presents the deciles as a histogram.

*Figure 3. Fushengchang Qianzhhuang number of transactions per date, by decile*



Source: “Guangxu Year 17, Fushengchang Co. Account of Notes issued in the First month: (光绪十七年复盛长记凭帖号帐新正月吉号), LJMPC.

The histogram shows that notes are not being redeemed at random, but rather cluster among a few dates. In summary, 70/130 transactions (or 54%) are clustered around the top ten dates

(20%). This clustering is not quite marked enough to draw any conclusions. To make sure the clustering is not just random, I simulated the account book in Python with the assumption that redemptions are distributed uniformly and randomly over the course of 50 days. Figure 4 shows the resulting sample distribution based on 999 simulations.

*Figure 4. Distribution of number of transactions in top decile for simulated Fushengchang accounts, 999 simulations*

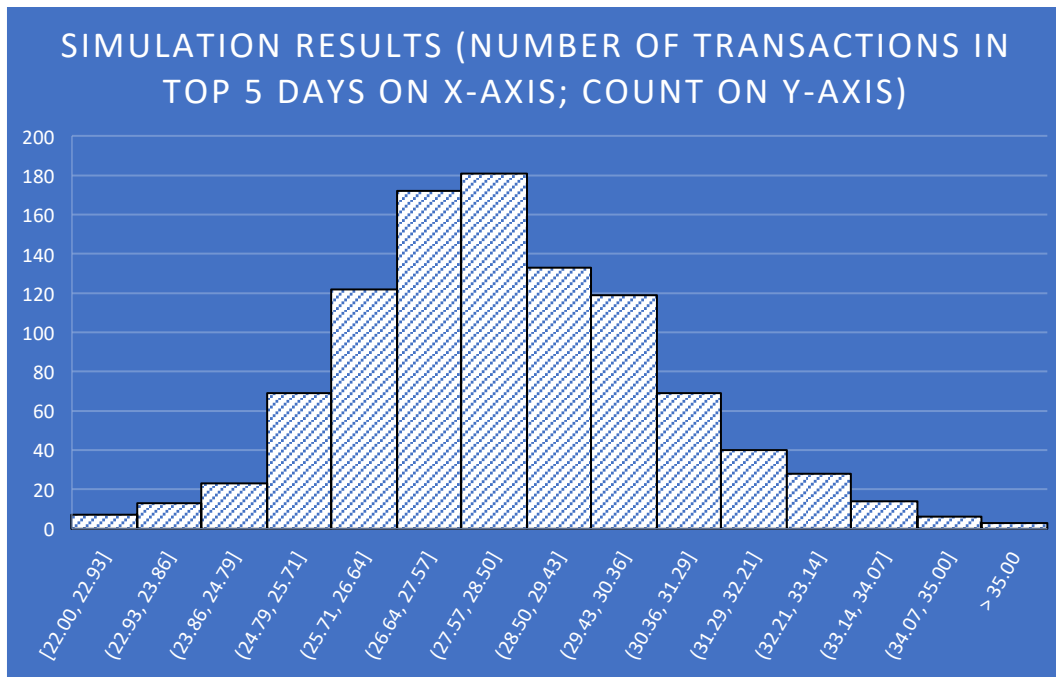


Figure 4 shows the data from 999 simulations. Not a single one returns clustering to the extent we see in the sample data. The most numbers of observations on the top decile are 37, compared to the observed 43. The average number of observations in the top-decline is 28.21, with a standard error of 0.081. This means the observed result is fully 182 standard errors away, or vanishingly unlikely to occur randomly.

It is quite implausible that the clustering in the data are random. There has to be something meaningful about the dates that show redemptions. Sure enough, of the five dates in the top bin, four of them fall on market days (the other date falls in between several market days,

and I believe is probably from one of the Yuci city fairs, held two days earlier). Two of the more common dates are April 19 and May 1. These are the market days for Yongkang Town (永康镇) and Xiaodian Town (小店镇), respectively. Yongkang and Xiaodian towns are quite close to one another, and formed critical markets between Yuci and the provincial capital of Taiyuan.

According to the *Guangxu Yuci Gazetteer*, Yongkang was one of the only township wealthy enough to contribute to the “tanpai”. The Gazetteer reads:

榆次差费向系闾邑按粮均摊额征地丁岁计六万余两，除城关，永康、鸣谦临大道诸村实在支差不摊<sup>266</sup>。

In 1933, it was important enough to receive a railway station on the Tong-Pu rail line.<sup>267</sup> In 1935, after a theater production attended by local notables, Yongkang was the subject of a feature story in the national news media about its tradition of high-quality theater.<sup>268</sup> This is all to say that Yongkang was an important marketing town. The evidence suggests that the Fushengchang qianzhuang sent an agent to Yongkang on 4/19, to participate in its major market day.

Certain dates could not be entered into the histogram because they do not contain a full date, but simply say “the sixth month”, or *liu yue* (六月). These are stamped so I do not believe they are written in error. Moreover, there are fully ten “six months” redemptions, making them rank highest apart from transactions on 9/30. They do not obviously correspond to any date in the Yuci schedule listed above. However, according to the Republican-era gazetteer, the major Yuci City market fair was the Fifth Month Temple Fair of the City God Temple (城隍庙). The

---

<sup>266</sup> *Guangxu Gazetteer of Yuci County*, vol. 4, 1885.

<sup>267</sup> Linshu Chang and Jinghao Zhang, eds., *Republican-Era Gazetteer of Yuci County*, 20 vols., 1942.

<sup>268</sup> “Yongkangzhen Biaoyan Dahui 永康镇表演大会 [Yongkang Town Has Big Performance],” *Shanxi Guoshu Tiyu Xunkan 山西国术体育旬刊 [Shanxi National Arts and Physical Training Review]*, 1935.

Gazetteer reads, “Only in the fifth month did the City God Temple take place. It could last for an entire month without stopping.”<sup>269</sup> That is, Yuci’s major yearly temple fair started on 5/17 and lasted a month. It seems likely that it was recorded simply as “month six” with the understanding that this referred to the Yuci City God temple fair.

To conclude this section, the account book shows that the Yuci qianzhuang was a kind of itinerant peddler of credit—or, more likely—sent employees to peddle credit on its behalf. It went around to all the important markets in Yuci, issuing notes or redeeming them for silver as demand required. The effect would have been to even out credit supply and demand throughout Yuci county. Moreover, this shows how notes and financial capital traveled physically through Shanxi, carried by the veins of the marketing system. To be sure, I do not wish to present this evidence as dispositive; it is, after all, only one account book. But the historical record from Qing-era grassroots finance is thin enough that any incremental evidence is important.

## Conclusion

This chapter has used new primary sources from Shanxi lineages to make a series of claims. First, a preponderance of evidence shows rural China possessed dedicated financial institutions. These institutions offered lending and deposit-taking services to peasants at the very grassroots of society. More importantly, they operated a financial system that could create credit money in the form of transferable deposits—or “account money”—and paper notes—known as *piao* or *tie*. Credit and financial services were accessible not only to wealthy landlords or

---

<sup>269</sup> Linshu Chang and Jinghao Zhang, eds., *Republican-Era Gazetteer of Yuci County*, 20 vols., 1942.

corporate entities, but to the entire Chinese peasantry. Finally, this grassroots system was itself part of the rural marketing system. Financial flows followed temple and marketing fairs as financial institutions sent rural peddlers to issue and redeem notes.

These empirical claims are linked to larger arguments about the nature of traditional Chinese society. First, a number of economic models—from the orthodox Marxist model to the involuntarily model—rest on the assumption that rural China possessed grain markets but not factor markets. Rather, supply and prices of capital are said to have been fixed by force of custom or by exploitation. But in a society with lively credit markets accessible to a broad swath of peasants—at the very least to all landowners and dianholders—with markets in both loans and deposits, these models are frankly implausible. Rather, the evidence indicates that the rural financial system was more than capable of attracting savings, and of mobilizing savings into productive investment.

It may be useful to add a word on the limits of this chapter. It shows that Qing China had a remarkably efficient financial system for finding channeling savings into productive investment in the context of a pre-industrial agricultural society. This does not mean that the system was capable of fostering industrial development. Moreover, to say that a financial market was free, competitive, and open to all proves that it was not “semi-feudal,” and that it was efficient by preindustrial standards in an abstract sense; but it cannot wish away the fact of rural poverty. The observations of Republican-era social scientists made regarding rural poverty and indebtedness remain as poignant as ever. My only argument with such social scientists is their causal theory; they saw high credit prices and rural poverty as arising from the lack of a true financial market. I believe high credit prices for an unlucky subset of society were an outcome of market calculation.



### Chapter Three: Chinese Rotating Savings and Credit Associations (ROSCAs) In Historical Perspective

“There must be a reason why today there are credit societies being established. The fact that people are establishing and joining these societies must have a cause. How do these credit societies promote virtue? Before answering, we can look at the ancients, who set up literary societies to cultivate body and spirit. If societies are set up on the basis of silver, members help each other gain economic profit. Verily, how can it be said that those who undertake societies on the basis of literature are just, while those who undertake societies on the basis of silver are unjust? This is the preamble.”

--Preamble to bylaws of a credit society, Sixth Day of the Fourth Month of the Fourth Year of the Daoguang Reign (1824)

This chapter studies Rotating Savings and Credit Associations (ROSCAs), or *hehui* (合会), from the Qing dynasty (1644-1911) down to the present. ROSCAs are a financial institution used to accumulate savings and distribute credit. To this day, they are found all over the world in communities whose financial needs are unmet by formal banks.<sup>270</sup> The precise operations of a Chinese ROSCA varied from society to society, but shared a basic structure. Societies met intermittently. At each meeting, members payed a fee into a society pool, and one member took the pool. At every subsequent meeting, a different member would take the pool until each member had received the pool once. Thus, the receiver of the pool would “rotate.” The membership fee increased with each meeting, so that the pool grew over time. Once each member had received one pool, the society terminated. Because payments and therefore pool size increased over time, earlier receivers of the pool paid in more than they received. They were effectively borrowers paying an interest rate. Conversely, later receivers of the pool received more than they paid in, and were therefore savers receiving a return on savings. At the same time, ROSCAs included an element of fraternization rarely found in modern banking. Each

---

<sup>270</sup> Clifford Geertz, “The Rotating Credit Association: A ‘Middle Rung’ in Development,” *Economic Development and Cultural Change* 10, no. 3 (1962): 241–63.

meeting included a banquet open only to society members, and some ROSCAs appear to have had quasi-religious rituals such as “standing and facing north.”

In this chapter, I argue that Chinese ROSCAs, as early as the Qianlong reign, were market-oriented financial institutions. Financial assets accumulated in ROSCAs were themselves tied to other factor markets, especially to land markets and money markets. This larger argument rests on two empirical discoveries. First, the overwhelming majority of ROSCA assets were collateralized by *dian* rights over land or fixed property,<sup>271</sup> or else by commercial inventories of business entities. Second, ROSCA shares were fungible. They could be sold for cash or hypothecated for loans, thus making them exchangeable with other forms of credit and integrating ROSCAs into the larger financial market. This means that landowners with good credit and in good standing with the community had ready ways to accumulate financial savings, or to access credit at reasonable rates of interest (I estimate ROSCA annualized credit costs at 8% to 25%, and annualized savings rates from 1.5% to 20%).

---

<sup>271</sup> A *dian*, also known as a “live sale” or “conditional sale,” was an important class of property rights in late imperial China. It was essentially a sale of land, in which the seller retained “redemption rights,” i.e. the right to repurchase the land at a later date. The legal historian Taisu Zhang explains the *dian*, writing, “The great majority of Qing and Republican land transactions were *dian* sales, sometimes translated as ‘conditional sales,’ in which a landowner ‘sold’ property but reserved the right to redeem it at a later time—it was, in effect, a mortgage in which the mortgagee obtained temporary title and use over the collateral until the mortgagor repaid.” See Taisu Zhang, *The Laws and Economics of Confucianism: Kinship and Property in Pre-Industrial China and England* (Cambridge, United Kingdom: Cambridge University Press, 2017), 36-37. Philip Huang’s account of how *dian* rights were incorporated to the KMT civil code is required reading for scholars seeking to understand the long-lasting legacies of Qing economic institutions on Chinese development; see Philip C. Huang, *Chinese Civil Justice, Past and Present*, (Lanham, Md.: Rowman & Littlefield, 2010), 236-238. Also see his earlier work on *dian* at Philip C. Huang, *Code, Custom, and Legal Practice in China: The Qing and the Republic Compared*, (Stanford: Stanford University Press, 2001), 94-98, along with the explanation for how *dian* differed from a mortgage.

To substantiate these claims, I draw on a number of sources from the LJMPC. The LJMPC contains account books of historical ROSCAs located in Shanxi Province from the High Qing to the late Republican Period (roughly, 1750 to 1940). These account books generally have three parts: a preamble, society bylaws, and then the accounts of individual members. The level of detail varies, but together they reveal much about how ROSCAs operated. In addition to account books, I also use contracts found in the LJMPC. These include loan contracts (*jiyue* 借约), contracts for the sale of ROSCA shares (*qiyue* 契约), and “pool contracts” (*shouhuiyue* 收会约). Pool contracts are formal contracts, much like a loan contract, that ROSCA members had to sign when receiving a pool. I also draw on material from post-1949 ROSCAs. These sources come mostly from Wenzhou, Zhejiang province. Wenzhou is ground-zero for gray market finance, and ROSCAs are one of many private financial institutions that exist on the edges of Chinese financial regulations.<sup>272</sup> The Wenzhou sources consist of published 1950s-era documents from the Wenzhou Party Committee, People’s Bank of China (PBOC) reports from the early 1908s period, and my own interviews with current-day Wenzhou ROSCA members.<sup>273</sup>

By making use of these new sources, I contribute to two literatures. The first is an older body of scholarship that dates back to Republican-era social scientists and continues with contemporary social historians. Its animating question is the extent to which ROSCA membership was motivated by economic calculation versus social ties. In short—were ROSCAs something like proto-banking institutions? Or more like a church collection basket? Many scholars see credit societies primarily as financial institutions driven by economic interests,

---

<sup>272</sup> On Wenzhouese private/gray-market finance, see Kellee S. Tsai, “Financial Innovation and Regulation in Wenzhou,” in *Back-Alley Banking: Private Entrepreneurs in China* (Ithaca: Cornell University Press, 2002), 120–65.

<sup>273</sup> I would like to thank my colleague, Huang Rui, for introducing me to interviewees.

though they acknowledge the role that feasting and social obligations played in ROSCA organization.<sup>274</sup> Other scholars disagree, characterizing ROSCAs as a favor to the organizer undertaken out of a sense of social obligation.<sup>275</sup>

Second, I draw on a more recent body of scholarship on contemporary ROSCAs. This research tends to be ethnographic in its methodology, and is generally conducted by

---

<sup>274</sup> The best pre-1949 work on ROSCAs comes from Sidney Gamble. During the war, Gamble surveyed ROSCAs in Hebei villages and wrote up his findings for the *Far Eastern Quarterly*. Gamble believed that the economic calculation involved in ROSCAs was quite sophisticated. Writes Gamble, “From the way the amounts [that is, bids] increased as the years went by, it would seem that a fairly set rate of discount was being figured by its members.” Gamble found that 60% of Hebei working-age males belonged to ROSCAs, and that a majority of ROSCA funds were redeployed into businesses or local lending markets. See Sidney Gamble, “A Chinese Mutual Savings Society,” *The Far Eastern Quarterly* 4, no. 1 (1944): 41–52. Also see Daniel Harrison Kulp, *Country Life in South China: The Sociology of Familism. Volume I: Phenix Village, Kwantung, China* (Taipei: Ch’eng-wen Pub. Co, 1966), pp. 190-196. William Skinner fits into this group of scholars as well, though his primary interest in ROSCAs was their relationship to the marketing system. He found that ROSCAs were organized at the tea-house from peasants within the same marketing system, thus bridging credit markets of multiple villages. G. William Skinner, “Marketing and Social Structure in Rural China: Part I,” *The Journal of Asian Studies* 24, no. 1 (1964): 3–43.

<sup>275</sup> Xiaotong Fei, *Peasant Life in China: A Field Study of Country Life in the Yangtze Valley* (New York: E.P. Dutton, 1939), 268-275. There is some tension in Fei Xiaotong’s work; he seems to retreat from this characterization in *Earthbound China*, describing ROSCAs simply as a “sort of savings system” and classifying them as a business. Xiaotong Fei and Tse-i Chang, *Earthbound China: A Study of Rural Economy in Yunnan*, Rev. English ed, International Library of Sociology and Social Reconstruction (London: Routledge & K. Paul, 1949), pp. 120-121. It is worth noting that Fei Xiaotong is uncharacteristically hard to follow on ROSCAs; his writing is muddled and it is not clear to me that he understood the underlying mechanics of a ROSCA. Also see Philip C. Huang, *The Peasant Family and Rural Development in the Yangzi Delta, 1350-1988* (Stanford: Stanford University Press, 1990), 108; and Ming-te Pan, “Rural Credit Market and the Peasant Economy (1600-1949): The State, Elite, Peasant and ‘Usury,’” *ProQuest Dissertations and Theses* (Ph.D., Ann Arbor, University of California, Irvine, 1994), ProQuest Dissertations & Theses Global (304081530), <https://search.proquest.com/docview/304081530?accountid=14657>, pp. 143-149. Pan also takes issue with Skinner’s contention that *hehui* spanned the marketing system, believing that they were often restricted to one village. I lean toward Skinner on this for two reasons. First, Skinner is substantiated by other social scientists from the period. Second, I have found contracts in the LJMPC that show ROSCA members hailing from multiple villages. But this question, while important, is not the focus of this chapter.

anthropologists, sociologists, and economists. One of the foundational papers in this literature, by Clifford Geertz, sees ROSCAs as a “middle rung” in economic development, useful for habituating peasants to a modern, financialized economy.<sup>276</sup> An influential study from the Philadelphia Federal Reserve sees ROSCAs as a way for immigrant communities to aggregate capital despite lack of access to the formal banking sector. It describes ROSCAs as a “system of savings and credit based on an individual’s social connections,” i.e., a way to monetize the value of one’s good standing in the community.<sup>277</sup> Kellee Tsai’s fascinating research finds a shift in ROSCA gender roles. Prior to 1949, ROSCAs were mostly run by men. But after Reform and Opening, they have been largely female. Tsai finds women micro-entrepreneurs in high growth areas to be the key organizers of ROSCAs. Funds raised from ROSCAs are applied to small businesses or to funding outward migration of male laborers.<sup>278</sup> Finally, another study of contemporary Chinese ROSCAs comes from Xiaoyu Wu and Theresa Hutchins, who examined a ROSCA of Wenzhou immigrants in Flushing, Queens. According to the authors, “Rather than being an economic backward method of intermediation, the associations are a sophisticated vehicle for a unique segment of the population.” Indeed, Wenzhou ROSCA borrowing rates were lower, and savings rates higher, than the local bank. In short, the economics of a Wenzhou ROSCA are competitive with the US banking system.<sup>279</sup>

---

<sup>276</sup> Clifford Geertz, “The Rotating Credit Association: A ‘Middle Rung’ in Development,” *Economic Development and Cultural Change* 10, no. 3 (1962): 241–63.

<sup>277</sup> Christy Hevener, “Alternative Financial Vehicles: Rotating Savings and Credit Associations (ROSCAs),” *Federal Reserve Bank of Philadelphia Discussion Paper*, November 2006.

<sup>278</sup> Kellee Tsai, “Banquet Banking: Gender and Rotating Savings and Credit Associations in South China,” *The China Quarterly*, no. 161 (2000): 142–70.

<sup>279</sup> Xiaoyu Wu and Teresa D. Hutchins, “Immigrants Financing Immigrants: A Case Study of a Chinese-American Rotating Savings and Credit Association (ROSCAs) in Queens.,” *New York Economic Review* 46 (2015): 21–34.

Putting these bodies of scholarship in dialogue with each other enriches both. The research on contemporary ROSCAs cautions historians against dismissing economic motives of pre-modern ROSCAs. If ROSCAs are a way of turning community standing into financial capital, then the supposed distinction between “economic calculation” and “social obligations” that guides the historical research is a false dichotomy. Feasting and fraternizing cannot be taken as evidence against economic incentives. On the contrary, they are likely to have had real economic utility in lowering the cost of pooling community capital. At the same time, much of the research on contemporary ROSCAs presupposes a “formal” banking system, with ROSCAs serving people left out of it. But in China, where ROSCAs predated banks by centuries, such a paradigm is anachronistic. To understand ROSCAs historically, it is not enough to ask how they compare to modern banks, or how they integrate peasants into a modern global economy. We must also ask how they allowed peasants to interface with pre-industrial markets.

This chapter thus approaches ROSCAs historically, but does not seek to label them according to a mutual assistance/economic motivation binary. Rather, it seeks to understand three things. First, what was the internal logic of a ROSCA? Second, how did ROSCAs approach risk management? Third, what was the relationship between ROSCAs and other factor markets?

The rest of this chapter is divided into six parts. Section two classifies Shanxi ROSCAs according to their rules and procedures. Section three discusses ROSCA risk management in the Qing and Republic, and investigates the collateral backstopping ROSCA assets. Section four looks at the links between ROSCAs and other financial markets, showing how ROSCA savings granted access to liquidity. Section five calculates the cost of capital in four distinct historical

ROSCAs, two from the Qing and two from the Republic. Section six charts the evolution of ROSCAs from 1949 to the present day. The final section is a conclusion.

### Rules and Procedures of the *hehui*, or Rotating Savings and Credit Associations (ROSCAs): Dice Societies and Competitive Auctions

Chinese ROSCAs emerged out of religious and clan-based *she* (社) and *hui* (会) to become a specialized institution for aggregating financial resources as early as the Song Dynasty.<sup>280</sup> Originally, *huishe* funded the upkeep of ancestral shrines, temples, or lineage halls. During the Ming dynasty, literary societies, or *wenhui* (文化) also became common.<sup>281</sup> Even up to the early Qing, many ROSCAs continued to raise funds for local religious institutions.<sup>282</sup> But by the mid-Qing, purely financial societies—that is, organized specifically to aggregate financial capital, rather than for dedicated temple usage or construction projects—were the most numerous.<sup>283</sup> Most financial ROSCAs in China fell into one of three categories: rotating societies (*lunhui* 轮会), dice societies (*yaohui* 摇会) and bidding societies (标会). In Shanxi, the latter two

---

<sup>280</sup> Liu Qiugen 刘秋根, *Zhongguo Gu Dai He Huo Zhi Chu Tan 中国古代合伙制初探 [An Exploration of Ancient Chinese Partnership Forms]* (Beijing: Ren min chu ban she, 2007), 127; Joseph Peter McDermott, *The Making of a New Rural Order in South China* (Cambridge: Cambridge University Press, 2013). Note that most Chinese scholars believe there is no meaningful difference between *she* and *hui*, at least before the Qing. In the Qing, *hui* become a broader category, but the two were still be used more or less interchangeably.

<sup>281</sup> Bian Li 卞利, “Ming Qing Shiqi Huizhou de Shehui Chutan 明清时期徽州的会社初探 [A Preliminary Study of Ming and Qing Era Huizhou Huishe],” *Anhui Daxue Xuebao (Zhexue Shehui Kexue Ban) 安徽大学学报(哲学社会科学版) [Journal of Anhui University (Philosophy and Social Sciences)]* 25, no. 6 (November 2001): 29–34.

<sup>282</sup> Yang Bo 杨波, “Songdai Yilai Taihangshan Diqu Cunshe Yanjiu 宋代以来太行山地区村社研究 [Study on Village Community (She) in Taihang Mountain Area since Song Dynasty]” (Ph.D. Dissertation, Baoding, Hebei, Hebei University, Center for Song History, 2020), 181; 188-190.

<sup>283</sup> Liu Qiugen 刘秋根, *Zhongguo Gu Dai He Huo Zhi Chu Tan 中国古代合伙制初探 [An Exploration of Ancient Chinese Partnership Forms]* (Beijing: Ren min chu ban she, 2007), 142-144.

were by far the most popular, except that the bidding society was referred to regionally as a “drawing society” (*bahui* 拔会).

In this section, I describe how these different kinds of credit societies functioned. I do this first at a high level, and then go on to a close reading of the bylaws left over from a number of Qing- and Republican-era dice societies and drawing societies. The bylaws show that credit societies were formal affairs, and displayed great ingenuity in protecting members’ investments and in allocating credit. This more granular understanding leads me to argue that both the use of dice and of auctions raised the economic value of ROSCA membership. Dice randomized the permutations of winners, thus equalizing *ex-ante* ROSCA returns. Bidding similarly imposed a measure of fairness, while also constituting a market mechanism for distributing credit and savings to those who demanded it most.<sup>284</sup> In addition, I examine an especially interesting account book from a society composed of corporate entities. ROSCAs were a source of credit and savings not only for rural individuals, but also for commercial entities and lineage trusts in Qing and Republican-era China.

Though there were three main kinds of credit societies, each with their own rules, all Chinese ROSCAs shared the same, basic organization principles. The societies were called into being by a peasant in need of funds, called the “society head,” or *huishou* (会首) and one or two of his close friends or kin, known as the “society backers” or *huidi* (会底). The society head

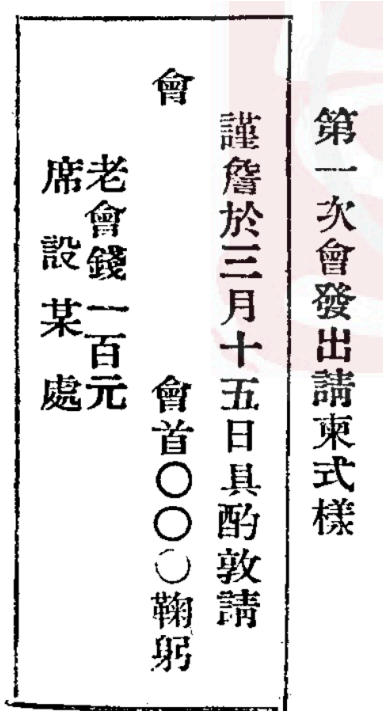
---

<sup>284</sup> For a formal economic model and proof of how random and bidding ROSCAs raise the value of savings for all members in a society, see Timothy Besley, Stephen Coate, and Glenn Loury, “Rotating Savings and Credit Associations, Credit Markets and Efficiency,” *The Review of Economic Studies* 61, no. 4 (October 1, 1994): 701–19; Timothy Besley, Stephen Coate, and Glenn Loury, “The Economics of Rotating Savings and Credit Associations,” *The American Economic Review* 83, no. 4 (September 1, 1993): 792–810.



would send a formal invitation to other members of a society, known as *huijiao* (会脚). A typical invitation can be seen in Image 11.

Image 11: Sample ROSCA Invitation



Source: Yao Bohang (姚伯行), “Investigation: Shanxi Folk Practice of Calling Mutual Assistance Societies (調查：山西民間互助之請錢會),” *Insurance World* (寿险界), 1935.

Image 11 is an excerpt from a Republican-era magazine. In English, it reads:

With respect, you are earnestly invited to a banquet on the fifteenth day of the 3<sup>rd</sup> month to convene a society. Respectfully, Society Head XXX.  
The contribution will be 100 *yuan* per society member.  
[Place name].<sup>285</sup>

<sup>285</sup> Yao Bohang 姚伯行, “Diaocha: Shanxi Minjian Huzhu Zhi Qing Qianhui 調查：山西民間互助之請錢會 [Investigation: Shanxi Folk Practice of Calling Mutual Assistance Societies],” *Shouxian Jie* 寿险界, 1935.

The invitation requested the presence of prospective members, stated the date of the inaugural meeting, and the membership fee. All members who accepted the invitation and joined the society would then be assigned a roster number, like players on a baseball team.

Credit societies aggregated capital by having members pay contributions into a pool at each meeting, with one member “taking the pool” (*shou hui* 收会 or *dehui* 得会). At the inaugural meeting, the society head would take the pool. At subsequent meetings, members took turns taking the pool, whence the “rotating” in the English “rotating credit society.” Sometimes the pool would accumulate interest directly. But more often, interest would be implied by the schedule of contributions, with a member acting as either creditor or debtor depending on when they took the pool. The simplest form of credit society was a rotating society (*lunhui* 轮会), in which members in a society took turns taking the pool in order of their roster number. In some of these societies, the fee would be lower for members who won the pool later, resulting in constant pool size. A sample payment schedule of such a society can be seen in Image 12.

Image 12: Sample payment schedule

**表1 七人轮会会金分配及会员收支盈亏表** 单位: 元

会期	会首及会脚	会首	A	B	C	D	E	F
一	期	(30)	7.5	6.5	5.5	4.5	3.5	2.5
二	期	7.5	(30)	6.5	5.5	4.5	3.5	2.5
三	期	7.5	6.5	(30)	5.5	4.5	3.5	2.5
四	期	7.5	6.5	5.5	(30)	4.5	3.5	2.5
五	期	7.5	6.5	5.5	4.5	(30)	3.5	2.5
六	期	7.5	6.5	5.5	4.5	3.5	(30)	2.5
七	期	7.5	6.5	5.5	4.5	3.5	2.5	(30)
<b>会员纳款数</b>		45	40	35	30	25	20	15
<b>盈 亏</b>		- 15	- 10	- 5	±0	+ 5	+ 10	+ 15

资料来源:《中国之合会》,第20页。

Source: Xu Chang (徐畅), "Analyzing Mutual Credit Societies ('合会'述论)," *Modern Chinese History Studies* (近代史研究), no. 2 (1998): 194–208.

In this society, the initial fee is higher than the fee paid after winning, and membership fees are lower for members who take the pool later on. But in most societies, one's membership fees would rise after winning the pool. That is, a member would have to pay "interest" along with the membership fee. In either case, earlier winners payed out more than they won, while those who won the pool later on, ended up taking in more total cash than they paid out. This means that earlier takers of the pool payed an effective interest rate on borrowings, while later takers earned an effective return on savings.<sup>286</sup>

<sup>286</sup> Wang Yukun 王玉坤 and Liu Daosheng 刘道胜, "Qingchao Zhi Minguo Shiqi Huizhou Qianhui Lilv Ji Yunzuo Jizhi Kaocha: Jiyu 89 Fen Huizhou Qianhui Wenshu de Kaocha 清朝至

The payment schedule of the society head was generally slightly different from the society members. The society head's membership fee was usually fixed at the initial membership fee. Thus, they would end up paying exactly the same amount out as they received at the inauguration of the society. In effect, the society head received an interest-free loan. Many scholars, including Ming-te Pan, have interpreted this to mean that credit societies were a form of “charity” to the society head.<sup>287</sup> But this misunderstands the nature of the ROSCA. The interest-free loan was not really “free”; rather, it compensated the society head for the time and energy involved in organizing the society, as well as for the considerable risk involved. If any member defaulted, the society head was liable to make the society whole. Thus, the common perception credit societies as lender of last resort for peasants in dire straits is not at all accurate. Only those in good community standing and of sterling credit could call a society.<sup>288</sup>

The above example is advisory. In reality, credit societies varied widely by type, payment scheme, payment amount, and duration. The two classes of credit society that were most popular in Shanxi were the *yaohui* (摇会) or “dice society”, and the *bahui* (拔会), or “drawing

---

民国时期徽州钱会利率及运作机制考述——基于 89 份徽州钱会文书的考察 [On the Interest Rate and Operation Mechanism of ROSCA in Huizhou from the Qing Dynasty to Republic of China: Analysis Base on 89 Folk Documents of Huizhou],” *Anhui Shixue 安徽史学 [Historical Research in Anhui]*, no. 4 (2017).

<sup>287</sup> Ming-te Pan, “Rural Credit Market and the Peasant Economy (1600-1949): The State, Elite, Peasant and ‘Usury,’” *ProQuest Dissertations and Theses* (Ph.D., Ann Arbor, University of California, Irvine, 1994), ProQuest Dissertations & Theses Global (304081530), <https://search.proquest.com/docview/304081530?accountid=14657>.

<sup>288</sup> This is consistent with Alec R. Levenson and Timothy Besley, “The Anatomy of an Informal Financial Market: Rosca Participation in Taiwan,” *Interamerican Seminar on Macroeconomics* 51, no. 1 (October 1, 1996): 45–68, [https://doi.org/10.1016/S0304-3878\(96\)00425-7](https://doi.org/10.1016/S0304-3878(96)00425-7). Their study of post-1949 ROSCAs in Taiwan finds that wealthier members of a community and members with stable incomes were the most likely to participate in ROSCAs.

society.”<sup>289</sup> Dice societies worked the same way as a rotating society, but the permutation was randomized. That is, rather than receive the pool in order of roster number, at each meeting those who had yet to receive the pool rolled dice to determine the next winner. At a drawing society, the winner of each pool was determined by competitive auction. The lowest bid set that meeting’s membership fee, and won the pool. Even within these categories, the precise rules could vary considerably. Thus, every credit society was governed by a set of bylaws, often drawn up with the help of a notary (*shu ren* 书人), and signed by each of the members. These bylaws would specify the precise rules and regulations for that society, including the dates that meetings would be held, payment amounts, and collateral requirements.

To examine how ROSCAs worked in more detail, it is useful to look at a few specific cases. A copy of the preamble from a dice convened in the 52<sup>nd</sup> year of the Qianlong Reign (1786) is transcribed in Bylaws 1.

**Bylaws 1:**<sup>290</sup>

摇会序

每月廿三日摇会，不许过午，如过午来得者不得捧盒，亦得者照会倍罚。摇会之时立南向北，点同让先出骰，骰磊俱不算点，不得重摇。不行靠，亦不得行押，得会之人定要保人二位，当面书名画字，每月廿三日纳钱二百出一位，三、六、十二月，加季每人纳钱四百出二位。得过会者每月出利钱二十文，加季出利钱四十文。管会人位每月二人轮流週而复始。

Dice society preamble

On the 23<sup>rd</sup> of each month we will convene a dice society. Members must arrive prior to the afternoon or they will not be permitted to eat and talk with the rest of the members. They will also pay a fine of double the membership fee. Prior to convening the society, we will stand and face north. We will then count to see who the first is to throw the dice. If the dice ‘stack’ it does not count, and the

---

<sup>289</sup> Drawing society, or *bahui*, are a Shanxi variant of the more widespread bidding societies, or *biaohui* (标会). Shen Zhihe 沈致和, “Biaohui Zhi Yanjiu 标会之研究 [Research on Bidding Societies],” *Shang Zhuan Yuekan* 商专月刊, 1937. Fei Xiaotong reports that dice societies were the most common ROSCA. Xiaotong Fei, *Peasant Life in China: A Field Study of Country Life in the Yangtze Valley* (New York: E.P. Dutton, 1939).

<sup>290</sup> “Qianlong 52 Eastern Society, Society Accounts,” LJMPC, 1-14.

member is not permitted to reroll. The use of *kao* and of pledges are not permitted. All winners of the pool must secure two guarantors, who are to sign in person. Every month, the membership fee is 200 copper cash with the pool allotted to one winner. At meetings on the third, sixth, and twelfth months the fee is doubled to 400 copper cash with the pool allotted to two winners. Those who have won the pool are to pay a monthly interest of 20 cash, or 40 cash on meetings with two winners.

Two members will be in charge of running the meetings each month, with this responsibility rotating on a monthly basis.

A *yaohui* (摇会) is best translated as a “dice society”; *yao*, meaning “shake” refers to the shaking of dice. The bylaws state that the dice society is not a one-time meeting, but an on-going event. The bylaws then specify the rules concerning the meal. Namely, members who arrive late do not get to partake in the banquet. The importance of “the feast” has been the subject of much scholarly attention. In my opinion it is an excellent example of the fallacy that *ganqing* comes at the cost of economic efficiency.<sup>291</sup> A feast made society membership a highly public commitment. It raised the social costs of financial default. By applying social incentives to stay good on membership payments, the feast lowered risk and raised the value of the ROSCA for all members involved. In this sense, its role is adaptive in the same way that a wedding reception is adaptive: it makes the parties involved more likely to abide by their obligations.

---

<sup>291</sup> See Xiaotong Fei, *Peasant Life in China: A Field Study of Country Life in the Yangtze Valley* (New York: E.P. Dutton, 1939), 268-275; Philip C. Huang, *The Peasant Family and Rural Development in the Yangzi Delta, 1350-1988* (Stanford: Stanford University Press, 1990), 108. Even Ming-te Pan reinforces the supposed distinction between *ganqing* and economic calculation, writing, “The nature of the *hehui* was a mixture of reciprocity and self-interest. Participating in the association was a favor that the members gave to the head, because the head received an interest free loan from the members,” in Ming-te Pan, “Rural Credit Market and the Peasant Economy (1600-1949): The State, Elite, Peasant and ‘Usury,’” *ProQuest Dissertations and Theses* (Ph.D., Ann Arbor, University of California, Irvine, 1994), ProQuest Dissertations & Theses Global (304081530), <https://search.proquest.com/docview/304081530?accountid=14657>, pp. 143-149. My difference with Pan is not empirical, but in the grammar of his argument. He implies economic calculation and *ganqing* were distinct, discrete institutional pressures. This obscures the fact that economic calculation depended on *ganqing*.

The bylaws go on to enumerate the rules of rolling the dice. Before commencing playing, the players are “to stand from the south and face the north” (*li nan xiang bei*). This is a ritualistic performance of lawfulness. As early as the Warring States period, the sovereign faced south according to the rules of Chinese cosmology. In Zhou-era bronzes “to face south,” or “*mian nian*” (面南) meant “to be a ruler,” while to face north (*bei xiang* 北向) meant to receive an office. For example, in the *Analects*, Confucius says, “*Yong ye ke shi nanmian*” (雍也可使南面), meaning his disciple Ran Yong is fit to be a sovereign.<sup>292</sup> In the Ming Dynasty, the exact same language that we find in the bylaws appears in Chen Gongxian’s *Guide to Da Liu Ren Divination*. The *Guide* states, “Therefore, standing from the south and facing north, this means to faces the sovereign and receive a new office, to the great fortune of the gentleman [who receives the office]” (且立南向北，有面君之义，故有改拜之封，君子之庆也).<sup>293</sup> In essence, this Dice Society’s stipulation amounts to a splendid example of Prasenjit Duara’s “cultural nexus of power.” In Duara’s telling, Qing imperial institutions seldom reached the grassroots directly. Rather, the monarchy maintained authority ritualistically, through a cultural nexus from rural institutions to the monarchy.<sup>294</sup> In this case, the society members are performing the lawfulness and virtuousness of their society by making a ritualistic display of loyalty to the emperor. A western analogue might be saluting the flag, or singing the national anthem, prior to a meeting of some civil or business institution.

---

<sup>292</sup> Confucius, “Yong Ye Section Six,” in *Analects*, n.d., [http://blog.sina.com.cn/s/blog\\_4e8f964f0100ad2v.html](http://blog.sina.com.cn/s/blog_4e8f964f0100ad2v.html).

<sup>293</sup> Chen Gongxian 陈公献, *Da liu ren zhi nan* 大六壬指南 [*Guide to Great Divination*] (Beijing: Hua ling chu ban she, 2013).

<sup>294</sup> Prasenjit Duara, *Culture, Power, and the State: Rural North China, 1900-1942* (Stanford, Calif: Stanford University Press, 1988).

After this ritual, the members take turns throwing the dice. If the dice “stack”—i.e., if one die lands on another die—the roll is disqualified and the member is not permitted to re-roll. In the event that two members roll the same, the tie goes to the member earlier in the roster. That is, if members two and four tie for the highest number, member two wins the pool. The use of dice is extremely important. Anthropological literature suggests we should be alert to possible adaptive functions of randomizers in pre-modern cultural practices.<sup>295</sup> The use of dice was in effect a way to prevent kinship or other interpersonal ties from diluting members’ interest in the society. The randomizer prevented members from colluding to game the order in which members took the pool, and thereby influence the financial returns of different members. It also meant that the expected return was equal for all members. The use of dice has sometimes been characterized as a form of gambling or entertainment. This is true, but only part of the story. Dice actually raised the ROSCA’S financial value for all of its members.

The subsequent regulation appears to have a similar purpose. It reads, “The practice of *kao* (靠) is not permitted, nor may one put up a pledge. The winner of the *hui* must have two guarantors who sign their names and marks in person.” I am not precisely sure what *kao* means, but it amounts to a ban on interpersonal transactions that do not go through the society. The society wanted to ensure that lending was not based on personal ties, and that risk remained pooled in the society. The society also banned putting up pledges in lieu of interpersonal

---

<sup>295</sup> Joseph Patrick Henrich, *The Secret of Our Success: How Culture Is Driving Human Evolution, Domesticating Our Species, and Making Us Smarter* (Princeton: Princeton University Press, 2016), pp. 104-106.



guarantees.<sup>296</sup> This means that members could not pledge silver or clothing to backstop the pool, likely because this would place an undue burden on whoever had to take possession of the item.

Finally, the bylaws detail the payment schedule. On most months, the membership fee was 200 copper cash and there is only one winner of the pool. On the third, sixth, and twelfth months fees were doubled to 400 copper cash and two winners split the pool. Those who had already won the pool had to pay an interest of 20 copper cash, increasing to 40 copper cash during months with two winners. This particular dice society seems not to have been called by any one society head. It met for many years, and people took turns acting as society head. It called itself the “eastern society” or *donghui* (东会) and appears to have had a sister organization called the “western society” or *xihui* (西会). In the list of pool winners, one winner is crossed off with the explanation “张林吉系西会人” or “Zhang Linji is a member of the western society.”

It should be clear now that the importance of the ROSCA has been misunderstood. The dice society was not a kind of charity event for a down-on-his-luck relative. It was a mutual savings and loan society, in which all the members participated. Some members received credit, while others were able to accumulate savings. Moreover, there were explicit measures to make sure there was no favoritism. Each winner of the pool required guarantors to make sure he kept paying his dues even after he won. Even the feast and use of dice should be seen as more than idle enjoyment. Feasting strengthened social trust while the dice randomized the permutation of borrowers and lenders, thereby evenly distributing *ex-ante* returns and preventing the formation of coalitions within the society.

---

<sup>296</sup> Similarly, I have not seen a single pool contract accepting pledges of personal items. Every single contract is based on either fixed property collateral or guarantees. I am not certain why this is so, but the simplest explanation is simply that no member wanted the added burden of becoming a pawn shop.

Apart from dice societies, Shanxi featured many “drawing societies” or *bahui* (拔会). In a drawing society, the society first set an initial membership fee. In the inaugural round, everyone paid the membership fee and the society head took the pool. In subsequent rounds, members—excluding the society head and others who had already won and were therefore no longer eligible to win future pools—placed anonymous bids in a bowl for an amount of money not to exceed the membership fee. The bids were then drawn from the bowl, hence the name *bahui*. The member with the lowest bid won the pool, and their bid would set a “small fee” while the original fee would remain as the “large fee.” The society head and any member who had already won the pool paid the large fee while everyone else paid the small fee (that is, the bid price), and the winner took the pool. This process would repeat, with every member who had already won a pool contributing the large fee and every member who had yet to win paying in the small fee. After winning, members could no longer participate in the bidding. In the final round, with only one member left, there was no need to bid. The small fee would equal the large fee, and the pool would equal the pool in the first round, as each member paid in the large fee. In effect, early winners of the pool were borrowers and later winners were savers investing in a kind of savings deposits. The bidding process made returns highly variable, both between members and between different drawing societies.<sup>297</sup>

One such society was established in the ninth reign year of the Daoguang Emperor (1829). It called itself the Sanyi Society (三益会), or “three profits society.”<sup>298</sup> The bylaws were decided on unanimously by the members. They stipulated first that the society consisted of a

---

<sup>297</sup> Yao Bohang 姚伯行, “Diaocha: Shanxi Minjian Huzhu Zhi Qing Qianhui 調查: 山西民間互助之請錢會 [Investigation: Shanxi Folk Practice of Calling Mutual Assistance Societies],” *Shouxian Jie* 壽險界, 1935.

<sup>298</sup> “Tongzhi 9, San Yi Hui Accounts,” LJMPC.

total of 42 members, including the society head. The membership fee was set at 5 taels of silver, measured with the society head's scale. Meetings were set for the 14<sup>th</sup> day of the second, six, and tenth months of every year. Each member received a small society account book, but no more invitations would be issued to remind members of future meetings. Members were expected to arrive in the morning, with no exceptions made for inclement weather. Those who arrived in the afternoon had to pay a fine equal to the small fee. The fineness of the silver paid by members could not fall below 96%, and all silver had to be prepared in advance and weighed on the spot. Silver that fell in excess or short of the amount, had to be exchanged for acceptable silver that day. If a member could not find silver to contribute, and tried to contribute copper cash, they would be charged a premium above the market rate; like buying forex at the airport instead of a bank.<sup>299</sup> The rules also say that since members are coming from near and far, there is no need to wait for everyone to eat breakfast; people can eat as they arrive. After breakfast, the fee set at the last meeting would be paid, and the bids drawn for the next meeting. After the drawing, there would be a ceremony and a meal. Anyone who arrived after the drawing was already over, or who broke the rules more than two times, was no longer entitled to eat the main meal. The next line reads "bids drawn cannot be in excess of 2%; those in excess of 2% are not entitled to take the pot." I am at present at a loss for what this means.

The remaining rules ensure the integrity of the bidding. One of them reads, "When filling out a bid, be sure to be clear and to bid to the tenth of one tael, not to the hundredth. In the case

---

<sup>299</sup> The exact wording actually specifies how much the premium was, but is in a kind of dialect: "*neiwai zhao qian bi shijia gao yi datou*" (内外找钱比时价高一大头). I suspect *da tou* (大头) is either dialect for some percentage amount, probably either 10% or 20%, or else is a colloquialism that refers to some quantity of strings in the local "copper plate," i.e. the number of copper strings equal to one silver tael.

of a tie the member with the high roster number wins. Any bids that have been altered or are unclear are ineligible to be drawn.” The next rule forbids the lending of bidding slips to other people, or the accepting of the pool in someone else’s name. Another rule forbids paying one’s fee through private transactions or pledging silver as collateral, *budei yi sizhang didui yi buxu quanya huoyin* (不得以私账抵兑亦不许权押活银). In other words, they want to prevent members from enmeshing society obligations with interpersonal obligations. This is comparable to the previous society’s banning of *kao*. Once again, as with the previous society, the drawing society did not allow the pledging of hard silver. Indeed, its pool requirements were far stricter. The winner of the pool was required to find two or three fellow members to serve as their guarantor, and also to post 20 *mu* (roughly 3.3 acres) of good land as collateral. By Qing-era landowning standards, this is a substantial amount of land. But note that with 42 members and a fee of 5 silver taels, the total borrowings of any one member could reach as high as 210 taels. Thus, it is no surprise that only landowners with significant collateral could participate.

The final regulation is also interesting: *daolian buxiazhe fang xu ting hui, shao you shoucheng bixu yao xing* (刀镰不下者方许停会，稍有收成必须要行). This means, “Only those who can no longer chop with a blade or swing a scythe may leave the society. Anyone with the slightest ability to reap a harvest must continue.” In short, people could leave early if they were physically unwell; otherwise there was no excuse.

A third record of a credit society demonstrates that ROSCAs were not exclusively interpersonal affairs, but allocated commercial capital as well. This ROSCA’s membership was composed almost entirely of corporate entities, including many financial institutions. The preamble to the society bylaws is transcribed as Bylaws 2.

**Bylaws 2:**<sup>300</sup> 今夫银会之设也，必有由，设而人之从会也，亦必有所由，从岂漫德，无说以处此该古之人，以文会友身心裨益，会之人以银会反彼此获利，岂敢曰古人以文会者为是而会人以银会者为非耶？是为序。

时

道光四年岁次甲申夏四月初六日，会来范肇青谨识

合会

公义会规则开列午后

There must be a reason why today there are credit societies being established. The fact that people are establishing and joining these societies must have a cause.

How do these credit societies promote virtue? Before answering, we can look at the ancients, who set up literary societies to cultivate body and spirit. If societies are set up on the basis of silver, members help each other gain economic profit. Verily, how can it be said that those who undertake societies on the basis of literature are just, while those who undertake societies on the basis of silver are unjust? This is the preamble.

Time: 1824/4/6, Society called by Fan Zhaoqing, respectfully

A Credit Society

Agreed upon rules enumerated below.

The preamble tells us a number of things. First, it suggests that credit societies had, fairly recently, become a common way of raising funds for corporate entities. Moreover, these societies were broadly recognized as being motivated by “mutual financial gain” (*yi yinhui fan bici huoli* 以银会反彼此获利). Second, a certain defensiveness is detectable in the insistence that credit societies are just. This suggests that there were misgivings about the ethics of such societies. Society members felt the need to justify their endeavor via a comparison to literary societies.

The society bylaws continue:<sup>301</sup>

- Bylaws 2:**
- 一、合会诸位各助首会银三十两悬
  - 一、议定会期自本年八月初六日起按五个月一遇，连闰月，实数週轮流纳
  - 一、议每逢会期首会于前五日备帖早达风而不阻
  - 一、议定收会者必先投阄以拔多者得会，两同者尽前。
  - 一、议定写阄以两钱为度，不得写分厘
  - 一、议定写阄字样必要真楷数目，文要分明，勿致有错
  - 一、议定众会并首会之银，遇会之日，务要齐集，银要足色
  - 一、议定会内席费，俱出于收会之家，首会仍以三十两还纳

<sup>300</sup> “Daoguang 4, Society Account,” LJMP.

<sup>301</sup> “Daoguang 4, Society Account,” LJMP.

一、议定收过者，以三十两还纳，未收者除拔头兑银

一、议定长短会俱以和合生号平兑，勿容改换

- The society members are earnestly entreated to contribute 30 taels of silver to the society head
- It is decided that the society will meet beginning on this year on the sixth day of the 8<sup>th</sup> month. Thereafter it will meet every five months, including intercalary months.
- It is decided that the society head will send out reminders five days in advance, and that inclement weather will not postpone the meeting.
- It is decided that to win the pool you must first cast a lot, and then highest bid wins. In the event that two bids are the same, the tie goes to the member with the earlier roster number.
- It is decided that lots shall be written to the *qian* [0.1 taels], not in units of *fen* or *li* [0.01 and 0.001 taels, respectively].
- It is decided that numbers must be written in proper calligraphy, and must be clearly legible. It is not permitted to write incorrectly.
- It is decided that silver must be ready in hand at the proper fineness on the meeting day.
- It is decided that the cost of the ceremonies on the meeting day will be borne by the winner of the pool, to be reimbursed by the society head for an amount of 30 taels of silver.
- Members who have already won the pool shall pay in 30 taels of silver. Those who have not yet won shall pay in the bid price.
- Silver shall be measured using the Hehesheng Company's scale. It is absolutely not permitted to use an alternate scale.

The bylaws show that this was a drawing society. Bids for the “small fee” were to be written to the nearest tenth of a tael, not to the hundredth or thousandth. They also had to be written in proper calligraphy. In this case, the highest bid won, meaning that the bid price was the “discount” to the large fee, rather than the small fee itself. Whoever won the pool on a given day would pay 30 taels for the banquet, but would be reimbursed by the society head at a later date. Membership fees, that is, the “large fee,” are quite high: 30 taels is not a trivial sum. This indicates that the members had significant resources. Indeed, reading further shows that most of the members were not even individuals, but business entities.

The participation of corporate entities is clear from the account book's roster of society members. Its list of members includes:<sup>302</sup>

三合成号、义和正号、李世璉与毛志义、赵尔忠、恒裕合号、关铸、王瑛祖、德临西号、王临湖与王玉、明德堂、敦义堂、艳春店、关汉、志诚德号、永和泰号、六合宁号、燉远协号（恒裕公）、德兴泰号、三和正号、永生和号、曹图林、协盛恒号、世兴荣号、兴盛清号、复兴源号、乾盛诚号、广庆高记、务本当、中和当、德裕正、祥顺成、和合生号、首会。

Sanhecheng Co., Yihezeng Co., Li Shilian and Mao Zhiyi, Hengyuhe Co., Guan Zhu, Wang Yingzu, Delinxi Co., Wang Linhu and Wang Yu, Mingde Hall, Dunyi Hall, Yanchun Shop, Gan Han, Zhichengde Co., Yonghetai Co., Liuhening Co., Duanyuanxie Co. (Hengyugong), Dexingtai Co., Sanhezeng Co., Yongshenghe Co., Cao Tulin, Xiashengheng Co., Shexingrong Co. Xingshengqing Co., Fuxingyuan Co., Qianshengcheng Co., Guangqinggao Co., Wuben Pawnshop, Zhonghe Pawnshop, Deyuzheng, Xiangshuncheng, Hehesheng Co., Society Head.

Of these 33 accounts, fully 25 were corporate accounts, including two pawn shops and two lineage trusts. This is surprising—I believe that it has been previously unknown to the literature that corporate entities could participate in Qing-era ROSCAs. Moreover, this is hard evidence that credit societies functioned within the larger commercial economy, and not in an isolated moral economy of kith and kin.

Credit Societies continued to be prevalent in Shanxi even after the fall of the monarchy.

One Republican-era account book comes from the Juyi Society (*Juyi hui* 聚义会), a drawing society established in 1933. The preamble to the society bylaws are striking; the language and the moral sentiments expressed by them have changed only slightly since the High Qing.

**Bylaws 3:** 窃闻亲戚乃一本之谊，朋友亦五伦之次，喜庆相慰，患难相扶，圣人盛构而求慨，诺实深钦感，固谓义聚会，云尔  
I have humbly heard that kin are of the first order of good feelings, while friendship follows it in the order of important relationships. Friends rejoice and comfort each other, and support each other in hard times. The sages sought to

---

<sup>302</sup> “Daoguang 4, Society Account,” LJMP.

generous, sincere, and grateful Therefore this meeting is called the gathering of the virtuous. That is what we say.<sup>303</sup>

The translation is a bit tricky, because the opening line is an allusion to the *Analects*. But its basic thrust is on the importance of friendship, sworn brotherhood, and the need for friends to support each other. This particular verbiage was popular on Republican-era calling cards, professions of sworn brotherhood, and stationary more generally.<sup>304</sup> A photograph with similar language from a Republican-era Profession of Friendship can be seen in Image 13.

Image 13. Republican-era Profession of Friendship



Source: Wang Zhiyuan 王支援 and Shang Yourong 尚幼荣, eds., *Guzhi Shiyi 故纸拾遗* [Collection of Old Materials], vol. 2 (Luoyang, Henan Province: Sanqin Press, n.d.),. 350.

<sup>303</sup> 1926 Juyi Society, LJMP, 1.

<sup>304</sup> Li Shengqing 李笙清, “Minguo Baibazi Liuxing Tianxie Jinlanpu 民国拜把子流行填写金兰谱 [In the Republic, Calling Cards Often Wrote Oaths of Sworn Brotherhood],” *Southern China Art (中国南方艺术)*, December 25, 2015, <http://www.zgnfys.com/a/nfrw-51882.shtml>.



Here, the intermingling of moral sentiments and economic relationships is apparent. “Good feelings” were essential to ROSCAs. Indeed, the reason ROSCAs worked as financial institutions is, in part, because they could justify themselves in the language of fraternity and mutual assistance.

The Juyi Society bylaws go on to give more detail on the obligations of each member:

- Bylaws 3:**
- 一、议随投随使，自使之后，仍然立业、讨保、立地者，须要四至分明，立房屋者，任其保人拆卖
  - 一、议逢会之期银洋即日交付不得推阻，如纳不到以上纳之洋一概作为无效
  - 一、议会中人素有鞅鞅者临期不准以私债抵抗公务
    - Decided, Whoever wins the bid, wins the pool. Upon winning, those posting their own usufruct rights, a guarantor’s, or pledging land, must clearly demarcate the boundaries of the plot they are pledging. Those pledging buildings, must specify a guarantor who will be responsible for selling the building to recover the appropriate amount in the event of default.
    - Decided, The full amount of silver must be paid on the day of the meeting. If a member is unable to pay, then their previous payments to the society will be null and void.
    - Decided, Those members with private dealings are not permitted to engage in transactions in the lead up to the meeting in lieu of meeting their obligations to the society as a whole.

This tells us that all winners of the pool had to post real property as collateral, or at least the real property of a guarantor. This property could consist either of land or buildings. In the event of default, the society member lost their share in the society, and the accumulated savings in it. A present day analogy might be defaulting on a life insurance premium, and losing the entire policy. As in Qing-era societies, the bylaws forbid using private transactions to take the place of public obligations to the society. The goal was to protect the society from degenerating into a web of interlocking paper obligations.

To conclude, this section has offered a close reading of the bylaws for a number of Qing- and Republican-era ROSCAs. In doing so, it has explored the economic logic behind the two most common ROSCA formats, the dice society and the drawing society. The dice society was an adaptive institution that equalized *ex-ante* returns amongst members. (In fact, it did a fair job at equalizing *ex-post* returns as well, but I discuss that in section seven.) The bidding society distributed savings and loans via competitive auction, and was thus literally a market mechanism for allocating capital. Furthermore, this section has touched on the issue of *ganqing*. Enjoying a shared meal was an integral part of each ROSCA meeting, and ROSCAs justified themselves in the language of fraternity and mutual aid. Some scholars have seen this as a reason to doubt the economic orientation of ROSCAs. But in fact, it was one of many practices used to maintain what were in essence financial institutions. Finally, this section has shown that corporate entities could be members of ROSCAs. This indicates that ROSCAs were integrated with the wider commercial economy, serving as a financing channel for businesses as well as individuals.

#### Risk Management and Collateral

This section discusses historical Chinese ROSCA's risk management practices. This marks a major contribution to the literature. Risk management is a *sine qua non* of any financial institution, yet the literature has never once addressed this with respect to pre-revolutionary credit societies. I show that ROSCAs enforced two layers of protection. First, each ROSCA member upon receiving the pool had to sign a contract naming guarantors who would cover their membership fees in the event of default, and/or pledge fixed assets as collateral. In fact, the overwhelming majority of ROSCA credit was backed by fixed property, in the form of either parcels of land, rooms in buildings, or cave dwellings. In cases where corporate entities participated in ROSCAs, their credit appears to have been collateralized by the business's assets,

such as inventories. Second, the society head guaranteed the credit of the entire ROSCA. Thus, in the event that a ROSCA was unable to recoup losses from a defaulted member, the society head was liable to make the society whole. Here, again, fixed assets were the ultimate guarantor of solvency: in most ROSCAs, the society head himself had to pledge a large amount of fixed assets at the inauguration of the society.

The importance of these findings cannot be overstated. First, they show that while *ganqing* was important, ultimately risk management was run along similar lines as the lending market: fixed property was the ur-source of rural credit, in ROSCAs and rural lending alike. Second, and more importantly, this means that ROSCAs were in direct competition with—and thus integrated with—other factor markets. The opportunity cost of joining a ROSCA, of and pledging one’s land, equaled the capital (or return on capital) one could acquire by disposing of the land in adjacent factor markets (such as selling it, renting it out, or selling it in a *dian*). The evidence for these claims come from two types of sources in the LJ MPC. First, I scrutinize ROSCA “pool contracts” (*shouhui yue* 收会约). These are formal loan agreements that winners of the pool would sign with the society head upon taking the pool. In addition, I look at the entries in ROSCA account books of members, especially those who defaulted, to see how societies tried to recoup investment of delinquent members.

The earliest pool contract dates from the 22<sup>nd</sup> reign year of the Qianlong emperor (1757), and is transcribed as Contract 1.

**Contract 1:** 立收会人李成发、李汪法，今收到李文正、李习崗二人名下，会内银陆拾式两式钱整，言明每季二、五、八、十一月廿八日填纳会银一两式钱，后有托累执当村东常家堰澗弯一段，上平地三亩，其他东西畛四至未开，如银不齐，二人情业，恐后无平，立收会约存照  
乾隆二十二年十一月二十八日，立收会人李汪法十、李成法十

Originating a contracting for receiving a society pool with Li Chengfa and Li Wangfa, receiving today from

Both Li Wenzheng and Li Xigang. The society pool amounts to 62.2 taels of silver. It is clearly stated that every quarter on the 28<sup>th</sup> day of the second, fifth, eighth, and eleventh months, the receivers of the pool will pay their society fee of 1.2 taels of silver. Moreover, they have posted as collateral one plot of land by the Chang family irrigation dyke with the pool by the eastern part of the village. This amounts to 3 mu of flat land and extends east to west. The exact borders are not yet demarcated. If the society payments are defaulted on, both receivers of the pool agree to render land rights. Oral testimony will not be relied upon so we are originating this society pool contract as proof.

1757/11/28, Originated society pool contract with Li Wangfa [signed] 十 and Li Chengfa [signed] 十

This contract is in many ways fascinating. What is immediately clear is the extent to which the language mirrors the loan contracts (*jieyue* 借约) discussed in Chapter 1, with only slight variation in language. Instead of “borrowing today from,” or “*jin jiedao*” (今借到), the contract reads, “receiving today from”, or “*jin shoudao*” (今收到). The winners of the pool, Li Chengfa and Li Wangfa are said to receive the pool from two other people, Li Wenzheng and Li Xigang. Li Wenzheng and Li Xigang were most likely the society heads. The collateral backstopping the pool is a 3 mu plot of land.

The next contract, also from the Qianlong reign, is interesting primarily on account of its simplicity. The relationship between the ROSCA and the borrower is extremely clear.

**Contract 2:** 立收会文约人卫炳文，今收到

赵文贤会内第十一会全收，自收之后，每会纳银六两整，会中无凭，情愿执当自己后古夺水地一亩下，四至不开，系南北畛，如一会不到保人查银赎业，恐口无凭，立约存照

保人赵文达

乾隆四十九年四月廿五日立收会约人卫炳文十

Originating a contract to receive the society pool with Wei Bingwen, today receiving from

Zhao Wenxian’s society, the 11<sup>th</sup> pool in its entirety. Since receiving this pool, he will be required to contribute 6 taels at each future meeting. No society receipt shall be given. He willingly posts collateral of under 1 mu of land behind the old waterlogged area. The boundaries will not be demarcated here. The land lies north

to south. If he does not stay good on his payments, the guarantor will have the right to repossess this property and to seek the silver owed.

Guarantor Zhao Wenda

1784/4/25, Originated Contract for Receiving the Society Pool, Wei Bingwen  
[signed] 十

This contract states that Wei Bingwen won the pool at the 11<sup>th</sup> meeting of the society, on 1784/4/25 for an unstated amount. He received the pool from Zhao Wenxian, presumably the society head. Thereafter, he owed the large fee of 6 taels to the society, to be paid at each meeting. As collateral, he posted a token amount of under 1 mu of land. This could either be because the society had nearly concluded, or perhaps because his reputation was good enough that he did not require significant collateral.

Similar contracts abound. Though there are also contracts for receiving ROSCA pools that do not register collateral, the overwhelming majority of them do. The most common form of collateral is land, followed by rooms in buildings. An example of “rooms” as collateral are found in a Republican-era account book from 1926:<sup>305</sup>

王福生

民国十六年四月初五日 2.8 元得会半名，共得大洋叁拾叁元四角，逢会之日，若填不上，愿将自己南房三间交与会首人经理

第二会

Wang Fusheng

1926/4/5, bid ¥2.8 and won half the pool, received a total of ¥33.4. In the event of default on future society membership fees, pledges the three rooms in the southern building of his courtyard to the society head.

Second meeting

This account is for ROSCA member Wang Fusheng, who won the pool at a bidding society. As collateral, rather than post land, he pledged three rooms in his family courtyard. In the event of default, the society head would be able to take possession of these rooms to recoup membership

---

<sup>305</sup> Society Account book from 1926, Unnamed, LJMPC, 6.

fees in arrears. These rooms could then be rented out for income by the society head, sold, or occupied by society members.<sup>306</sup>

Now that I have demonstrated that ROSCA loans were collateralized by fixed property, I will move on to discuss the nature of a society's foreclosure rights. The evidence here is patchier, but leads toward a tentative conclusion: foreclosure rights consisted of a *dian* over the forfeit collateral. That is, if a ROSCA member received a pool and later defaulted on their fees, they would not lose permanent title to the collateral. The defaulting party gave the society head a *dian* over the collateral, which could be redeemed after they paid the membership fees in arrears.

The clearest evidence of this comes from two sources. First is a pool contract from the 33rd Qianlong reign year (1768). The contract is transcribed as Contract 3.

**Contract 3<sup>307</sup>:** 立当契人 杨清，情因在作劲杨兄名下纳三两之会，一会已经收过，自收会以后，理宜会银付还，不料还至戴彩文收会之日，光景甚是疲累，不能付还，问心不甘细想毫无出洗，无奈与契约十六会期之日，一概清楚，倘若负约，情愿将自己所有北房尽东一间东房三间，执当与众位名下任凭典卖清，不得阻当，此系甘心情愿，并无反悔之意，恐口无凭，立当契存照  
所欠自戴彩文二两四分起至邢秉成止共十一会当日，每人各收银三两下，止欠每人银三两整  
未收过者四会，刘根、杨思明、白锡福、劲恺官、以上共欠会银四十五两六钱  
乾隆三十八年七月十六日立当契人杨清十  
同人吴大仁、王世福、姚永纲

---

<sup>306</sup> Wang Yuan has conducted extensive research on the partition of rural buildings into individual room rights, which could be inherited or sold to third parties. Wang Yuan 王媛, “Yi Ge Jiating Daiji Fenjiashong de Fangjian Fenpei Shi: Yi Shicang Queshi Fenjiashu (1750-1926) Wei Zhongxin 一个家庭代际分家中的房间分配史--以石仓阙氏分家书(1750-1926)为中心 [A Study of the Family Room Division Based on Clan Que's Family Division Book, 1750-1926],” *Shanghai Jiao Tong Daxue Xuebao (Zhhexue Shehui Kexue Ban) 上海交通大学学报 (哲学社会科学版)* [Journal of Shanghai Jiaotong University (Philosophy and Social Sciences)] 25, no. 3 (May 2017): 109–16. The LJMPC is similarly replete with *dian* contracts for individual rooms in buildings and cave dwellings.

<sup>307</sup> Loans related to societies, LJMPC, 3.

Originating a mortgage with Yang Qing, who is willing to do his utmost to meet his society fee of 3 taels. But Yang has already received the pool and since receiving the pool has fallen on hard times. Ever since the date on which member Dai Caiwen received the pool, business conditions have been sluggish. He was distraught over this, but hopeless and desperate. Therefore on the date of 16<sup>th</sup> meeting we have signed this contract with clarity to all parties. In case of default, he is willing to pledge his own northern building, the easternmost three east rooms to all the society members, which he agrees to let the society members live sale in their entirety. He will not obstruct this. This is agreed to willingly and without any thoughts of regret. Oral testimony will not be relied on, so this mortgage contract is being established as proof.

Debts outstanding range from 2.4 taels from when Dai Caiwen [won the pool], to when Xing Bingcheng [won the pool], he owes money to 11 members, owing 3 taels to each member.

There are still four members Liu Gen, Yang Siming, Bai Xifu, Jing Qiguan who had yet to win the pool. In total, the debt comes to 45.6 taels.

This contract is rich in information. It tells the story of Yang Qing, a ROSCA member who won the pool, but was unable to continue paying his regular fee. This is obviously frowned upon, and a stain on someone's credibility. The contract takes pains to explain that Yang Qing is extremely unhappy about his default, but it is in dire straits; i.e., he has been derelict out of necessity rather than bad faith. The wording *guangjing shen shi pilei* (光景甚是疲累) indicates he was hit hard by a serious business slowdown. We can therefore infer that Yang Qing was engaged in some kind of commercial undertaking. The contract also specifies both the property serving as collateral, as well as the property rights. The property involved consists of four rooms; the easternmost room in his northern compound, and the three eastern rooms. In terms of property rights, we see clearly that this is live sale, or *dian*. Specifically, the society as a collective now has rights to live sale the rooms to a third party. This means that the society members can get the cash owed to them immediately. Meanwhile, Yang Qing does not lose permanent title to his rooms. He would merely transfer use rights to the creditors until such a time as he could make

good on his obligations. After that, the society would redeem the rooms from the third party, and return them to Yang Qing.

The second clear piece of evidence showing that foreclosure consisted of *dian* rights comes from the account book of the 1926 bidding society referenced above. One of the members failed to meet his obligations. Wang Shenghai, the winner of the pool at the fourth meeting, defaulted at the tenth meeting. His account reads:<sup>308</sup>

王生海

民国十七年又二月廿五日得 2.8 元会子一名，共得大洋柒拾柒式角，逢会日若佃不上，愿将自己家崖的、寺后地 12 亩、8 亩，共二十亩交与会首人耕种，不得异说

第四会

后批民国二十年三月十八日将所立地分别人经手，现将自己茶房地两段共九亩，又将自己场基一块交会 X 人抵押作证，不得异说

（第九会，同合会人将场基茶庄商地居南五亩地交与会首经手，六月十七日收 8 元）

民国二十三年二月二十九日，过第十会王生海填会不上，将自己茶房地南五亩场基，一院作场，交会首经手，期至六年半为满，原业交还不得异说，

Wang Shenghai

1928/2/25, 2.8 Bid, full share, won a total of ¥77.2. If At any meeting, payment is not forthcoming, he will surrender his family's property, and property behind the temple, amount to 12 and 8 mu respectively, for a total of 20 mu, to the Society head and will not protest this.

Fourth Meeting

Addendum: 1931/3/18, It is approved by the society members that Wang Shenghai may place his land posted as security at someone else's disposal. Now, he is posting as collateral the 9 mu of land surrounding his teahouse, and his teahouse building, to be rendered [in the event of default] as collateral to the society head, and will not protest this.

At the ninth meeting, rendered to the Society head the 5 mu of land south of his commercial land with his teahouse. (6/17 received ¥8).

1934/2/29, At the tenth meeting, Wang Shenghai defaulted on his payments. He has rendered his 5 mu of land south of his teahouse, with one courtyard, to the society head for a term of 6.5 years, on condition of repaying his debts. This will not be protested.

---

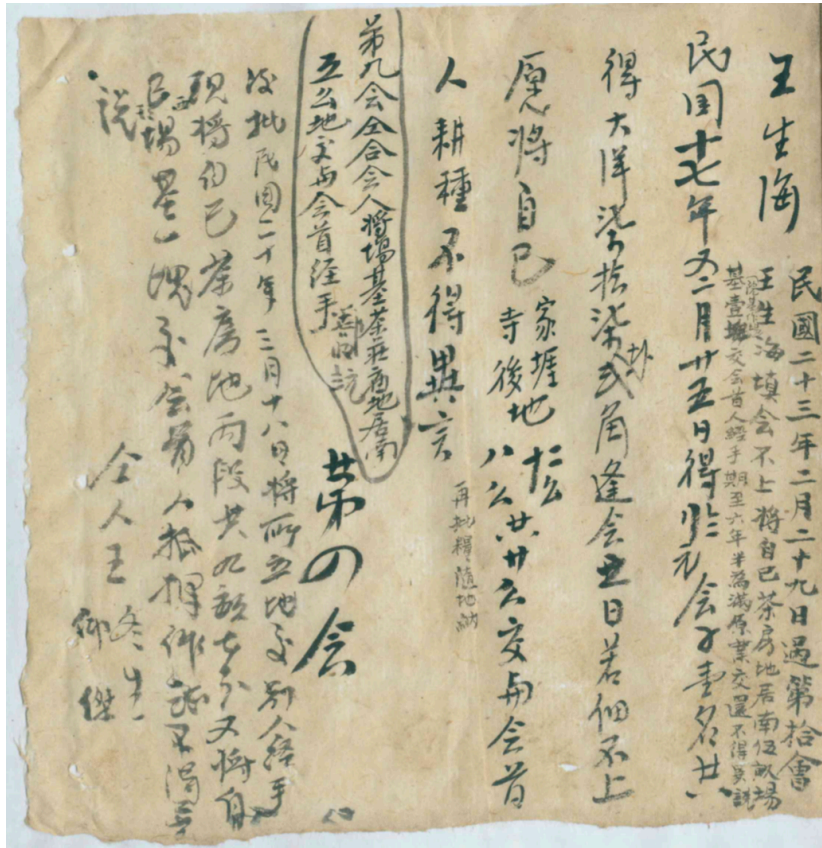
<sup>308</sup> Society Account book from 1926, Unnamed, LJMP, 7.



This account is for ROSCA member Wang Shenghai. On 1928/2/25, Wang Shenghai won the pool worth ¥77.2, at the fourth meeting, with a bid of ¥2.8. He then pledged as collateral two plots of land totaling 20 mu. This entry is followed by an addendum added in 1931/3/18. Wang Shenghai evidently needed to use this property in another transaction; perhaps to sell, perhaps as collateral. The Chinese “*fen bieren jingshou*” simply implies some sort of superior claim has been transferred to another party. To do this, he needed the approval of the other society members, which they granted. In return, Wang Shenghai had to offer up new collateral. He posted 5 mu of land south of his teahouse, including a courtyard.

At the ninth meeting, Wang Shenghai appears to have had some trouble making his payment. He rendered the 5 mu of land to the society head as payment. A note scribbled under that entry reads “6/17, received ¥8.” The society bylaws fix the “large fee” at ¥8, thus the ¥8 in the note refers to Wang Shenghai’s membership fee. The entry has also been circled in heavy black ink, visible in Image 14. This is a Qing- and Republican-era bookkeeping convention indicating that a transaction has been completed or a debt has been repaid

Image 14: Wang Shenghai Member Account, 1926 Credit Society



Source: Society Account book from 1926, Unnamed, LJMPC, 7.

Note that this convention is no more legally binding than simply writing “paid” would be; and thus cannot be used to wish away one’s debts. Rather, it is a shorthand for indicating that an obligation has been discharged.<sup>309</sup>

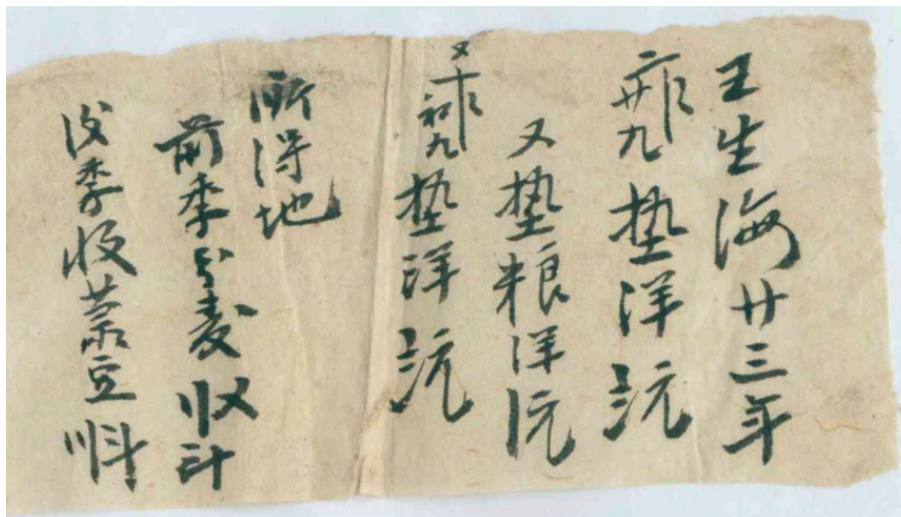
At the tenth meeting, Wang Shenghai was unable to pay his society fee. He had to surrender his collateral to the society head for a period of 6.5 years. This is bad news for Wang Shenghai, but good for historians: it gives a clearer picture of the kind of ownership rights to be

<sup>309</sup> Qing-era paper notes that have been redeemed also have circles or hooks scrawled on top of them. The practice of drawing circles and hooks to void documents survives in contemporary Mandarin, in the word “gouxiao” (勾销), used to mean “void” or “cancel.” The *gou* in *gouxiao* literally means “hook.”

transferred in the event of default. Wang Shenghai has not lost title to this land, but has been forced to give the land to the society head for 6.5 years. We can infer that the society had a *dian* over the property with a minimum holding period of 6.5 years, after which Wang Shenghai could redeem the land.

We can be especially sure that this was a *dian* because of a slip of paper found inside the account book, reproduced in Image 15.

Image 15: Receipt for Wang Shenghai



Source: Society Account book from 1926, Unnamed, LJMP, 8.

The slip of paper is a receipt acknowledging Wang Shenghai's payments toward fulfilling his obligation. It reads:

王生海，廿三年  
二月廿九日垫洋 8 元  
又垫粮洋 1 元  
又十月初九日垫洋 8 元  
所得地  
前季分麦 2.4 斗  
后季收丛豆 3 斗  
Wang Shenghai, 1934  
2/29, paid ¥8  
Also paid ¥1 in land taxes  
Also on the 10/9 paid ¥8

The land which has been acquired produces  
2.4 dou of wheat in the early harvest  
3 dou of cong beans in the late harvest

For our purposes, the key information in this receipt is the fact that Wang Shenghai was making payments of ¥8, to repay his membership fees in arrears. At the same time, the entry “*you dian liangyang* ¥1” shows that he continued to pay the land tax on the surrendered land! This is the hallmark of a *dian*. In short, default transferred a *dian* of the collateral to the society head with the redemption price set at the membership fees in arrears.

We have thus established the nature of the collateral and foreclosure rights for individual members of ROSCAs. Namely, ROSCA credit was collateralized by *dian* rights over fixed property such as parcels of land or rooms in buildings. But that still leaves the question of what kind of collateral backstopped corporate ROSCA members. Fortunately, there is an example of a corporate account defaulting in the Daoguang-era society, whose bylaws are transcribed above as Bylaws 2. This account book shows that a ROSCA could liquidate the inventories of a defaulting party and seek additional redress from related parties.

The ROSCA in question was a bidding society convened in the fourth year of the Daoguang emperor. One of the members was a corporate entity named Hehesheng Company (和合生号). I believe this entity was owned, at least in part, by the society head Fan Zhaoqing. This is because the bylaws specify that society payments are to be measured using the Hehesheng Company scale. Unfortunately, things went poorly for Fan Zhaoqing. He died unexpectedly, and the account book entry for the society head reads:<sup>310</sup>

道光十一年二月初六日因首会范肇青辞世，其子范镛年幼稚，资财空虚，无力随会期还纳会银卅两，因而表伯兰生俊恳请王临湖与家众短会，说合深承

---

<sup>310</sup> “Daoguang 4, Society Account,” LJMP, 22.

蒙众短会之情，于会内随一短会以顶首会，诸公慨然，承应并无异说，是为序。

于道光十二年五月初六日因其子范镛上来又恳众短会说合，以后无论收银多寡，随会纳十六两顶首会银卅两，当日众公依允，并无异说。

In 1831/2/6, because the Society Head Fan Zhaoqing passed away, and his son Fan Yong is still a minor, there is a shortage of funds and no ability to pay society contributions in a timely manner. Because of this, Fan Yong's uncle Lan Sheng has asked Wang Linhu to mediate between Fan Yong and the Society members. In reach an agreement, they are deeply indebted to the good will of the short society members. As for the Society's internal affairs, a short society fee member has been deducted from the society head's contributions. Everyone has generously agreed to this, with no disagreement. This is the situation.

1832/5/6 Because the son Fan Yong has come and earnestly entreated the short society to reach an agreement, from now on no matter how much the Society contribution is, the society head will contribute 16 taels instead of the 30 taels [as stated in the bylaws]. On this today everyone approves this, and there is no disagreement.

The entry explains that the society head Fan Zhaoqing died and his son Fan Yong was still a minor without any assets. Therefore, the society head was unable to meet his obligations. As a result, Fan Yong's uncle asked that "short" society members accept lower membership fees from Fan Yong. The short society members were simply those who had not yet won the pool (and thus were paying the "small" or "short" fee.). At first, Fan Yong's uncle asked that Fan Yong also be allowed to lower his contributions to the short fee, despite having already received the pool. But later, it was agreed that Fan Yong's future contributions would be fixed at 16 taels per meeting, rather than the "long fee" of 30 taels. This is essentially a form of write down.

The death of Fan Zhaoqing appears to have impacted Hehesheng's business. As soon as Fan Zhaoqing passed away, the society members lost faith in Hehesheng's solvency, and placed restrictions on its participation in the society. Hehesheng's account entry reads:

此会因借使会内银六百五十两，中和当银 250、曹图林 150、王瑛祖 100、永和泰 50、赵尔忠银 50、兴盛清银 50，又有众短会因 250 于道光十一年二月初六日众短会公议许纳不许收会，完之日以顶此债

Because Hehesheng borrowed 650 taels to members of the society, including 250 taels to the Zhonghe Pawnshop, 150 taels to Cao Tulin, 100 taels to Wang

Yingzu, 50 taels to Yonghetai, 50 taels to Zhao Erzhong, 50 taels to Xingshengqing, also 250 taels to all the members of the short society, therefore as of 1831/2/6, the short society has decided to allow Hehesheng to continue to pay into the pool, but not to receive the pool. This will satisfy its debt obligations.

This means that Hehesheng was mired in debt. It owed 650 taels of silver to various members of the society, including 250 taels to a pawn shop and another 250 taels of silver to the short society. The short society refers to members who have yet to win the pool, and are thus the society's savers/creditors. The 250 tael debt to the short debt thus refers simply to Hehesheng's membership future fees. In light of its copious debts, Hehesheng was barred from participating in the bidding, but was to continue contributing its membership fee in lieu of paying its debts. Moreover, these restrictions were placed on Hehesheng on the exact date that Fan Zhaoqing died. It is therefore clear that Hehesheng's sudden loss of solvency was related to its Fan Zhaoqing's untimely death.

Another note, written nearly a year after Fan Zhaoqing passed away, speaks to Hehesheng's ongoing problems. Hehesheng wrote the society, saying:

此会因生意不前【XXX】再三中央说合，实无力本利还纳，恳求众位让利纳本蒙，众公概允随会期以十六百本银还纳  
十二年五月

As for this society, because our business has not been good as before, we have appealed multiple times for arbitration. We truly have no ability to make good on our principal and interest obligations. We have earnestly entreated everyone to forgive our interest obligations, and the entire society has generously agreed to allow us, at each meeting, to pay 16 taels in consideration for our principal obligations.  
1832/5.

That it is, Hehesheng's business was not as good as before. As a result it had asked multiple for a mediator to deal with its obligations to the society, as it did not have the ability to make good on its principal and interest. Hehesheng "earnestly entreated everyone to forgive their interest" and allow it to pay back its principal by continuing to contribute 16 taels at each meeting. This is

further proof that Hehesheng and Fan Zhaoqing were related parties; Hehesheng's work-out was the same as Fan Zhaoqing's, with its meeting payments reduced from 30 to 16 taels.

Unfortunately, even these measures fell short of saving Hehesheng from insolvency.

Another note written two years later discloses Hehesheng's outstanding debts to the "long society," or the members who had already won the pool. The note reads:

道光十四年五月廿日牛庆王、解文懋、梁 X 青、王通 X, 等, 所以乾盛诚号欠长会银三百四十两整, 同中说合, 共账牲口货物一概清楚不欠  
1834/5/20, Niu Qingwang, Jie Wenmao, Liang XQing, Wang TongX, and others, regarding the debts that Qianshengcheng Co. owes to the long society amounting to 340 taels, have mediated an agreement. The entire account will be settled with the payment of one draught animal and the company's inventories, after which the entire obligation will be considered discharged.

This means that Hehesheng owed 340 taels through another corporate, Qianshengchenghao, to the "long society." On the 20<sup>th</sup> day of the 5<sup>th</sup> month of the 14<sup>th</sup> year of the Daoguang Reign (1834), they arrived at an agreement. The language suggests that there may have been a mediator called in, as "*tongzhong shuohe*" means something like "mediated an agreement." There is no information on who the mediators might be, but I strongly suspect it would have been Wang Linhu, the mediator Fan Yong's uncle appealed to earlier. In any case, an arrangement was settled on to work out Qianshengcheng's debts. Hehesheng would surrender a draught animal such as a mule or an ox, along with its remaining inventories. This compensation would serve as consideration of the entire debt, which was considered discharged.<sup>311</sup>

---

<sup>311</sup> "Daoguang 4, Society Account," LJMP. Both the forgiveness of interest, and the repayment of bad debt using other assets was common in cases of insolvency. Lou Min 娄敏, "'Youxian' Yu 'Wuxian' Zhijian: Tanhuan Guize de Changzhai Luoji: Yi Jiangjinxian Zhaiwulei Sifa Dang'an Wei Zhongxin '有限'与'无限'之间: 摊还规则的偿债逻辑\* ——以江津县债务类司法档案为中心 [Between 'limited' and 'Unlimited': The Rules and Logic of Repaying in Installments. A Case Study Using Legal Cases of Jiangjin County Debt]," *Zhongguo Jingjishi Yanjiu 中国经济史研究 [Researches in Chinese Economic History]*, no. 2 (March 2018): 66–81. Also note that the bankruptcy of this credit society coincided with the Daoguang Depression. See

The story of Hehesheng is extremely important. First, it explains why many societies explicitly banned private debts between society members. They feared that in the event of default, the society's finance's would become hopelessly complicated. In this particular society, the amounts of the debts were enormous. The participants were therefore highly prosperous business entities. Given the size and resources of the corporate members, we can infer that they never considered default a serious danger. It was only because of the society head's untimely death that the ROSCA suffered member defaults. Equally important, the Hehesheng episode reveals the underlying assets behind corporate ROSCA debt. Namely, in the event of default corporate inventories and related-party assets were forfeit to the ROSCA in consideration for delinquent membership fees.

Now that we have explored the collateral underlying ROSCA member solvency, it is worth taking a look at the second layer of protection: the society head. The evidence suggests that in order to get a ROSCA off the ground, the Society head himself had to pledge significant fixed assets as collateral. A remarkable document from the 12<sup>th</sup> reign year of the Tongzhi Emperor (1873), transcribed as Contract 4, reveals the resources needed to be a society head.

**Contract 4:**<sup>312</sup>立会首人高步才因不便，今请保人高东河、党林海、高登宪、高同荣，立会，每年三、九月廿四日行会，若不行会，情愿将自己房院北房两间、东房三间、东边场两分、场西北角房间，又有东院西房一间，又有村北二头地一段，计地五亩，其地东西畛，又有杨家钟地一段，计地一亩五分，又有杨家崖上地北半段，计地二亩，又有后地南边一亩七分五厘，又有堰上地一段，计地三亩，俱四至未开，土木相连，尽在 X 数，许保人耕业，发会决不阻挡[挡]，恐后无凭，立约为证

---

Li Bozhong, "The 'Daoguang Depression' and the 'Guiwei Great Flood': Economic Decline and Climatic Cataclysm in Early Nineteenth-Century Songjiang in a New Perspective," *Etudes Chinoises* 34, no. 2 (2015): 89–119.

<sup>312</sup> Contracts related to societies, LJMPC, 25.



钱粮会首人封纳

同治十二年吉日立高步才

Originating a contract with society head Gao Bucai, who is short of funds and inconvenienced. Today, he has invited guarantors Gao Donghe, Dang Linhai, Gao Dengxian, and Gao Tongrong to found a credit society meeting on the 24<sup>th</sup> day of the third and ninth months of every year. In the even he is unable to do the society, he will pledge two rooms in the north building of his courtyard, and three rooms in the eastern building of his courtyard, two plots to the east of his courtyard, a room in the northwest corner of the plot, as well as one room in the western building of his eastern courtyard. In addition, he pledges half a plot on the northern boundary of the Yang family amounting to 2 mu, and 1.75 mu at the back area of the southern boundary, as well as a plot by the dyke amounting to 3 mu. The precise boundaries are not delineated in this contract. The contract includes both land and timber, which are all included herein, and forfeit to the guarantors in the event of default, who promise not to obstruct the society. Oral testimony will not be relied upon, so this contract is being drawn up as proof.

Placed in trust by Credit and Grain Society Head

1873, New Year's Day, Originated Contract with Gao Bucai

This contract means that Gao Bucai was short of funds, and so planned to start a ROSCA in which he would serve as society head. He planned for the society to meet twice a year. To do this, he needed to find guarantors, in this case, Gao Donghe, Dang Linhai, Gao Dengxian, and Gao Tongrong. In order to get them to agree to serve as guarantors, Gao Bucai had to post significant collateral, including 6.75 mu of land and a number of rooms in various buildings.

In the Republican period, society heads continued to post collateral in order to ensure the integrity of a ROSCA. The Juyi Society, referenced above as Bylaws 3, contain a pledge of land from Society Head Yang Genwen (杨根温). The pledge reads:<sup>313</sup>

会首杨根温自请之后，情愿将自己社南下平坟地七亩，东西畛，东至道，南至福 X，西至道，北至升龙德娃，上段三亩，东至十保 XX 至龍，西至道，北至景堂，又有东坡下保 X 五亩，东西畛，东至沟，西至道，南至文 X 北 X 保畛三段，四至分明，共计拾五亩作为会上抵押款，日后会首若有差错，保人查银经业  
Society Head Yang Genwen, after calling the Society together, is willing to pledge his 7 mu plot with grave sites located south of the family temple. The plot lays east to west. Its easternmost boundary ends at the road, its southernmost boundary ends at Fu XX, its

---

<sup>313</sup> 1926 Juyi Society, LJMP.

western most boundary ends at the road, and its northernmost boundary ends at the Dewa Mounted on a Dragon. The upper plot is 3 mu, it extends eastward to the tenth Baojia, south to the dragon, west to the road, north to the Jing Hall. In addition, there is a plot of land in the Baojia district of the southern slope amounting to 5 mu. It lays east to west, and extends eastward to the irrigation ditch, west to the road, south to the XXX. The boundaries of three plots are clearly demarcated. They total 15 mu, and are hereby pledged as collateral to the society. If later the society head is short on his obligations, guarantors/mediators will be called on to take possession of these lands and recover the appropriate value.

This passage reveals the risk that a society head exposed himself to. While he would generally earn a greater return than anyone else in the society, this was in large part as compensation for greater risk and cost. Organizing the society took considerable time and expense, and if any member defaulted the society head was had to make the entire society whole. For this reason, the society head posted a significant amount of collateral, 15 mu of land, to backstop the ROSCA.

In this section, I have shown how ROSCAs managed their risk. They had two layers of risk control—one at the membership level, and one at the level of the society head. If a ROSCA member defaulted on his obligations, his guarantors or the society head could foreclose on his property. If this was not enough to make the society whole, the society head himself had to make up the difference. For both society members and the society head, fixed property was the ultimate guarantee of solvency. Receipt of a ROSCA pool was contingent on pledging parcels of land or rooms in buildings as collateral.

These findings are important for two reasons. First, they show how ROSCAs dealt with the problem of potential defaults, and how they maintained such low capital costs. It turns out that *ganqing*, reciprocity, and fraternity were fine things—but they were no substitute for hard assets. Second, these findings prove that ROSCAs were embedded in the larger grassroots factor markets. For a landowner to join a ROSCA, the benefits from joining had to be attractive relative

to other uses of land—such as posting it as collateral for a loan, renting it, selling it in a *dian*, or selling it outright. Indeed, ROSCAs were so tightly integrated that ROSCA assets were fungible with other financial assets in rural society. This is the subject of the next section.

### ROSCAs and the Money Market

ROSCAs were not only a vehicle for accumulating savings, but were also a source of liquidity. The value accumulated in a ROSCA share that had yet to pay out could be monetized either by selling the share or using it to collateralize a loan. This is extremely important. There is a trivial sense in which all savings are “financialized” inasmuch as they constitute accumulated wealth represented in monetary terms. But different forms of savings have different relationships to financial markets. For example, social security is an important source of savings in contemporary America. But workers cannot sell or borrow on social security prior to retirement. This is different from a life insurance policy, which you can usually borrow on well before the policy matures. Thus, savings accounts have differing levels of liquidity. Surprisingly for a pre-industrial form of savings, ROSCAs appear to have been relatively liquid. This has wider implications for the nature of grassroots financial markets. It means that a ROSCA shareholder could swap into more attractive financial assets and vice versa. Thus, risk- and time-adjusted returns in a ROSCA should tend to converge with those in other financial markets. In short, this is extremely powerful evidence to suggest that Chinese financial markets were integrated, and thus effective at allocating credit across different sectors.

The simplest way to monetize a ROSCA share that had not yet matured was to sell it. Just as today it is sometimes possible to sell a savings account or life insurance policy—usually in the form of a surrender—so in Qing China it was possible to sell one’s share in a ROSCA. One such transaction is recorded as Contract 5. It comes from the 17<sup>th</sup> Jiaqing reign year (1812) and shows the sale of a share in a “silver society” to a triad society.

**Contract 5:**<sup>314</sup>

立卖会文约人，杨贵生因为使用不便，今将水西庄李来发三两银会一会，同中言明卖与三合会接纳，卖价银一拾三两正，前后与杨贵生无干，恐口难凭，故立卖约存照

嘉庆十七年八月七日立卖会人杨贵生十  
中人许世纯、李来发

Originating a contract with Yang Guisheng, who is short of funds and inconvenienced, to sell his share in Li Laifa from Shuixi village’s three tael silver society. It is clearly stated that he will sell this to the Triad Society to take ownership of, and the sales price will be 13 taels.

Thenceforth, Yang Guisheng will have absolutely no relationship with this share. Oral testimony will not be relied on, so we are establishing this contract as proof.

1812/8/7, Sales contract established with Yang Guisheng [signed] 十  
Broker Xu Shichun, Li Laifa.

The language is legalistic and follows the same formula used for land sales contracts down to the character order. For example “*yihui*” (一会) takes the place of “*yi duan*” (一段) to signify that the item in question has been described, and “*qianhou yu...wu gan*” (前后与。。。无干) is exactly the kind of verbiage that a final sale contract uses to distinguish itself from a live sale contract. But of course here, the sale is for a share in a “three-tael silver society,” meaning, a ROSCA in which the membership fee was three taels. The ROSCA’s society head was Li Laifa, and either the ROSCA and/or Li Laifa hailed from the Shuixi village.

---

<sup>314</sup> Contracts related to societies, LJMPC, 9.

The buyer of the share jumps out immediately: it is the *Sanhe* society, or “Triad Society” It would be tempting to speculate that Yang Guisheng, the seller, had some connection to the triads but the contract specifically states that he will have absolutely no relationship to the property in the future. Equally possible, is that this triad group was simply looking for a place to park excess cash, and so purchased the share from Yang Guisheng.

Finally, the broker, or *zhongren*, are critical to understanding this contract. One of the brokers is the same Li Laifa who was mentioned earlier as the society head. This indicates that the society head had to sign off on a sale of a society share. This makes economic and social sense. In a ROSCA, the integrity of the entire institution depends on the creditworthiness of each individual shareholder. If Yang Guisheng were to sell his share to a someone who could not afford the membership fee, the society—and ultimately Li Laifa—would be liable it make it whole. It therefore seems likely that the society head had to sign off on the transfer.

Another contract, this one from the Daoguang reign, shows a similar sale. Once again, a member of a ROSCA is selling his share. This time, he appears to be selling it back to the society itself, much like a life insurance surrender.

**Contract 5:**<sup>315</sup> 立写凭字人王步霄今将自己聚盛面会出卖与本会同中言明作卖钱式仟文整，此卖之后，王步霄无干，恐口不凭，立字写证  
同治十二年十月初七日立写卖字人王步霄十  
中人王步汉  
Originating a contract with Wang Buxiao, today selling his own interest in the Jushengmian Society to the Society. It is clearly stated that the consideration shall be 2,000 copper cash. After this sale, Wang Buxiao will have no interest in or relationship to the Society. Oral testimony shall not be relied on, so this contract is being written as proof.  
1873/10/7, Contracted sale with Wang Buxiao [signed]十

---

<sup>315</sup> Contracts related to societies, LJMPC, 27.

This means that Wang Buxiao was a member of the Jushengmian society. He decided to sell his share back to the society at a consideration of 2,000 copper cash, thus terminating his relationship with the society. We have no way of knowing what kind of return, if any, Wang Buxiao received on his initial investment. It is also an open, and interesting, question how the ROSCA's internal accounting dealt with the share purchase. All we can say for certain is that these contracts demonstrate the liquidity of at least some Qing-era ROSCA shares.

ROSCA members in need of cash who did not want to sell their shares had another option: they could use their ROSCA shares as collateral for a loan. This is similar to how a present-day life insurance policy can be used to take out a policy loan.

**Contract 6<sup>316</sup>:** 立借文约人武连温今借

到靳明章名下本钱三千整同众言定每月加式行利恐人失信，内当到焦二保名下摇会半个如有得会之日本利清还，恐后无凭立借约为证。

道光拾叁年二月初三日，立借文约武连温十  
中见人郭德花、郭福俊十

Originating a loan contract with Wu Lianwen, borrowing today from Jin Mingzhang, principal of 3,000 copper cash. It is clearly stated that the loan will accrue a monthly interest of 3%. In the event that the borrower does not meet his obligations, collateral has been pledged consisting of half of Jiao Erbao's Dice Society membership, so that the interest and principal may be repaid when he wins the pool. Oral testimony will not be relied upon, so we are establishing this loan contract as proof.

1833/2/3, Contract Originated with Wu Lianwen [signed] 十  
Brokers Guo Dehua and Guo Fujun [signed] 十

Contract 6 is a loan from Jin Mingzhang, one of the two largest lenders studied in Chapter 1.

Here, he has extended a loan of 3,000 copper cash to Wu Lianwen. But rather than post land as collateral, Wu Lianwen has pledged half of a third party, Jiao Erbao's, share in a dice society.

---

<sup>316</sup> Loans between individuals, LJMPC, 31.

The contract specifies that the maturity date is whenever Jiao Erbao wins the pool, at which time principal and interest will be repaid out of the dice society payout.

Another loan contract, transcribed as Contract 7, also shows a share in a ROSCA pledged as loan collateral.

**Contract 7<sup>317</sup>:** 立借约人郭福海今借到

靳明章名下本钱拾千又同众言定每月一分七厘半行利，恐人失信，内当到王万金名下会一奉，日后得会之日，本利清还，恐口无凭，立借文约为证。

道光十四年四月初二日立借文约人郭福海自书

Originating a contract with Guo Fuhai, borrowing today from Jin Mingzhang principal of 10,000 copper cash. It is clearly stated that the loan will accrue an interest of 1.75% per month. In the event that the borrower does not meet his obligations, he is pledging as collateral Wang Wanjin's share in a ROSCA. When he wins the pool, the principal and interest of the loan will be discharged. Oral testimony will not be relied on so this loan contract is being originated as proof. 1834/4/2, Contract originated with Guo Fuhai [signed] in person.

Here, Jin Mingzhang has extended a more substantial loan, worth 10,000 copper cash, to Guo Fuhai at 1.75% interest per month. As collateral, Guo Fuhai posted a share in a ROSCA. The contract does not specify what kind of ROSCA this is, but only that “Upon receipt of the pool, principal and interest will be repaid in full” (*rihou dehui zhiri, benli qinghuan* 日后得会之日，本利清还).

Such contracts show up later in the Qing as well. For example, Contract 8 is a loan agreement from the Xianfeng Reign.

**Contract 8<sup>318</sup>:** 台借文约人郭德万今借到

靳明章名下本钱五千整，言定每月加贰行利，内当到百子沟村侯德盛会一分得会之日本利交还，恐后无凭，立此借约为证

代还保人郭保来

大清咸丰二年四月初八日立此借约人郭德万十

Originating a loan contract with Guo Dewan, borrowing today from

---

<sup>317</sup> Loans between individuals, LJMPC, 32.

<sup>318</sup> Loans between individuals, LJMPC, 78.

Jin Mingzhang, a principal of 5,000 copper cash. It is clearly stated that the loan will accrue an interest of 2% per month. As collateral, one share in the Hou Desheng Society in Baizigou Village is pledged. The principal and interest of the loan will be repaid upon winning the pool of this society. Oral testimony will not be relied upon, so this contracted is being executed as proof. To be repaid on agency through guarantor Guo Baolai.<sup>319</sup>

In this contract, the same lender Jin Mingzhang has extended a loan of 5,000 copper cash to borrower Guo Dewan. The loan accrued a monthly interest of 2%. Guo Dewan pledged his share in the “Houdesheng” society, located in Baizigou Village. As in the previous contract, the maturity date is whenever Guo Dewan happened to win the pool. Thus, the loan was a way of Guo Dewan monetizing his share in the society prior to actually winning the pool. This is further proof that shares in ROSCAs were “liquid”, in that they could be financialized prior to the ROSCA’s actual payout. In addition, the added detail that the society is from Baizigou Village means that he was not from the same village as Jin Mingzhang. This indicates that ROSCA shares could be hypothecated and sold to other villages, possibly throughout the Skinnerian standard marketing system. Evidence of this in the pool contracts are more common.

Contract 9 shows a similar arrangement. Again, a loan is extended backed by a share in a dice society.

**Contract 9:**<sup>320</sup> 立借约人韩受财今借到  
靳明章名下钱本捌仟文整，同众言明按月壹分式厘得息，内当到原道生名下  
摇会一个，得会之日，本利钱壹并交还，恐后无凭，立借约存据  
咸丰伍年十月廿日立借钱文约人韩受财自书  
中人王开达、韩受明同证  
Originating a loan contract with Han Shoucai, borrowing today from  
Jin Mingzhang, principal of 8,000 copper cash. It is clearly stated that the loan  
will accrue monthly interest of 1.2%. Pledged as collateral is one share of Yuan

---

<sup>319</sup> The guarantor’s name is a little strange, as Guo Baolai taken character for character translates to something like “Guo Guarantor.” This could be a coincidence; like the librarian in Seinfeld named “Mr. Bookman.” But I thought it worth flagging as it may indicate a kind of professional guarantor.

<sup>320</sup> Loans between individuals, LJMP, 90.



Daosheng in a dice society. Upon winning of the pool, the principal and interest will be repaid. Oral testimony will not be relied upon, so we are establishing this loan contract as proof.

1855/10/20, signed in person by borrower Han Shoucai  
Brokers Wang Kaida and Han Shouming jointly witness

This means that the lender Jin Mingzhang extended a loan of 8,000 copper cash to Han Shoucai. Han Shoucai pledged as security a share of in a dice society owned by Yuan Daosheng. There is no maturity date. Rather, whenever the dice share paid out, Han Shoucai was required to repay principal and interest. Note that the interest is not especially high, suggesting that dice society shares were not considered risky assets or low quality collateral.

Contract 5 shows a loan with a specific maturity date. Even this is collateralized with a share in a credit society of some sort.

**Contract 10:**<sup>321</sup> 立借钱文约人郭典忠今借到  
靳明章名下本钱柒仟文，言明每月式分行息，内当到郭福林名下麦会一个，  
拾年六月内交还，倘日本利交还钱主作会，恐后无凭，立借约为证  
中见人郭得瑛书  
咸丰九年十一月廿一日立借约人郭典忠十  
Originating a loan contract with Guo Dianzhong, borrowing today from  
Jin Mingzhang, principal of 7,000 copper cash. It is clearly stated that the loan  
will accrue monthly interest of 2%. Guo Fulin's share in a Wheat Society is  
pledged as collateral. If on that day the principal and interest are not repaid, the  
lender will take position of the society share. Oral testimony will not be relied on,  
so we are establishing this contract as proof.  
Broker Guo Deying notarized  
1859/11/21, Contract Originated with Guo Dianzhong [signed] 十

This contract is somewhat tricky. I am not sure what a “Wheat Society” is. It is most likely a ROSCA in which payments can be made in kind or partially in kind.<sup>322</sup> I have not been able to

---

<sup>321</sup> Loans between individuals, LJMP, 110.

<sup>322</sup> It is also possible that this is simply the name of a normal financial ROSCA, in which case it should be translated as “the Wheat Society” rather than “a wheat society.” I tend to think this is not the case. Having read many of these contracts, it reads to me more like a typology than a name; i.e. *qianhui* refers to copper cash ROSCAs, *yinhui* to silver ROSCAs, *yaohui* to dice

find any reference to grain societies in the secondary literature. Furthermore, the contract seems to be missing a character; taken literally it means “after the interest and principal are repaid, the creditor will take possession of the society share.” It makes no sense to transfer possession of collateral in the event a loan is repaid. The simplest explanation is that it is missing a character, or signifies that the society share can be transferred to discharge the loan in lieu of cash payment.

A similar contract, transcribed as Contract 6, dates from the following year.

**Contract 11:**<sup>323</sup> 立借钱文约人韩义隆今借到  
张殿公名下九文本钱三千文整，同中言明按月式分行息，内当张怀论  
粮食会一个，限至明年七月内本利交还，立约存照  
咸丰拾年十月廿五日立约人韩义隆十  
中见人高太生、京士永书  
Originating a loan contract with Han Yilong, borrowing today from  
Zhang Diangong, principal of 3,000 9-wen grade copper cash. It is clearly  
stated that the loan will accrue a monthly interest of 2%. Zhang Huailun’s  
Grain Society share is posted as collateral. The loan will mature next year  
in the seventh month, during which principal and interest are due. We are  
establishing this contact as proof.  
1860/10/25, Contract originated with Han Yilong [signed] 十  
Brokers Gao Taisheng and Jing Shiyong as notary

This contract is important for a number of reasons. First, it accepts a grain society share as collateral for a loan. In addition, the lender is Zhang Diangong. Thus, we can be more confident that accepting society shares as collateral was not some personality quirk of Jin Minzhang (though I find that exceedingly unlikely in any case). The precise nature of these “grain societies” is tantalizing, but again I can find no more records pertaining to them.

Contract 12 dates from the Tongzhi reign. This shows that loans collateralized with ROSCA shares were originated throughout the Qing, and by multiple lenders.

---

societies, and *bahui* to drawing societies. Thus, the *maihui* sounds like a specific kind of society, rather than a proper name. Nevertheless, this is worth flagging as a point of uncertainty.

<sup>323</sup> Loans between individuals, LJMPC, 116.

**Contract 12**<sup>324</sup>: 立借钱文约人靳殿玺今借到  
任宏有名下九文钱本壹佰千文整，言明每月壹分行息，随便交还，内  
当到王玉玺钱会一个，日后本利钱不到，钱主收会，恐后无凭，立此  
约为据  
同治九年四月初一日立借钱文约人靳殿玺十  
中人王茂荣、宋月星书  
Originating a loan contract with Jin Dianxi, borrowing today from  
Ren Hongyou, principal of 100,000 9-*wen* grade copper cash. It is clearly  
stated that the loan will accrue a monthly interest of 1%, to be repaid at  
any time. Posted as collateral is Wang Yuxi's share in the credit society.  
In the event of default, the creditor will receive the pool. Oral testimony  
will not be relied upon, so we are establishing this contract as proof.  
1870/4/1, Contract established with Jin Dianxi, [signed] 十  
Broker Wang Maorong, Song Yuexing notarized

Contract 12 records a loan extended by Ren Hongyou, to the tune of 100,000 copper cash—a sizable sum—and at a quite reasonable rate of 1% per month. The borrower is Jin Dianxi; one wonders if he is a relation to Jin Mingzhang, the large lender from the Daoguang and Xianfeng reigns, but there is no way to tell. Jin Dianxi has posted collateral of a share in a copper cash society, or “*qianhui* (钱会).” In the event of default, the rights to receive the pool as granted by that share go to the creditor.

To summarize, this section has provided ample material to demonstrate the liquidity of Qing-era ROSCA shares. Specifically, it shows that ROSCA shares could be sold or hypothecated for a loan prior to maturity. The existence of such transactions suggests that ROSCAs were tightly integrated into other grassroots financial markets. The fact that ROSCAs could be sold or used as collateral to access short-term money markets means that ROSCA rates and prices would have been sensitive to rates and prices in other financial markets.

---

<sup>324</sup> Loans between individuals, LJMPC, 159.

## Internal Rate of Return (IRR)

This section quantifies the borrowing costs and savings rates in four historical ROSCAs, two from the Qing and two from the Republican period. That is, it converts irregular streams of payments into a single percentage term. This number is the rate at which the time value of cash flows is zero, or the rate at which the series of payments and receipts should “clear.” It is useful for us, because IRR is a way of normalizing cost of capital for a ROSCA’s irregular cash flows so that they can be compared to interest rates in lending markets.

A number of scholars have attempted similar calculations. Daniel Kulp records interest rates for members of the ROSCA that he studied. I have copied his findings as Image 16.

Image 16: ROSCA Interest Rates from Daniel Kulp

**TABLE XIII**  
**METHOD OF OPERATION OF THE MUTUAL AID CLUB**

Months	I	2	3	4	5	6	7	8	9	10	11	Total Paid Back to Each Member	Interest Saved at 2%-10%	Interest Lost at 2%-10%	Interest Gain or Loss at 2%-10%	Interest Lost on Feast at 2%-10%	Net Gain or Loss
*Amount—dollars	50	45	40	35	30	25	20	15	10	5	0						
Members of Club	Returns to Each Person																
O	O	F	F	F	F	F	F	F	F	F	F	50	10.00- 55.00		+10.00- 55.00	1.00- 5.00	+9.00- 55.00
A	5	5	5	5	5	5	5	5	5	x	5	50	.10- .50	5.50- 27.50	-5.40- 27.00	.20- 1.00	-5.60- 28.00
B	5	5	5	x	5	5	5	5	5	5	5	50	4.90- 24.50	1.00- 5.00	+3.90- 19.50	.80- 4.00	+3.10- 15.50
C	5	5	5	5	5	5	5	5	x	5	5	50	.40- 2.00	4.50- 22.50	-4.10- 20.50	.30- 1.50	-4.40- 22.00
D	5	5	x	5	5	5	5	5	5	5	5	50	6.40- 32.00	.60- 3.00	+5.80- 29.00	.90- 4.50	+4.90- 24.50
E	5	5	5	5	5	5	5	x	5	5	5	50	.90- 4.50	3.60- 18.00	-2.70- 13.50	.40- 2.00	-3.10- 15.50
F	5	x	5	5	5	5	5	5	5	5	5	50	8.10- 40.50	.30- 11.50	+7.80- 39.00	1.00- 5.00	+6.80- 34.00
G	5	5	5	5	5	x	5	5	5	5	5	50	2.50- 12.50	2.10- 10.50	+4.0- 2.00	.60- 3.00	-.20- 1.00
H	5	5	5	5	5	5	5	5	5	5	x	50	0	6.60- 33.00	-6.60- 33.00	0	-6.60- 33.00
I	5	5	5	5	x	5	5	5	5	5	5	50	3.60- 18.00	1.50- 7.50	+2.10- 10.50	.70- 3.50	+1.40- 7.00
J	5	5	5	5	5	5	x	5	5	5	5	50	1.60- 8.00	2.80- 14.00	-1.20- 6.00	.50- 2.50	-1.70- 8.50
Total	50	45	45	45	45	45	45	45	45	45	45						
Number of Feasts	1	2	3	4	5	6	7	8	9	10	11						

\*Amount organizer has available to use from month to month.  
x Feast at which member wins throw and receives \$50 from other members; what precedes is loss of interest; what follows is gain.  
O is "organizer." Letters A, B, etc., represent members. F is feast.

Source: Kulp, 192.

I do not understand Kulp's calculations. What is meant by "interest saved at 2%-10%" is unclear, as are the other columns on the right-hand of the table. I believe he was trying to compare the costs and returns on the ROSCA to the opportunity costs of saving/borrowing at between 2% and 10%, and calculated these in nominal dollar amounts. Even so, how he calculated this is confusing, and I am unable to reverse-engineer it.

Fortunately, the more recent Chinese-language scholarship are clearer about what they are calculating. Bing Changchu writes, "We can use the interest rate on grassroots lending as a benchmark. We can compare what would have happened if the funds invested in the credit society were invested in the lending market. According to scholarly research, Huizhou lending rates were 2% per month."<sup>325</sup> Bing Changchu's methodology is similar to what I believe Kulp was trying to do. Bing compares the interest received after taking the pool with interest received if one had invested all the membership fees in the lending market. This is a clever methodology. It sets the rate of return at 2% and compares the terminal value of a ROSCA with the terminal value of placing the same capital in the lending market. That said, the methodology is problematic. It does not really capture costs of capital; rather, it assumes a constant cost of capital in all of society, and evaluates ROSCAs on that basis. This results in Bing Changchu drawing some strange conclusions. In calculating the "net value" of the ROSCA, he finds that nearly all of the members lose money, such that the ROSCA was systemically destructive of

---

<sup>325</sup> “我们以民间借贷利率作为参照系，假设把投入钱会的资金投入到民间借贷市场，可以对两者的收支情况有一个比较。据学者考证，清代徽州地区的民间借贷利率为月息2%。” In Bing Changchu 宾长初, "Qingdai Huizhou Qianhui de Jiliang Fenxi: Jiyu 'Huizhou Wenshu' Di Er Ji Suo Shou Hui Shu de Kaocha: Jiyu 清代徽州钱会的计量分析——基于《徽州文书》第二辑所收会书的考察 [A Quantitative Analysis of Qing-Era Huizhou Credit Societies: Based on a Study of Society Documents in the Second Volume of Huizhou Documents]," *Zhongguo Shehui Jingjishi Yanjiu* 中国社会经济史研究, no. 4 (2011): 45–54.

value. For this to be true requires that we simultaneously believe two things: 1) rural lending was efficient, value-creating, and based on competitive market dynamics and 2) the same people participating in these markets also regularly participated value-destroying ROSCAs. This strikes me as impossible. To put it differently, using Bing Changchu’s methodology, the more effective a financial institution is at managing risk, the worse it will appear, while the more speculative and risky a financial market institution is, the more “value” it will appear to create. Far more likely is that ROSCAs and lending markets had truly different costs of capital. The question becomes, what were they?

Wang Yukun and Liu Daosheng attempt to calculate ROSCA capital costs in the form of real interest rates. In doing so, they use the same methodology that Fei Xiaotong used, in which, for any given member, average borrowing cost is calculated as:<sup>326</sup>

$$\text{Average Borrowing Cost} = \frac{(\text{Pool Amount} - \text{Total Membership Fees})}{T_1 - T_2} \div \text{Pool Amount}$$

Where  $T_1$  represents the number of meetings prior to winning the pool, and  $T_2$  represents the number of meetings after winning the pool. The average return on savings is calculated in the same way:

$$\text{Average Savings Rate} = \frac{(\text{Total Membership Fees} - \text{Pool Amount})}{T_2 - T_1} \div \text{Pool Amount}$$

These equations are identical; it is just the order of several terms that have been rearranged. I do not know why the authors and Fei Xiaotong thought this was helpful. In any case, the equation

---

<sup>326</sup> Wang Yukun 王玉坤 and Liu Daosheng 刘道胜, “Qingchao Zhi Minguo Shiqi Huizhou Qianhui Lilv Ji Yunzuo Jizhi Kaocha: Jiyu 89 Fen Huizhou Qianhui Wenshu de Kaocha 清朝至民国时期徽州钱会利率及运作机制考述——基于 89 份徽州钱会文书的考察 [On the Interest Rate and Operation Mechanism of ROSCA in Huizhou from the Qing Dynasty to Republic of China: Analysis Base on 89 Folk Documents of Huizhou],” *Anhui Shixue 安徽史学 [Historical Research in Anhui]*, no. 4 (2017).

attempts to get at something like the time value of money by subtracting the number of meetings prior to winning the pool from the number of meetings subsequent to winning the pool.

Nevertheless, it has several problems. First, it does not account for changes in the membership fee before and after winning the pool. This is an enormous problem, because most societies raised the fee after winning. Second, it calculates returns on a per meeting basis. If meetings are held at irregular intervals—or even simply not evenly spaced throughout the year—this number will be almost meaningless when compared to annual or monthly rates. Third, and most important, the way of calculating time value of money is a highly crude, back of the envelope methodology. It does not really normalize rates of return.

Christy Hevener, in an influential Federal Reserve working paper on ROSCAs, combines a Net Present Value (NPV) analysis with an analysis of Internal Rates of Return (IRR).<sup>327</sup> An NPV analysis assumes a cost of capital, and calculates the NPV of a series of cash flows given that rate. The IRR is the rate of return at which a series of cash flows has an NPV of zero. (In other words, an NPV analysis assumes a rate and solves for value; an IRR analysis assumes a value and solves for rate). An NPV analysis is similar to that performed by Bing Changchu [Bing Changchu uses terminal value, which can be converted to NPV at  $(1+r)^t$ ]. For reasons described above, I believe NPV is inappropriate in this context. It would require picking a more or less arbitrary rate as the “true” rate of return for ROSCA members, and measuring the ROSCA performance against that. Indeed, I am not sure that NPV makes any sense outside of information-rich markets (in which we can observe market Beta, risk premiums, and/or some other objective measure of risk). Of course, IRR suffers its own drawbacks. As Hevener notes, it

---

<sup>327</sup> Christy Hevener, “Alternative Financial Vehicles: Rotating Savings and Credit Associations (ROSCAs),” Federal Reserve Bank of Philadelphia Discussion Paper, November 2006.

can only calculate ex-post returns, rather than expected returns. That said, I am not sure that this is unique to IRR. Indeed, isn't any empirical study, including NPV, by definition *ex-post*? A more serious drawback is that IRR calculations are non-linear; i.e., multiple IRR values can solve for the same set of cash flows.<sup>328</sup> In an institution whose cash flows are as irregular as a ROSCA's, IRR becomes extremely sensitive to slight changes in assumptions and is sometimes not calculable with Microsoft Excel (or returns nonsense). Nevertheless, I see it as the best way to convert ROSCA payments into interest rates.

In this section, I calculate the IRRs for members in four different ROSCAs. Some of these calculations are only partial. This is due to incomplete information, as the Republican-era account books terminate prior to the end of the ROSCA. That is, either the account book itself is incomplete, or the ROSCA disbanded before all the members had a chance to win the pool. These incomplete account books date from the Sino-Japanese War, so either is possible.

The earliest ROSCA that I can calculate an IRR for is the one referenced above in Contract 3, for a ROSCA founded in 1768.<sup>329</sup> Though we cannot know what befell Yang Qing—who defaulted in his payments to the society—we can tease out enough information to recreate the society's entire payment schedule. The contract states that Yang Qing owes money to 11 members who have already won the pool and four members who have yet to win. This indicates that there are 16 members total, including the society head (15 members who Yang Qing owes money to, plus Yang Qing himself). Moreover, we know that Yang Qing must have won the 12<sup>th</sup> pool, since prior to his winning there were 11 members who had already won and four members who had not. Furthermore, he owes each member who had already won 3 taels. This must be the

---

<sup>328</sup> This problem is exacerbated by the limited computing power of Microsoft Excel.

<sup>329</sup> Loans related to societies, LJMPC, 3.



“small fee” or the initial fee, since he owes it to members who won prior to himself. The fact that he only owes 2.4 taels to the first winner, Dai Caiwen, is a bit confusing. But this simply indicates that the inaugural meeting required 0.6 taels in cash, while the rest could be paid out over time (similar to other provisions we have seen). The contract then states that his total debts to the society come to 45.6 taels. Since he owes three taels apiece to the members who have already won, or 33 taels, he must owe 12.6 taels to the 4 members who have yet to win. This amounts to 3.15 taels per member who have yet to win the pool. This means that the “interest” was 0.15 taels making for a “large fee” of 3.15 taels. With such regular payment amounts, the ROSCA was not a drawing society. Most likely it was a dice society. In any event, this information is sufficient to reconstruct the ROSCA’s cash flow schedule, which I have entered into Table 8.

*Table 8. ROSCA payment schedule, 1768*

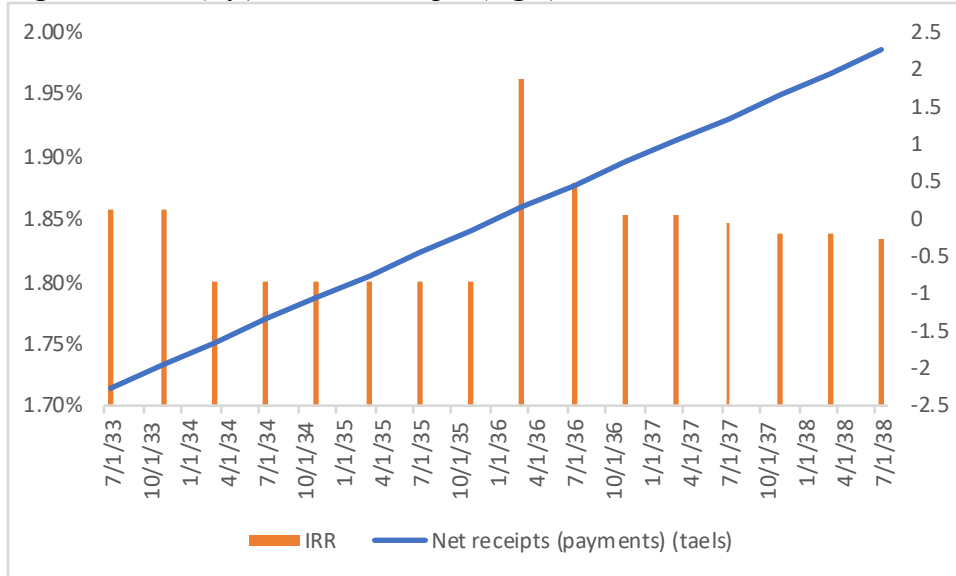
Date (in Qianlong reign)	7/16/33	11/16/33	3/16/34	7/16/34	11/16/34	3/16/35	7/16/35	11/16/35	3/16/36	7/16/36	11/16/36	3/16/37	7/16/37	11/16/37	3/16/38	7/16/38
Meeting #	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Meeting winner																
1	45	-3.15	-3.15	-3.15	-3.15	-3.15	-3.15	-3.15	-3.15	-3.15	-3.15	-3.15	-3.15	-3.15	-3.15	-3.15
2	-3	45.15	-3.15	-3.15	-3.15	-3.15	-3.15	-3.15	-3.15	-3.15	-3.15	-3.15	-3.15	-3.15	-3.15	-3.15
3	-3	-3	45.3	-3.15	-3.15	-3.15	-3.15	-3.15	-3.15	-3.15	-3.15	-3.15	-3.15	-3.15	-3.15	-3.15
4	-3	-3	-3	45.45	-3.15	-3.15	-3.15	-3.15	-3.15	-3.15	-3.15	-3.15	-3.15	-3.15	-3.15	-3.15
5	-3	-3	-3	-3	45.6	-3.15	-3.15	-3.15	-3.15	-3.15	-3.15	-3.15	-3.15	-3.15	-3.15	-3.15
6	-3	-3	-3	-3	-3	45.75	-3.15	-3.15	-3.15	-3.15	-3.15	-3.15	-3.15	-3.15	-3.15	-3.15
7	-3	-3	-3	-3	-3	-3	45.9	-3.15	-3.15	-3.15	-3.15	-3.15	-3.15	-3.15	-3.15	-3.15
8	-3	-3	-3	-3	-3	-3	-3	46.05	-3.15	-3.15	-3.15	-3.15	-3.15	-3.15	-3.15	-3.15
9	-3	-3	-3	-3	-3	-3	-3	-3	46.2	-3.15	-3.15	-3.15	-3.15	-3.15	-3.15	-3.15
10	-3	-3	-3	-3	-3	-3	-3	-3	-3	46.35	-3.15	-3.15	-3.15	-3.15	-3.15	-3.15
11	-3	-3	-3	-3	-3	-3	-3	-3	-3	-3	46.5	-3.15	-3.15	-3.15	-3.15	-3.15
Yang Qing, 12	-3	-3	-3	-3	-3	-3	-3	-3	-3	-3	-3	46.65	-3.15	-3.15	-3.15	-3.15
13	-3	-3	-3	-3	-3	-3	-3	-3	-3	-3	-3	-3	46.8	-3.15	-3.15	-3.15
14	-3	-3	-3	-3	-3	-3	-3	-3	-3	-3	-3	-3	-3	46.95	-3.15	-3.15
15	-3	-3	-3	-3	-3	-3	-3	-3	-3	-3	-3	-3	-3	-3	47.1	-3.15
16	-3	-3	-3	-3	-3	-3	-3	-3	-3	-3	-3	-3	-3	-3	-3	47.25

Source: Loans related to societies, LJMPC, 3.

The data in Table 8 is sufficient to calculate the IRR for each member. The dice society seems to result in nearly constant IRRs across the entire membership group. The IRRs along with net receipts are displayed in Figure 5. Dates that correspond to negative net receipts mean that the winner on that date was a net borrower; dates that correspond to positive net receipts mean that the winner on that date was a net saver. IRRs were roughly constant at 1.8% annually, peaking at

2%. They are thus in line with *changnian* rates in previous chapters. This means that those involved in this society were very confident in each other.

Figure 5. IRR (left) vs. Net Receipts (right)

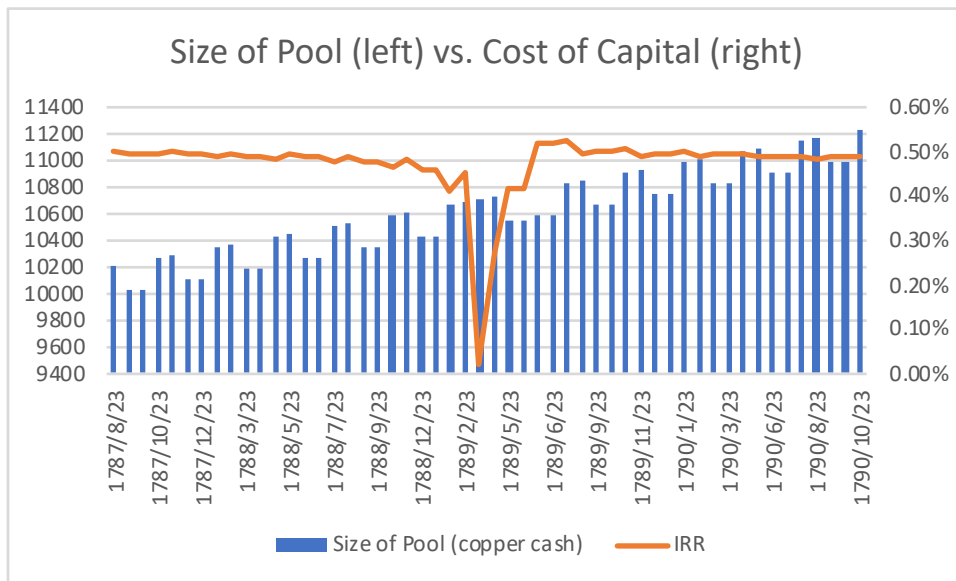


Moreover, since *ex-ante* no one could know if they would be net borrowers or savers, there could be no question of members taking advantage of other members’ low interest rates. Rather, in the world of scarce capital that most pre-industrial societies face, a highly variable opportunity to borrow at low rates would have been an *ex-ante* gain for all members.

The next society that I have been able to calculate the internal rate of return (IRR) for was another Qianlong-era Dice Society. This is the same “Eastern Society” whose account book I analyzed above. This Society included 52 members, inclusive of the society head. The membership fee was 200 taels, with an interest of 20 taels. At the inauguration, each member paid the small fee to the society head, who continued to contribute the small fee for the duration of the society. Other members paid the membership fee plus “interest” of 20 taels after winning the pool. On certain months, fees and interest doubled, and the pool was shared between two members. Since there were 52 members, it is impossible to display the schedule of payments.

Instead, I have graphically depicted the pool size along with the monthly IRR for each member, in Figure 6. The rates were on the low end of lending rates and quite close to normal deposit rates, which makes sense since the purpose of such societies was to save on frictional costs of financial intermediaries.<sup>330</sup> Moreover, old society practices such as rolling dice and occasionally having two winners have yielded similar results to the previous society. The timing of the cash flows produces a virtually uniform internal rate of return of 0.5% per month for all but two members.

Figure 6. Dice Society IRR by pool size, 1768



Source: “Qianlong 52 Eastern Society, Society Accounts,” LJMPC, 1-14. See appendix for detailed cash flow schedule.

<sup>330</sup> Wang Yukun 王玉坤 and Liu Daosheng 刘道胜, “Qingchao Zhi Minguo Shiqi Huizhou Qianhui Lilv Ji Yunzuo Jizhi Kaocha: Jiyu 89 Fen Huizhou Qianhui Wenshu de Kaocha 清朝至民国时期徽州钱会利率及运作机制考述——基于 89 份徽州钱会文书的考察 [On the Interest Rate and Operation Mechanism of ROSCA in Huizhou from the Qing Dynasty to Republic of China: Analysis Base on 89 Folk Documents of Huizhou],” *Anhui Shixue 安徽史学 [Historical Research in Anhui]*, no. 4 (2017).

The dip in the cost of capital trend represents two players near the middle of the society, whose IRR is near 0%.<sup>331</sup>

Another society with an IRR that I have been able to calculate is the Juyi Society, studied in the previous section. The Juyi Society was founded in 1933 with 29 members. It met twice a year, in March and September, and should have run until 1948. However, the account book cuts off after September of 1937, roughly one month before the Japanese completed the occupation of Shanxi Province (Japanese incursions began in August, ramped up in September, and Taiyuan fell in October despite fierce resistance). In a dice society—where the outcomes are preordained and only the permutations are undecided—this would not matter. But the Juyi Society was a bidding society; therefore, I can only forecast the cash flows of the nine members who had already won the pool as at September of 1937. Their IRRs, pool size, and projected net receipts are shown in Table 9.

*Table 9: Juyi Society IRR Calculation*

Member	IRR	Pool	Net Receipts
Dong Shuangxi	14%	77.9	-56.56
Wu Shichang	10%	91.28	-38.38
Zhang Changwang	11%	91.4	-35.94
Duan Jun'er	18%	68	-69.46
Zhi Huaixian	21%	54.04	-92.9
Yang Xihuan	8%	93.8	-37.96
Wang Hanbao	20%	60.75	-79.88
Duan Heshui	20%	54.32	-95.68
Yang Zhaohai	20%	58.62	-85.14

---

<sup>331</sup> Once again, note that this society's IRR is monthly, while Chart 1 IRR is annual. It would be ideal to maintain constant time periods. But since the second society met monthly and the first did not, it is much easier to calculate them this way. IRR is a tricky measure, since there can be multiple IRRs, or no IRR that is calculable with Microsoft Excel. When I try to calculate IRR for the second society on an annual basis, I get nonsense terms.

Source: 1926 Juyi Society, LJMP. C.

All net receipts are negative, because only net borrowers had won the pool by the time the account book terminates. The IRR calculation shows quite reasonable borrowing costs, ranging from 8% to 21% annualized, and average at 16% annualized.

Another bidding society, the Renyi Society (*Renyihui* 仁义会), was also founded in 1933 and poses similar challenges to the Juyi Society accounts. It had a total of 17 members, and cuts off after October of 1940. At that point, only eight members had taken the pool. Thus, IRRs can only be calculated for half of the society's members. Even more troublesome, this society has the added difficulty of meeting irregularly. For instance, it met once at the end of 1933, twice in 1934, and then once a year at irregular intervals. In general, meetings seemed to have been about ten months apart. Thus, in my forecasts I assume ten month intervals between meetings. The schedule of member payments, along with projected payments, are shown clearly in Table 10.

Table 10: *Renyi Society Payment Schedule*

	Actual	Actual	Actual	Actual	Actual	Actual	Actual	Actual	Actual	Actual	Actual	Forecast	Forecast	Forecast	Forecast	Forecast	Forecast	Forecast
Meeting	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	
Date	11/16/33	1/29/34	9/29/34	6/18/35	3/18/36	1/13/37	11/8/38	11/9/39	10/29/40	8/29/41	6/29/42	4/29/43	2/29/44	12/29/44	10/29/45	8/29/46	6/29/47	
Bid		2.4	2.55	2.5	2.4	1.93	1.6	1.2	0.8									
Pool	128	45.4	51.25	54	56.2	54.16	54.6	55	56.2									
Member																		
Society Head Wei Cunwang	128	-7	-7	-7	-7	-7	-7	-7	-7	-7	-7	-7	-7	-7	-7	-7	-7	
Yan Xianying, Yan Ernü	-8	43	-6	-6	-6	-6	-6	-6	-6	-6	-6	-6	-6	-6	-6	-6	-6	
Wei Yincun (half) and Wei Jingye with Yan Qinqing (half)	-8	-2.4	48.7	-6	-6	-6	-6	-6	-6	-6	-6	-6	-6	-6	-6	-6	-6	
Wei Yincal	-8	-2.4	-2.55	51.5	-6	-6	-6	-6	-6	-6	-6	-6	-6	-6	-6	-6	-6	
Yan Qingshu, and Wang Junf	-8	-2.4	-2.55	-2.5	53.8	-6	-6	-6	-6	-6	-6	-6	-6	-6	-6	-6	-6	
Xie Tianbao	-8	-2.4	-2.55	-2.5	-2.4	52.23	-6	-6	-6	-6	-6	-6	-6	-6	-6	-6	-6	
Wei Fengxin and Wei Yinlan	-8	-2.4	-2.55	-2.5	-2.4	-1.93	53	-6	-6	-6	-6	-6	-6	-6	-6	-6	-6	
Wei Shuangyi	-8	-2.4	-2.55	-2.5	-2.4	-1.93	-1.6	53.8	-6	-6	-6	-6	-6	-6	-6	-6	-6	
Wang Junping	-8	-2.4	-2.55	-2.5	-2.4	-1.93	-1.6	-1.2	55.4									
Wei Kuiyin	-8	-2.4	-2.55	-2.5	-2.4	-1.93	-1.6	-1.2	-0.8									
Wu Liuzi	-8	-2.4	-2.55	-2.5	-2.4	-1.93	-1.6	-1.2	-0.8									
Chen Yinlan	-8	-2.4	-2.55	-2.5	-2.4	-1.93	-1.6	-1.2	-0.8									
Wang Xianye	-8	-2.4	-2.55	-2.5	-2.4	-1.93	-1.6	-1.2	-0.8									
Wei Yinzhu	-8	-2.4	-2.55	-2.5	-2.4	-1.93	-1.6	-1.2	-0.8									
Wei Shuang'e	-8	-2.4	-2.55	-2.5	-2.4	-1.93	-1.6	-1.2	-0.8									
Yan Liuhuai	-8	-2.4	-2.55	-2.5	-2.4	-1.93	-1.6	-1.2	-0.8									
Xue Guixiao and Yan Gengsh	-8	-2.4	-2.55	-2.5	-2.4	-1.93	-1.6	-1.2	-0.8									

The IRRs again suggest borrowing costs that were on the low side of normal for rural China.

Annualized IRRs range from 13% to 21%, and average 17%.

To conclude this section, I have been able to calculate the IRR for members in four different credit societies. IRRs ranged from 1.88% per year, to 25% per year. Broadly speaking,

they trend toward the lower side of rates seen in other financial markets in Chapters 1 and 2. In other words, as in contemporary Wenzhou, ROSCAs offered attractive borrowing costs and savings rates by conserving on frictional costs. To do this, it was important they be low risk. This explains the strict rules on guarantors and collateral, as well as the fact that ROSCAs were invitation only. Indeed, relatively low costs of capital relative to lending markets is exactly what we would expect for financial institutions specifically designed to pool assets and risk.

### Old Institutions in the New China

After 1949, there was in principle little role left for private finance. All money was supposed to be deposited at registered banks, or ideally at the People's Bank of China. In 1951, private financial institutions were forced into public-private partnerships (*gongsi heying* 公私合营), effectively nationalizing the financial sector.<sup>332</sup> By 1956, the People's Bank of China had formally absorbed legacy private institutions, and private finance ceased to exist.

But ROSCAs continued to operate. In 1954, the Wenzhou Conference of Light Industry Cadres reported that one of its errors was relaxing “thought leadership” (*sixiang lingdao* 思想领导) in its cooperatives. As a result, “spontaneous capitalist tendencies within the cooperatives were very serious.”<sup>333</sup> The report on the conference went on to list some examples of capitalist

---

<sup>332</sup> Hu Pingxi and Shanghai Gazetteer Office, eds., “Zhongguo Renmin Yinhang Shanghai Fenheng 中国人民银行上海市分行 [People's Bank of China, Shanghai Branch],” in *Shanghai Finance Gazetteer 上海金融志* (Shanghai: Shanghai China Academy of Social Sciences Press, 2007), <http://www.shtong.gov.cn/Newsite/node2/node2245/node75491/node75498/node75567/node75593/userobject1ai92389.html>.

<sup>333</sup> Also see Matthew Lowenstein, “Return to the Cage: Monetary Policy in China's First Five-Year Plan,” *Twentieth-Century China* 44, no. 1 (January 1, 2019): 53–74 which draws on the

behavior. It stated, “In some cooperatives, there is still exploitative behavior. Some people want to save banknotes with the hope of opening a shop in the future. Half of all cooperative members have joined a dice society.”<sup>334</sup> This is remarkable. In the midst of the Socialist Transformation, half of Wenzhou light industry cooperative members participated in dice societies! This suggests ROSCAs were ubiquitous, at least in Southeast coastal areas.

ROSCAs even persisted into the Great Leap Forward. The Wenzhou 1958 Financial Work Program mentioned ROSCAs in its list of measures necessary to meet its quotas. One of these measures was to “eradicate the remnants of usury.” This included, “posting large character posters (*dazibao* 大字报) and engaging in dialectics in any work unit with serious dice society or bidding society activity.”<sup>335</sup> The sources do not state the purpose of these societies, or answer the tantalizing question of why someone would want to accumulate financial capital in the midst of the Great Leap Forward. But they show that ROSCAs survived the first decade of revolution.

With the advent of Reform and Opening, and the general relaxation of state controls over the economy, ROSCAs began to operate more widely. A 1986 survey from the People’s Bank of China linked credit societies directly to Reform and Opening, writing, “Since the Third Plenary Session of the 11<sup>th</sup> Central Committee of the Communist Party of China and the new policies to open up towards the rest of the world and reinvigorate the economy, this form of popular fundraising has reappeared.” According to the report, dice societies had sprung up all over Yueqing, Zhejiang (now a sub-municipality of Wenzhou), as a form of direct and indirect

---

Wenzhou Party Committee documents to explore the relationship between the planned economy and “spontaneous capitalist tendencies.”

<sup>334</sup> WPC Forwarded Report on Second Comprehensive Handicrafts Industry Cadre Conference,” August 28, 1954, WPC, vol. 6, 614.

<sup>335</sup> “1958 Wenzhou Finance Work Plan,” February 6, 1958, WPC, vol. 10, 120.

financing. The survey found that the funding costs of dice societies was equivalent to “high interest lending,” but that they were attractive to borrowers owing to the long duration of the loans. The report implies that most of the funds went into light manufacturing.<sup>336</sup> This was confirmed in a study conducted between 1994 and 1997, which found credit societies to be used by microentrepreneurs. Interestingly, it also found that society participants were disproportionately women.<sup>337</sup> A more recent study found that well into the 2000s Wenzhou credit societies had thousands of members and over 100 mln RMB in capital<sup>338</sup> (roughly \$12mln in 2000). There are no good estimates of total Wenzhou gray market credit at this time, but by 2010, Wenzhou gray market debt reached an estimated 800 bln RMB.<sup>339</sup> This suggests that ROSCA were a small fraction of the total private-lending sector. That said, estimates of total gray market debt extrapolate from surveys that are assumed to be a drastic underestimate, so we would have to inflate estimates of ROSCA credit in the same way to compare it to the rest of the

---

<sup>336</sup> Yang Zhaonan 杨照南 and Wang Yanqing 王延庆, “Minjian Xinyong de Ling Yi Zhong Xingshi: Yaohui 民间信用的另一种形式—摇会 [Another Form of Minjian Credit: Dice Societies],” *Jinrong Yanjiu 金融研究 [Journal of Financial Research]*, no. 1 (1986).

<sup>337</sup> Tsai, Kellee S. “Banquet Banking: Gender and Rotating Savings and Credit Associations in South China.” *The China Quarterly*, no. 161 (2000): 142-70.

<sup>338</sup> Rongzhu Ke and Min Ye, “The Practice of Rotating Saving and Credit Associations and Interest Rate Liberalization—A Case Study of Wenzhou,” *The Chinese Economy* 52, no. 2 (March 4, 2019): 155–70. It should be said that local governments accused credit societies of degenerating into ponzi-like schemes. See Lin Ping 林平, “Wenzhou Nongcun Hehui Huodong de Pouxu 温州农村合会活动的剖析 [An Analysis of Credit Society Activity in Wenzhou Rural],” *Zhejiang Academic Journal (浙江学刊)*, Research Office of Zhejiang Provincial Committee (浙江省委政策研究室), no. 6 (1987).

<sup>339</sup> Zhou Yongnan 周咏南, “Zhejiangsheng Daibiao Weiyuan Jianyi: Dushubingju Guifan Minjian Jiedai 浙江省代表委员建议——堵疏并举 规范民间借 [Zhejiang Provincial Representative Committee Recommendations: Build Dykes and Dredge Rivers, Regulate the Private Lending Market],” *Zhejiang Ribao 浙江日报*, March 11, 2012, [http://www.gov.cn/2012lh/content\\_2089036.htm](http://www.gov.cn/2012lh/content_2089036.htm).



market. My intuition is that ROSCAs would be a subsidiary but significant channel of Wenzhou gray market debt.<sup>340</sup>

ROSCAs continue to be common along China's southeast coast. In Wenzhou, ROSCAs are everywhere. I doubt whether one family in ten does not have at least one member who participates in a ROSCA. Though dice societies were common in the early years of Reform and Opening, the advent of digital banking has led to their replacement by other forms of ROSCA, namely, "rotating societies" (*lunhui* 轮会) and "bidding societies" (标会). In a rotating society, there is no element of chance. Members simply take turns receiving the pool in an order fixed ahead of time. Members who have yet to receive the pool pay the membership fee at each meeting, while those who have already received pay the fee plus interest. Note that this means a rotating society and a dice society have the same payment schedule. The only difference is in the permutation of winners, which is random in a dice society and fixed in a rotating society. Image 17 shows a schedule of all the winners of a contemporary rotating society.

---

<sup>340</sup> The article singles out Jamaica and Flushing as hosting such ROSCAs. Xiaoyu, Wu, and Teresa D. Hutchins, "Immigrants Financing Immigrants: A Case Study of a Chinese-American Rotating Savings and Credit Association (ROSCAs) in Queens.," *New York Economic Review* 46 (2015): 21–34.

Image 17: Friendship Mutual Assistance Society payment schedule

**友谊互助会单**

手机: [REDACTED]

序号	姓名	收会日期(国历)	得会金额
会首	[REDACTED]	2019年3月16日	100000元
1	[REDACTED]	2019年6月16日	100000元
2	[REDACTED]	2019年9月16日	101500元
3	[REDACTED]	2019年12月16日	103000元
4	[REDACTED]	2020年3月16日	104500元
5	[REDACTED]	2020年6月16日	106000元
6	[REDACTED]	2020年9月16日	107500元
7	[REDACTED]	2020年12月16日	109000元
8	[REDACTED]	2021年3月16日	110500元
9	[REDACTED]	2021年6月16日	112000元
10	[REDACTED]	2021年9月16日	113500元

**说明:** 本会以排会的方式得会, 国历2019年3月16日至2021年9月16日止, 每三个月交会一次10000元(得会后加利息1500元)。希望大家自觉遵守, 按时交纳会金。**谢谢合作!**

支付宝: [REDACTED]  
 农业银行: [REDACTED]  
 工商银行: [REDACTED]  
 农村信用社: [REDACTED]

注: 本地会友可以选择其它方式交纳会金, 银行转账的会友请仔细核对卡号和姓名。

Source: Interview, Friendship Mutual Assistance Society, Mr. Sun.

The schedule comes from a ROSCA called the *Youyi Huzhu Hui* (友谊互助会), or “Friendship Mutual Assistance Society.” The original pool, collected first by the society head and also by the first winner, is 100,000 RMB. This means that the Society Head does not pay interest. The society fee is 10,000 RMB, with interest of 1,500 RMB due by previous winners. This society began on 3/16/2019, and is schedule to end on 9/16/2021. Payments are due on the

16<sup>th</sup> of March, June, September, and December. There are a total of 11 members, including the society head.

The Friendship Mutual Assistance Society appears to run multiple societies, much like some of the examples seen from the Qing dynasty. For instance, Image 18 depicts a winners schedule from another Friendship Mutual Assistance Society rotating society.

*Image 18 Friendship Mutual Assistance Society payment schedule II*

**友谊互助会单**

手机: [REDACTED]

序号	姓名	收会日期(国历)	得会金额
会首	[REDACTED]	2017年12月8日	150000元
1	[REDACTED]	2018年3月8日	150000元
2	[REDACTED]	2018年6月8日	152300元
3	[REDACTED]	2018年9月8日	154600元
4	[REDACTED]	2018年12月8日	156900元
5	[REDACTED]	2019年3月8日	159200元
6	[REDACTED]	2019年6月8日	161500元
7	[REDACTED]	2019年9月8日	163800元
8	[REDACTED]	2019年12月8日	166100元
9	[REDACTED]	2020年3月8日	168400元
10	[REDACTED]	2020年6月8日	170700元
11	[REDACTED]	2020年9月8日	173000元
12	[REDACTED]	2020年12月8日	175300元
13	[REDACTED]	2021年3月8日	177600元
14	[REDACTED]	2021年6月8日	179900元
15	[REDACTED]	2021年9月8日	182200元

**说明:** 本会以排会的方式得会, 国历2017年12月8日至2021年9月8日止, 每三个月交会一次10000元(得会后加利息2300元)。望大家自觉遵守, 按时交纳会金。 **谢谢合作!**

支付宝: [REDACTED]  
 农业银行: [REDACTED]  
 工商银行: [REDACTED]  
 农村信用社: [REDACTED]

Source: Interview, Friendship Mutual Assistance Society, Mr. Sun.

This society has 16 members, including the society head. This is a higher stakes society. The original membership fee is the same 10,000, but since there are more members—and therefore

more capital involved—the interest has been raised to 2,300 RMB for winners of the pool. Table 11 shows a payment schedule and IRR calculation for the smaller society.

*Table 11: Friendship Mutual Assistance Association Payment and IRR (Units in RMB)*

Member	3/16/19	6/16/19	9/16/19	12/16/19	3/16/20	6/16/20	9/16/20	12/16/20	3/16/21	6/16/21	9/16/21	Net receipts	IRR
会首	会首	1	2	3	4	5	6	7	8	9	10		
会首	100,000	-10,000	-10,000	-10,000	-10,000	-10,000	-10,000	-10,000	-10,000	-10,000	-10,000	0	0%
1	-10,000	100,000	-11,500	-11,500	-11,500	-11,500	-11,500	-11,500	-11,500	-11,500	-11,500	-13,500	12%
2	-10,000	-10,000	101,500	-11,500	-11,500	-11,500	-11,500	-11,500	-11,500	-11,500	-11,500	-10,500	13%
3	-10,000	-10,000	-10,000	103,000	-11,500	-11,500	-11,500	-11,500	-11,500	-11,500	-11,500	-7,500	14%
4	-10,000	-10,000	-10,000	-10,000	104,500	-11,500	-11,500	-11,500	-11,500	-11,500	-11,500	-4,500	17%
5	-10,000	-10,000	-10,000	-10,000	-10,000	106,000	-11,500	-11,500	-11,500	-11,500	-11,500	-1,500	10%
6	-10,000	-10,000	-10,000	-10,000	-10,000	-10,000	107,500	-11,500	-11,500	-11,500	-11,500	1,500	6%
7	-10,000	-10,000	-10,000	-10,000	-10,000	-10,000	-10,000	109,000	-11,500	-11,500	-11,500	4,500	8%
8	-10,000	-10,000	-10,000	-10,000	-10,000	-10,000	-10,000	-10,000	110,500	-11,500	-11,500	7,500	9%
9	-10,000	-10,000	-10,000	-10,000	-10,000	-10,000	-10,000	-10,000	-10,000	112,000	-11,500	10,500	9%
10	-10,000	-10,000	-10,000	-10,000	-10,000	-10,000	-10,000	-10,000	-10,000	-10,000	113,500	13,500	9%

Source: Interview, Friendship Mutual Assistance Society, Mr. Sun.

Note that for the society head, there is no true IRR; they get a “free loan” in return for organizing the society. For most participants, borrowing rates are around 12% to 17% annualized, with saving rates at around 9%. This is quite attractive in the Chinese economy, where it is difficult for private entities to get loans. At the same time, a policy of financial repression keeps returns on savings low.<sup>341</sup> Thus, ROSCAs present one way for borrowers and savers to seek it more attractive rates than in the formal banking system.

I have also seen a schedule of a present-day bidding society. The bidding society is similar to the bidding societies pre-1949, with a slight difference. Instead of bidding on the society fee, members bid on interest. Those who have yet to win pay in the society fee. Those who have already won, pay in the original fee plus the winning interest bid.<sup>342</sup>

<sup>341</sup> On China’s post-Reform and Opening financial repression see Michael Pettis, *Avoiding the Fall: China’s Economic Restructuring* (Washington, D.C: Carnegie Endowment for International Peace, 2013); also see Michael Pettis, “Monetary Policy Under Financial Repression,” Carnegie Endowment for International Peace, December 20, 2013, <https://carnegieendowment.org/2013/12/20/monetary-policy-under-financial-repression-pub-54008>.

<sup>342</sup> Huang Rui Brother Interview, 5/4/2020.

Credit societies were an integral part of the rural financial system, from the imperial period down to reform and opening. Scholars have made the case before that China's post-reform and opening success has its roots in the pre-1949 economy.<sup>343</sup> This argument is usually made in the abstract, by inferring a causal relationship between late Qing and Republican entrepreneurialism to post-1979 business success.<sup>344</sup> ROSCAs are a rare, tangible example of long-durée institutional continuity. Here was a traditional, grass-roots form of financial organization that not only persisted, but played a key role in jump-starting the Zhejiang/Fujian private economy.

More importantly, the post-Reform and Opening operations of ROSCAs tell us much about the nature of ROSCAs in the Qing and Republic. Of course it is possible that the very same dice and bidding societies that have proved so capable of mobilizing financial capital in the Deng-era were used for entirely different purposes prior to 1949; in short, that the persistence of ROSCAs is a coincidence. It is also conceivable that, somewhere, there is a bank where people make deposits and take out loans as part of a communal ritual, without regard to economic calculus; but this is unlikely to be the case with any given bank. Similarly, the fact that

---

<sup>343</sup> Loren Brandt, Debin Ma, and Thomas G. Rawski, "From Divergence to Convergence: Reevaluating the History behind China's Economic Boom," *Journal of Economic Literature* 52, no. 1 (March 2014): 45–123.

<sup>344</sup> For a splendid example of Qing-era entrepreneurialism, see Debin Ma, "Between Cottage and Factory: The Evolution of Chinese and Japanese Silk-Reeling Industries in the Latter Half of the Nineteenth Century," *Journal of the Asia Pacific Economy* 10 (January 1, 2005): 195–213. Though he does not make this connection explicit, a similar spirit can be found in Sherman Cochran's seminal studies of early Chinese business. See Sherman Cochran, *Encountering Chinese Networks: Western, Japanese, and Chinese Corporations in China, 1880-1937* (Berkeley: University of California Press, 2000); Sherman Cochran, *Chinese Medicine Men: Consumer Culture in China and Southeast Asia* (Cambridge, Mass: Harvard University Press, 2006).

southeastern Chinese used ROSCAs to fund Reform-era private businesses and accumulate savings is suggestive. It is yet another piece of evidence in favor of the market-oriented nature of Qing and Republican ROSCAs.

## Conclusion

In conclusion, this chapter has made a number of important contributions. First, it provides a more granular explanation of what a Chinese credit society actually did. That is, rather than simply classify a society in terms of its purpose, I detail the processes by which a society was formed and operated. This has allowed me to make a number of discoveries. First, I show how dice and bidding were integral to the society's value as a financial intermediary. Dice equalized the *ex-ante* return amongst members, while bidding is itself a market mechanism for distributing credit and savings. Second, I show how Chinese ROSCAs were linked to property markets. The ultimate guarantee of ROSCA solvency was fixed property consisting of either land or buildings, and which collateralized the overwhelming majority of ROSCA pools. This means that ROSCAs had to compete with other factor markets, and were thus integrated into the larger capital market. Third, I show how ROSCAs were linked to money markets. ROSCA shares could be sold for cash or hypothecated for loans, thus integrating them into the lending market. Finally, the continued use of ROSCAs down to the present-day is important. ROSCAs are sometimes thought of as charity organizations, disconnected from market calculus. But here is evidence that ROSCAs were used to mobilize capital for one of the most entrepreneurial communities in the entire world: post-Reform and Opening Wenzhouese. Ultimately, these findings have wider significance for our understanding of Chinese social history. They show that, for at least much of

the country, financial capital in Qing-era China was allocated through a market process, down to the very grassroots of rural society.

## Chapter Four: The Biaoqi system: Settlements Fairs and High Finance in Late Imperial China

On the sixth day of the sixth month of the Renchen year,<sup>345</sup> Wu Weixian sat down to write a letter to his father. It had been a trying year. His father was away on business, stationed in Zhangjiakou near the Mongolian frontier. As a filial son, Wu “kneelingly” related the state of affairs in their native Qi County. Unfortunately, he had not yet found a suitable husband for his sister, and their neighbor Wang Mingguai was pressing the Wu family to repay a loan. Even worse, a drought in central Shanxi had devastated that year’s wheat crop. Drought was followed by torrential rains, which brought flooding to Yuci, Wenshui, and Xugou counties. Enough time remained to plant a bit of grain, but people were talking fearfully about a “half famine.” As such, grain prices were high, and held no possibility of falling until at least after the year’s meager harvest. Before closing his letter, Wu Weixian informed his father that “Qi County opened its summer *biao changnian* [夏标长年银利] interest rate on silver at 64 taels, the autumn and winter monthly rates at 0.54%, and next spring’s monthly rate at 5.5%. The *manjia* autumn biao [满加秋标利] rate opened at 17 taels, before settling at 2 taels.”<sup>346</sup> Clearly, Wu Weixian was relaying prices in Qi County financial markets. But what did these prices mean? What was the “biao”? And why would his father, away in Zhangjiakou, care so much about it?

This chapter examines the *biaoqi* (标期) settlement system. The *biaoqi* were enormous fairs at which merchants and financiers settled obligations, engaged in wholesale commerce, and

---

<sup>345</sup> July 29, 1891 in the western calendar.

<sup>346</sup> “祁邑议开夏标 长年银利 74 两、秋冬月 5.4 厘、明春月 5.5 厘，做开满加秋标利 17 两，渐疲至二两平和。” Wu family correspondence (武氏), LJMPC, 7-3.



sought financing. They were held in commercial centers across the northern frontier, from Xinjiang in the west to Manchuria in the east, with the most important fairs centered around Shanxi province and Shanxi-settled Zhili. A typical *biaoqi* lasted six days. Commercial settlements occupied the first three days, during which everyone from cotton and cloth to tea and wine merchants settled their obligations. The final three days were dedicated to financial settlements, with copper cash settlements preceding silver settlements.<sup>347</sup> This system meant that merchants could conduct long-distance wholesale trade on credit, thereby freeing them of the need to carry heavy silver sycee or barterable goods to use as a medium of exchange. The timing and spatial orientation of the *biaoqi* further economized on the need for silver. In any given quarter, *biaoqi* in neighboring locales were staggered by the number of days required to ship hard silver from one place to the next. This meant that the same physical stocks of silver could meet the settlement needs of numerous markets across a vast territorial area.

The central argument of this chapter is that *biaoqi* and similar fairs constituted the world of “high finance” in the late Qing, and were tantamount to an intermediate institution between Braudelian fairs and exchanges.<sup>348</sup> This conceptual argument rests on three empirical discoveries. First, I show how *biaoqi* fostered liquid markets in credit, exchange, and remittances. These markets included not only spot markets, but robust trading in futures. The main participants in these markets were institutional, including both financial institutions as well as commercial firms and lineage trusts. It is in this sense, that *biaoqi* markets were “high

---

<sup>347</sup> The final three days were sometimes called the *maoqi*. See “Gedi Shangye Xiguan: Jinhang Suoshu: Baotouzhen: Sibiao Baluo 各地商业习惯：津行所属：包头镇：四标八骡 [Commercial Practices around the Country: Tianjin Branch: Baotou: Four Biaoqi and Eight Luoqi],” *Jiaotong Yinhang Yuekan* 交通银行月刊 [*Bank of Communications Monthly*], 1923.

<sup>348</sup> Fernand Braudel, *Civilization and Capitalism, 15th-18th Century: The Structures of Every Day Life*, vol. 1, 3 vols. (New York: Harper & Row, 1982).

finance,” rather than retail or peasant finance. Second, I demonstrate that *biaoqi* markets were intermediated by specialized financial institutions acting as brokers, much as in a formal exchange. This allowed greater access to financial markets, as smaller institutions or individuals without their own representative at a given *biaoqi* could still borrow or invest in *biaoqi* markets through an intermediary. Finally, I show how *biaoqi* financial markets relied on institutional lenders known *zhangju* (账局)—or “accounts bureau.” *Zhangju* were wholesale financiers that supplied liquidity and clearing services to other financial institutions. They are one of the most under-studied economic institutions of the Qing dynasty,<sup>349</sup> and constitute nothing less than privately-run, for-profit “banker’s banks”; in short, a proto-central banking system.<sup>350</sup>

My argument has consequences for social historians of China, as well as for historians of global capitalism. It adds an entirely new class of market<sup>351</sup> to the Skinnerian marketing system, one that integrates Han Chinese markets into long-distance, overland—indeed, “international”—trade. Moreover, it shifts our understanding of the economic “core” and “periphery” by locating the center of pre-modern Chinese finance not in one of the Han heartlands such as the Yangzi or

---

<sup>349</sup> Happily, less understudied as of last year. See Chen Tianyi’s dissertation on the *Zhangju*, by far the best work on the subject. Chen Tianyi 陈添翼, “Qingdai Minguo Shiqi Zhangju Yanjiu 清代民国时期账局研究 [Research on the Zhang Ju During the Qing Dynasties to the Republic of China]” (Ph.D. Dissertation, Baoding, Hebei, Hebei University, Center for Song History, 2020).

<sup>350</sup> I say “central” in the Bagehot-ian sense of bankers’ banks that supply base money, settlement, and clearing services to other financial institutions. However, these are of course not central in the legal, or Minskyan, sense of being banker to the public fisc.

<sup>351</sup> Or, at the very least, this chapter emphasizes the importance of *temple fairs* as integral to interregional economic coordination. Skinner hints at such a possibility but does not pursue it in G. William Skinner, “Marketing and Social Structure in Rural China: Part I,” *The Journal of Asian Studies* 24, no. 1 (1964): 3–43, <https://doi.org/10.2307/2050412>.

Pearl River deltas, but on the Sino-Mongolian frontier.<sup>352</sup> For scholars of global capitalism, what is significant is that these settlement fairs were a homegrown, indigenous Chinese institution that nevertheless evolved a suite of highly advanced financial technologies typically associated with western Europe.

At the same time, I hasten to add that there is room here for nuance, and that Chinese high finance was by no means identical to its western counterpart. In the world of Qing high finance there is one specific practice of which I have found no evidence, even in embryonic form: property and casualty insurance. Moreover, as evidence of other advanced financial technologies such as liquid credit markets, futures markets, and brokerage relationships, become more abundant; the complete absence of insurance and equity markets appears ever-more conspicuous. This suggests that while high finance arises naturally wherever volumes of long-distance trade reach critical mass, these two vehicles of capital accumulation so essential to early British capital accumulation<sup>353</sup> may indeed have been contingent on imperialist, armed trade.

This chapter is divided into nine sections, including this introduction. Section two reviews the relevant literature on the *biaoqi* system. In section three, I contextualize the *biaoqi* both within a wider taxonomy of settlement fairs, as well as geographically. I show how a northern *biaoqi* system spanned the entire frontier from Xinjiang in the west to Manchuria in the east. Fourth, I trace the origins of the *biaoqi*, and speculate on its possible roots as a temple fair,

---

<sup>352</sup> Here I build on Luman Wang, whose recent monograph makes a similar argument. Luman Wang, *Chinese Hinterland Capitalism and Shanxi Piaohao: Banking, State, and Family, 1720-1910* (London: Routledge, 2021).

<sup>353</sup> Kenneth Pomeranz, *The Great Divergence: Europe, China, and the Making of the Modern World Economy*, The Princeton Economic History of the Western World (Princeton, N.J: Princeton University Press, 2000); Sven Beckert, *Empire of Cotton: A Global History*, First edition (New York: Alfred A. Knopf, 2014), 52.

or *miaohui* (庙会). Section five explores *biaoqi* financial markets in more granular detail, with a focus on credit markets. In section six, I go on to analyze exchange markets. In this section, I take care to establish the existence not only of exchange between hard silver and copper, but of a liquid derivatives market. Section seven demonstrates the function of *biaoqi* in fostering regional market integration by showing how they enabled market pricing for *piaohao* remittances. Section eight investigates the “zhangju,” an understudied historical financial institution that stood at the core of *biaoqi* financial markets. The final section is a conclusion.

## Literature Review

Nearly all academic accounts of the *biaoqi*—including my own—build on two foundational articles. The first is Jiang Xuekai’s (蒋学楷) Republican-era description of the Shanxi finance, published in *Banker’s Weekly*.<sup>354</sup> Jiang’s article contains two sections on *biaoqi*, one on settlements and the other on interest rates.<sup>355</sup> The second work is Kong Xiangyi’s article from 2003.<sup>356</sup> Kong’s work is mostly derivative of Jiang Xuekai, and at times is content to quote

---

<sup>354</sup> Jiang Xuekai 蒋学楷, “Shanxi Zhi Jinrongye 山西省之金融業 [The Financial Industry of Shanxi Province],” *Banker’s Weekly*, 1936.

<sup>355</sup> Jiang Xuekai was the name of a Ningbo native who had a successful career as a Republican-era translator, and who also served as an economic journalist and an editor of fiscal and economic works. “Xiushan Baohu Jiang Xuekai, Jiang Xuemo Guju: Zhe Xiongdi Lia Shi Cixi de Jiao’ao 修缮保护蒋学楷蒋学模故居 这兄弟俩是慈溪的骄傲 [Restoration and Preservation of the Historical Residence of Jiang Xuekai and Jiang Xuemo: These Two Brothers Are the Pride of Cixi],” *Zhongguo Ningbo Wang 中国宁波网*, June 17, 2020. I believe this is a coincidence, because the article on *biaoqi* would have been difficult for a non-native of Shanxi to write in the 1930s. But nor, of course, can I rule out this possibility.

<sup>356</sup> Kong Xiangyi 孔祥毅, “Biaojū, Biaoqi, Biaoli Yu Zhongguo Beifang Shehui Xinyong 镖局、标期、标利与中国北方社会信用 [Armed Escort, Maturity and Interest Rate for a Deal and the Social Credit System in North China],” *Jinrong Yanjiu 金融研究 [Journal of Financial Research]* 1 (2004): 117–25.

Jiang directly with almost no added commentary. But Kong also draws on gazetteers and uncited sources to fill in some of the gaps in Jiang's account.<sup>357</sup> He is especially interested in the “self-regulating” system of settlements and clearing, in which default was punished not by seizure of collateral or state coercion, but by being denied future credit. More recently, two important new works on Shanxi merchants touch on the *biaoqi*. Li Jinzhang covers the *biaoqi* in his primer on Shanxi merchant accounting methods. He compares the *biaoqi* to the European fairs studied by Braudel, noting that the *biaoqi* was a similar institution that emerged a few centuries later.<sup>358</sup> Chen Tianyi's exhaustively researched dissertation on the *zhangju* explores how *zhangju* participated in *biaoqi* lending markets.<sup>359</sup>

The English-language literature has two references to *biaoqi*. Luman Wang's recent monograph on the Shanxi *piaohao* discusses the *piaohao*'s reliance on *biaoqi* as “an internal information-sharing mechanism governing implicit contractual relations among *piaohao* and

---

<sup>357</sup> He draws heavily from the Draft Suiyuan Gazetteer, Suiyuan tong zhi guan, ed., *Suiyuan Tong Zhi Gao* (“Draft Suiyuan Gazetteer”), Di ban (Huhehaote Shi: Nei Menggu ren min chu ban she, 2007). Note also that Kong Xiangyi's uncited passages are not to be dismissed. He was an ardent amateur historian, and spoke to anyone he could find with knowledge of “old society” Chinese finance. His personal knowledge includes much valuable folk wisdom or, in Meng Wei's words, “hearsay from the road” (道听途说 *daotingtushuo*).

<sup>358</sup> Li Jinzhang 李锦章, *Jin Shang Lao Zhang* 晋商老账 [*The Historical Accounts of Shanxi Merchants*], Beijing di 1 ban (Beijing Shi: Zhonghua shu ju, 2012), 136-140. In a private discussion, Li Jinzhang expanded on the difference between European fairs and *biaoqi*. He believes that one key distinction is that Chinese *biaoqi*—and indeed Chinese merchants throughout the empire—did not develop insurance, and as a result never elaborated liquid markets in equity (i.e. stock exchanges). His theory is that without insurance, changes in ownership of company can seriously impact its credit, and therefore its underlying value. This means that owners have an interest in who the owners in the business are, and so are less likely to allow for liquid transactions in the shares of their business. As such, it may have been difficult for China to develop securities exchanges without western influence. I find this argument intriguing, if not conclusive.

<sup>359</sup> Chen Tianyi 陈添翼, “Qingdai Minguo Shiqi Zhangju Yanjiu 清代民国时期账局研究 [Research on the Zhang Ju During the Qing Dynasties to the Republic of China]” (Ph.D. Dissertation, Baoding, Hebei, Hebei University, Center for Song History, 2020), 183-196.

balancing information asymmetries between debtor and creditor.”<sup>360</sup> Wang draws on Jiang Xuekai and Kong Xiangyi for her empirical account, but channels Avner Greif in her interpretation. She conceives of *biaoqi* primarily as a useful way of saving time on negotiations, since there was an agreed upon date at which all loans came due. The only other work in English that raises the problem of the *biaoqi* is an anthropological study on brigandage and armed couriers. The author also cites Kong Xiangyi, but is rather vague.<sup>361</sup>

This chapter contributes to the scholarship in several ways. Empirically, it discovers three aspects of the *biaoqi* that have heretofore been overlooked. The most important of these is the exchange market. Extant scholarship on *biaoqi* finance has focused exclusive on the credit market. But the exchange market between copper and silver was at least as important. In addition, this chapter uncovers brokerage services at the *biaoqi* that allowed a host of individuals and institutions access to *biaoqi* financial markets, even if they could not participate directly. Third, this chapter probes more deeply into the origins of the *biaoqi*. Previous scholarship going back to Jiang Xuekai accounts for the *biaoqi*'s origins in general terms, as arising to meet the needs of long-distance overland trade between China and Mongolia, Russia, and Inner Asia. This narrative is useful as an explanation of the *biaoqi*'s utility, but is not really an origin story. It leaves open the question of what social practices the *biaoqi* grew out of. This chapter seeks to fill this gap. In his lectures, Meng Wei proposes the temple fair as the *biaoqi*'s antecedent. This chapter expands on this hypothesis, and seeks to find tangible evidence for it.

---

<sup>360</sup> Luman Wang, *Chinese Hinterland Capitalism and Shanxi Piaohao: Banking, State, and Family, 1720-1910* (London: Routledge, 2021), 62.

<sup>361</sup> Laurent Chircop-Reyes, “Merchants, Brigands and Escorts: An Anthropological Approach of the Biaoju 標局 Phenomenon in Northern China,” ed. Paolo Santangelo, *Ming-Qing Studies*, December 1, 2018, 130.

In addition, this chapter intervenes in an old dispute over the nature of *biaoqi* credit markets. This dispute is quite technical, and may be difficult for the lay reader to follow, but is nevertheless crucial. It concerns the way in which credit prices were quoted at the *biaoqi*. In brief, Jiang Xuekai argues that daily rates (the *manjia*) was a kind of yield to maturity, while Kong Xiangyi argues that they were a premium over a benchmark. These are two entirely different ways of quoting interest rates and the fact that this is even an open question is telling of how understudied the *biaoqi* are. I provide evidence in support of Jiang's position, and cast further doubt on Kong's understanding of the *manjia*— at least in much of northern China.

My empirical contributions sum to an equally important conceptual advance. Most of the previous scholarship—and all the English-language scholarship—has examined how the *biaoqi* fulfilled specific functions; either trade settlements, loan settlements, or remittance settlements. But this chapter, by looking at the *biaoqi* holistically, conceives of it as a financial *market*. In doing so, I take inspiration from Li Jinzhang's intriguing comparison between *biaoqi* and Braudelian fairs, and argue that *biaoqi* functioned as a kind of proto-exchange. In brief, my work demonstrates that *biaoqi* were not merely convenient days to make payments; they were a kind of integrated financial market: the Qing dynasty's "Wall Street."

Ultimately, the most important contribution of this chapter is larger than the *biaoqi*. The fact that in the northern Qing, wholesale commodities and financial flows were mediated by a massive, quasi-exchange class of fair is an important contribution to the social history of China more broadly. Skinner's seminal work on the marketing system posited a tiered network of trade. In this network, large cities or commercial hubs connected different "macroregions" with each other, while markets of diminishing size—but increasing geographic density—brought goods to lower rungs of society. At the grassroots of rural life were regular markets and temple fairs,

which gave peasants access to trade as well as to social necessities including marriage, entertainment, and information.<sup>362</sup> But Skinner's model left open the question of how—if at all—the long-distance, overland trade in luxury commodities interfaced with the marketing system. The *biaoqi* fulfilled precisely this role; marshalling flows of capital and goods that were greater than what could be supported by the regular marketing system.

### The World of Settlement Fairs

The *biaoqi* were the most important among a system of settlement fairs established by Shanxi merchants along the frontier. This system was composed of three kinds of fairs; in order of size these were *biaoqi* (标期), *luobiao* (骡标), and *liangbiao* (粮标).<sup>363</sup> Cities, county seats, or market towns with a *biaoqi* would generally host anywhere between one and five *biaoqi* a year, with quarterly *biaoqi* being the most common. Quarterly *biaoqi* were referred to by the season they were held in. The “spring biao,” (*chunbiao* 春标) was typically held in the second or third lunar month. The summer biao (*xiabiao* 夏标) fell in the fifth or sixth month. The autumn *biao* (*qiubiao* 秋标) arrived in the eighth or ninth month, and the winter biao (*dong biao* 冬标) came in the tenth or eleventh month. Zhangjiakou, the single largest trading hub in the Shanxi merchant network, also held an “annual biao” (年标 *nianbiao* or 寅标 *yinbiao*) in the first month. The precise dates of *biaoqi* varied by a few days from year to year and from place to

---

<sup>362</sup> G. William Skinner, “Marketing and Social Structure in Rural China: Part I,” *The Journal of Asian Studies* 24, no. 1 (1964): 3–43, <https://doi.org/10.2307/2050412>.

<sup>363</sup> Kong Xiangyi 孔祥毅, “Biaojū, Biaoqi, Biaoli Yu Zhongguo Beifang Shehui Xinyong 镖局、标期、标利与中国北方社会信用 [Armed Escort, Maturity and Interest Rate for a Deal and the Social Credit System in North China],” *Jinrong Yanjiu* 金融研究 [*Journal of Financial Research*] 1 (2004): 117–25.



place, but the approximate timing was consistent.<sup>364</sup> In addition to the *biaoqi*, major commercial centers near the Mongolian border held a *luobiao* (骡标 “mule biao”), also known as a *luoqi* (骡期) or *yuebiao* (月标 “monthly biao”). This was a kind of ancillary settlement fair that took place during *biaoqi* off months. Thus, Baotou was renowned for its “four biaoqi and eight luoqi” (四标八骡 *si biao ba luo*).<sup>365</sup> Another settlement fair, the *liangbiao* (粮标 “grain biao”), also known as the *liangqi* (粮期), referred to regular grain markets. In areas influenced by Shanxi merchants, these grain markets included liquid markets in short-term loans, and were thus also used for conducting financial settlements. They were held even more frequently than *luobiao*. The Taigu *liangqi*, for example, took place every 20 days.<sup>366</sup>

*Biaoqi* and *luobiao* settlement fairs emerged to meet the needs of the overland trade between China proper and the frontier. Indeed, the “biao” in *biaoqi* is often said to derive from the “biao” in *biaoju* (镖局), the armed transport services run by Shanxi merchants, and responsible for physical shipments of commodities and bullion in northern China. Translated character for character, *biaoqi* therefore means “the time when the armed transport arrives.” According to Jiang Xuekai, “Merchants trading on the frontier with Mongolia and Russia...required a full year to turnover their financing, and relied on the Zhangjiakou financial system. They settled all their accounts once a year and depended on silver sent by armed

---

<sup>364</sup> Jiang Xuekai 蒋学楷, “Shanxi Zhi Jinrongye 山西省之金融業 [The Financial Industry of Shanxi Province],” *Banker's Weekly*, 1936.

<sup>365</sup> “Gedi Shangye Xiguan: Jinhang Suoshu: Baotouzhen: Sibiao Baluo 各地商业习惯: 津行所属: 包头镇: 四标八骡 [Commercial Practices around the Country: Tianjin Branch: Baotou: Four Biaoqi and Eight Luoqi],” *Jiaotong Yinhang Yuekan 交通银行月刊 [Bank of Communications Monthly]*, 1923. There was also a *liangbiao* (粮标) or “grain biao” that took place every 20 days and was used to settle short-term loans.

<sup>366</sup> Jiang Xuekai, 1936.

transport to clear accounts.” Jiang explains that this is the purpose of the “annual biao” held in the first month at Zhangjiakou. The four seasonal *biaoqi* emerged to service merchants who did not venture beyond Zhangjiakou and therefore had a shorter turnover period.<sup>367</sup>

The *biaoqi*’s role in coordinating physical shipments of commodities and silver across long distances is reflected in the timing of settlement fairs. In any given quarter, *biaoqi* in neighboring locales were staggered by approximately the number of days required to ship hard silver from one *biaoqi* to the next. Figure 7 shows the timing of several key settlement fairs relative to travel times between them.

Figure 7. The Biaoqi Circuit, 1936



Source: CHGIS, Jiang Xuekai

<sup>367</sup> Jiang Xuekai, 1936.

In effect, *biaoqi* were a single financial “core.” But rather than being fixed in a single location, they migrated across time and space in a rotating circuit. In this way, the same physical stocks of silver could meet the settlement needs of numerous markets across a vast territorial area.

Within this framework, there was considerable regional variation in timing of fairs, the financial markets that operated in them, and nomenclature. But all frontier regions with Shanxi merchant activity operated some version of this settlement system. In Manchuria and even in Shandong province’s Weifang,<sup>368</sup> settlement fairs were referred to as *maoqi* (卯期).<sup>369</sup> These were functionally identical to the fairs in the *biaoqi* system. Indeed, the etymology of *maoqi* can even be seen in specific *biaoqi* practices. The final three days of the *biaoqi* during which financial settlements took place was known as the *maoqi*,<sup>370</sup> and the process of inter-financial

---

<sup>368</sup> “Gedi Jinrong: Weixian 各地金融:潍县 [Finance around the Country: Weifang],” *Jiaohang Tongxun 交行通讯 [Bank of Communications Bulletin]*, 1932. Shanxi merchant activity in Weifang has a long history, going back to the role as ironmongers to Wei County in the late Ming. See Wang Yun 王云, “Ming-Qing Shiqi Shandong de Shansha’an Shangren 明清时期山东的山陕商人 [The Ming- and Qing-Era Shan-Shaan Merchants of Shandong],” *Dongyue Luncong 东岳论丛 [Dong Yue Tribune]* 24, no. 2 (2003): 102–5 and Qiao Nan 乔南, “Qingdai Shanxi Shangren Xingshang Diyu Fanwei Yanjiu 清代山西商人行商地域范围研究 [A Research in the Domain Where Shanxi Merchants Took Their Commercial Activities in the Qing Dynasty],” *Jinyang Xuekan 晋阳学刊 [Academic Journal of Jinyang]*, no. 2 (2008): 36–40.

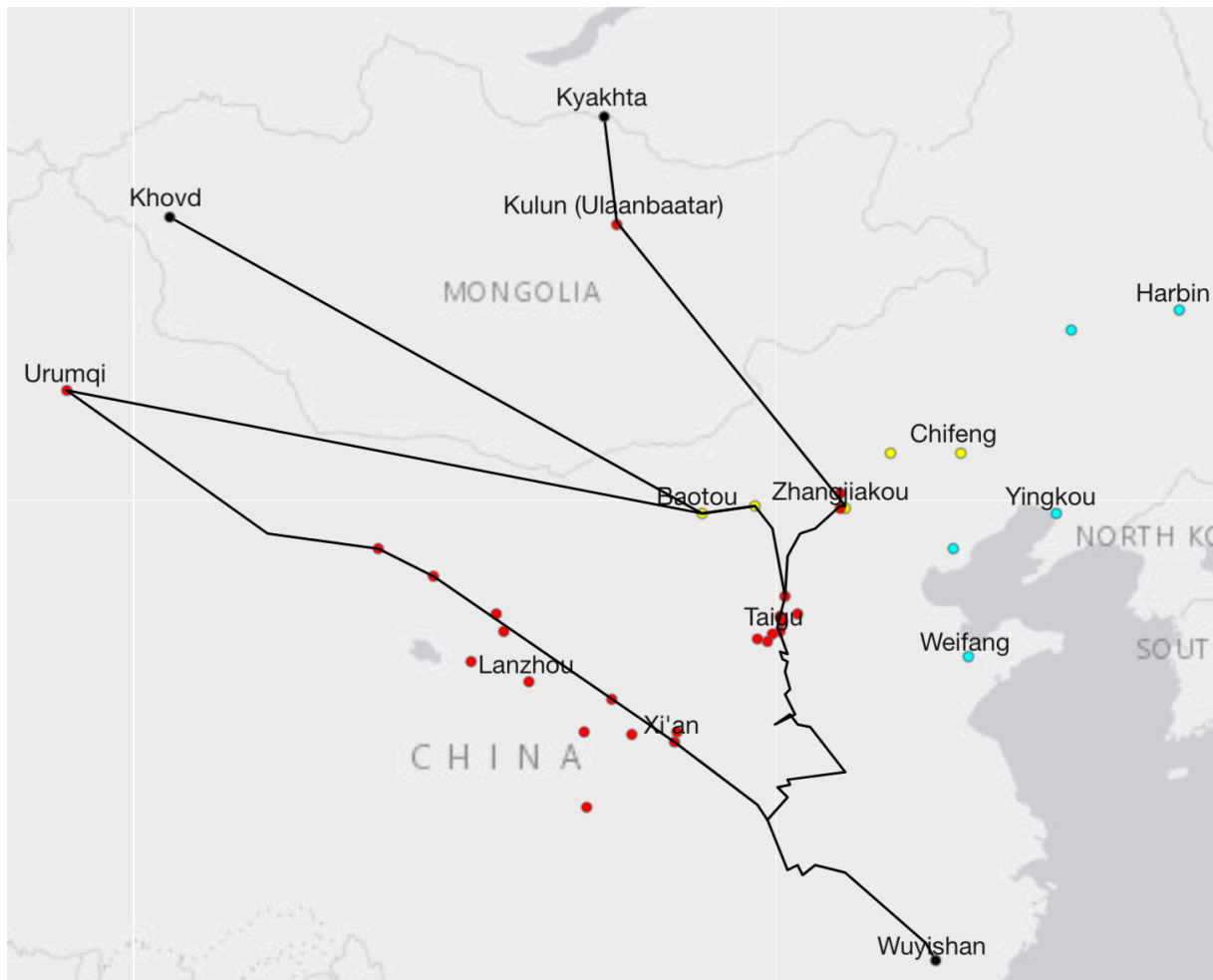
<sup>369</sup> “Gedi Shangye Xiguan: Ha’hang Suoshu Heilongjiang Maoqi 各地商业习惯哈行所属黑龙江卯期 [Commercial Practices around the Country: Ha’erbin Branch: Heilongjiang Maoqi],” *Jiaotong Yinhang Yuekan 交通银行月刊 [Bank of Communications Monthly]*, 1923.

<sup>370</sup> “Gedi Shangye Xiguan: Jinhang Suoshu: Baotouzhen: Sibiao Baluo 各地商业习惯: 津行所属: 包头镇: 四标八骡 [Commercial Practices around the Country: Tianjin Branch: Baotou: Four Biaoqi and Eight Luoqi],” *Jiaotong Yinhang Yuekan 交通银行月刊 [Bank of Communications Monthly]*, 1923; “Gedi Shangye Xiguan: Jinhang Suoshu: Guihua: Biaoqi Luoqi 各地商业习惯: 津行所属: 归化: 标期骡期 [Commercial Practices around the Country: Tianjin Branch: Guihua Biaoqi and Luoqi],” *Jiaotong Yinhang Yuekan 交通银行月刊 [Bank of Communications Monthly]*, 1923.

institutional clearing was known as *dingmao* (订卯).<sup>371</sup> The Manchurian “maoqi,” character for character, translates literally to “the period for conducting financial settlements.”

Shanxi-merchant settlement fairs thus spanned an enormous geographical expanse. They operated along the frontier between China proper and “beyond the pass” (口外 *kouwai*), stretching from Xinjiang in the west, to Manchuria in the east. Figure 8 shows a map of settlement fairs in relationship to the tea routes running from China to Russia and Inner Asia.

Figure 8. Map of Settlement Fairs and Tea Routes, Qing to Republican period



Tea routes in black, Biaoqi in red, Luobiao in yellow, Maoqi in blue.

Source: CHGIS, Li Chenguang (李晨光), *The Shanxi Merchant Tea Route* (晋商茶路) (Taiyuan, Shanxi: Shanxi Chuban Jituan, 2008).

<sup>371</sup> Kong Xiangyi, 2004.

This map is not comprehensive. It includes only the locations where I have found proof of a settlement fair, and leaves out a great many others. It is also somewhat anachronistic, including any site that hosted a settlement fair either in the Qing or the Republic. With those caveats, the map shows that there were at least 28 settlement fairs, with the greatest concentration clustered in Shanxi and Shanxi-settled Zhili (now Hebei) provinces. Chen Tianyi characterizes the spatial layout of *biaoqi* as existing on two axes: a vertical axis starting in Shanxi, and going north along the tea route, and a horizontal axis stretching along the frontier.<sup>372</sup> By including *maoqi*, we can also discern from the map a third, though perhaps sparser, axis connecting Manchuria to Shandong and Shanxi provinces.

The world of Shanxi-merchant settlement fairs should not be taken as representative of China as a whole, but were mainly limited to the north. That said, another institution—known as the *biqu* (比期)—consisted of similar settlement fairs and were found all along the Yangzi river from Ganzhou in Jiangxi down to Chongqing in Sichuan, ports whose financial industries were dominated by Shanxi merchants. The earliest reference to the *biqu* I have found comes from the fourth reign year of the Guangxu emperor, in a textbook compiled for the children of Shanxi merchant families. The textbook includes a passage cautioning young businessmen not to let “devious characters” (狡猾之徒 *jiaohuazhitu*) take advantage of them. The primer warns, “One day, he will go to your shop and ask for something on credit, or ask you for a loan of 10 to 8 taels and say he’ll pay you back at the *biqu*.”<sup>373</sup> During the Republican period, *biqu* were a core

---

<sup>372</sup> Chen Tianyi, 2020, 183.

<sup>373</sup> “有一日到你店赊取货，抽或拾两、八两，说比期归还。” In “Necessary studies for trade, 1878” (光绪四年贸学须知), LJMPC.

component of financial markets in many major Yangzi river ports, including Ganzhou, Changsha, Hankou, and Chongqing, among other locations.<sup>374</sup> In short, it is clear that some kind of settlement fair reached even southern areas with considerable Shanxi merchant influence.

### *Biaoqi*: Origins in the Temple Fair

This section traces the origins of the *biaoqi* to Chinese temple fairs, or *miaohui* (庙会).<sup>375</sup> My account diverges somewhat from the extant literature. According to Wang Yidian, member of the Pingyao County Finance Bureau, the Mongolian overland trade was originally conducted by bartering real goods. As the volume of transactions increased, merchants began to conduct transactions using commercial credit. To economize on the amount of silver needed to settle their accounts, two corporate entities invented the *biaoqi*.<sup>376</sup> Li Jinzhang's primer on Shanxi

---

<sup>374</sup> “Gedi Shangye Xiguan: Hanhang Suoshu Changsha Biqi 各地商业习惯汉行所属长涉比期 [Commercial Practices around the Country: Hankou Branch: Hankou: The Changsha Biqi],” *Jiaotong Yinhang Yuekan 交通银行月刊 [Bank of Communications Monthly]*, 1923; “Gedi Shangye Xiguan: Hanhang Suoshu Hankou Liang Biqi 各地商业习惯汉行所属汉口两比期 [Commercial Practices around the Country: Hankou Branch: Hankou: The Two Biqi],” *Jiaotong Yinhang Yuekan 交通银行月刊 [Bank of Communications Monthly]*, 1923; Qin Yiya 秦宜雅, Huang Yiji 黄伊基, and Li Changxin 李昌忻, eds., *Sichuanshengzhi Jinrongzhi 四川省志 金融志 [Sichuan Finance Gazetteer]* (Chengdu: Sichuan Cishu chubanshe, 1996), 394-395.

<sup>375</sup> Yang Bo's study of *she* states explicitly that *biaoqi* evolved out of temple fairs. He believes that *biaoqi* were essentially large temple fairs that were dedicated to commercial and financial settlements. Yang Bo also states that *biaoqi* dates coincided with temple fair dates, but does not provide any evidence to this effect. Yang Bo 杨波, “Songdai Yilai Taihangshan Diqu Cunshe Yanjiu 宋代以来太行山地区村社研究 [Study on Village Community (She) in Taihang Mountain Area since Song Dynasty]” (Ph.D. Dissertation, Baoding, Hebei, Hebei University, Center for Song History, 2020), 220.

<sup>376</sup> Wang Yidian 王夷典, “Guanyu Jinshang Biaoqi Zhidu de Jige Wenti He Xianshi Qishi 关于晋商标期制度的几个问题和现实启示 [Several Questions and Empirical Revelations about the Shanxi Merchant Biaoqi System],” *Jinzhong Xueyuan Xuebao 晋中学院学报 [Journal of Jinzhong University]* 25, no. 5 (October 2008): 29–32. Wang Yidian's account leans heavily on Kong Xiangyi.

merchants recounts an old folktale in which Dashengkui (大盛魁) singlehandedly invents the *biaoqi*. Dashengkui was a Shanxi merchant enterprise from Qi County that grew to become the largest firm specializing in the Mongolian overland trade.<sup>377</sup> According to Li, Dashengkui would purchase consumer goods in China proper and ship them to Guihua (归化城, in present-day Hohhot, the provincial capital of Inner Mongolia). From there the goods were shipped across Mongolia. Writes Li, “Purchasing on credit was common at the time, resulting in complicated chains of debt...As the leader of the commercial world, Dashengkui proposed a specialized method for clearing commercial debt. This was the *biaoqi*.”<sup>378</sup> In other words, with commercial debts piling up between individual firms, Dashengkui suggested a way for working out these paper debts without needing excessive amounts of hard silver. I find this a useful parable for understanding the *biaoqi*’s utility. But as history, it is implausible. The *biaoqi* system was too widespread and too complex to be “invented” from whole cloth by one enterprising merchant.

The historical record is too incomplete to establish the *biaoqi*’s origins with certainty. But it gestures toward temple fairs as a likely source.<sup>379</sup> The temple fair was one of the most important folk traditions of premodern China. It was a periodic gathering at a specific site held for religious worship, and often served the critical function of delineating a village’s territorial boundaries.<sup>380</sup> In addition, temple fairs were an occasion for socializing and entertainment—

---

<sup>377</sup> He Zhi 何志, “Cong Qingchu Dao Kangri Zhanzheng Qianxi de Huhehaote Shangye 从清初到抗日战争前夕的呼和浩特商业 [Commerce in Hohhot from the Early Qing to the Eve of the War of Resistance],” *Journal of Inner Mongolia University (Philosophy and Social Sciences)* 17 (June 15, 1961): 95–107.

<sup>378</sup> Li Jinzhang, 2012, 137.

<sup>379</sup> Meng Wei was the first to propose the link between temple fairs and *biaoqi*—but, as with so many of his insights—has left the pursuit of this idea to his students.

<sup>380</sup> Skinner, 3; Stephan Feuchtwang, *Popular Religion in China: The Imperial Metaphor*, New ed. (Richmond, Surrey: Curzon, 2001).

particularly for attending theater, opera, or acrobatics.<sup>381</sup> Finally, many temple fairs played an economic function, acting as a fair for larger-scale commercial transactions in much the same way as Skinnerian markets.<sup>382</sup> These fairs were still operative in the 1980s, during which a secularized instauration of temple fairs helped coordinate trade in the budding private economy.<sup>383</sup> In this respect, a *biaoqi* may be considered almost as a class of temple fair. What distinguished them from similar temple fairs organized for economic purposes was the *biaoqi*'s unusually large scale, as well as its emphasis on settlements, clearing, and finance.

The evidence indicating that we should think of *biaoqi* as evolving from temple fairs is mostly circumstantial. This circumstantial evidence includes the role that temple fairs played in Shanxi commerce, the patronage that Shanxi merchants gave to temple fairs, as well as the key role of religion in Shanxi merchant organizations. To this, I add a few snippets of more direct, though by no means dispositive, evidence from gazetteers and Republican-era news clippings.

Temple fairs were focal points of Shanxi trade and commerce, and thus a natural forbear to the *biaoqi*. The Wenshui county gazetteer from the ninth reign year of the Guangxu Emperor (1883) states:<sup>384</sup>

---

<sup>381</sup> Such operas themselves could have deep religious and ritual significance. See David Johnson's work on hereditary entertainers performing operas on deities' birthdays, David G. Johnson, *Spectacle and Sacrifice: The Ritual Foundations of Village Life in North China*, Harvard East Asian Monographs 315 (Cambridge, Mass: Harvard University Asia Center : Distributed by Harvard University Press, 2009).

<sup>382</sup> Zhao Shiyu 赵世瑜, *Kuang huan yu ri chang: Ming Qing yi lai de miao hui yu min jian she hui 狂欢与日常: 明清以来的庙会与民间社会 [Carnival and the everyday: Temple fairs and popular society since the Ming and Qing dynasties]*, Beijing di 1 ban (Beijing Shi: Sheng hui, du shu, xin zhi san lian shu dian, 2002), 198-204.

<sup>383</sup> Eugene Cooper, *The Market and Temple Fairs of Rural China: Red Fire*, Asia's Transformations 37 (London ; New York: Routledge, 2013), 66-94.

<sup>384</sup> Yang Buxia 阳步霞, *Guangxu Wenshui Xian Zhi 光绪文水县志 [Guangxu Wenshui Gazetteer]* (China, 1883).



邑本非繁富之區，又與交、祁、平、汾接壤，殷實之戶，戶悉交易於鄰邑，境內無多商賈，平居一箕帚之微，無從購置，惟恃有廟會則四方齊集百貨，雜陳民間日用之需、耕穫之具，皆取給焉。既便商，亦便民，且以覘富庶卜盛衰何可少歟。

Wenshui is not a wealthy area. It borders Jiaocheng, Qi County, Pingyao, and Fenyang. Wealthy households all trade with these neighboring areas. Within Wenshui there are not many merchants and the average household cannot even afford the tiny expense of a broom. For all of its goods, Wenshui relies entirely on the temple fair. Miscellaneous daily necessities of the people as well as their farming implements are all acquired through it. Verily, when the mass of people's prosperity or poverty depend upon it, how could Wenshui do without it!

The Wenshui gazetteer is notable for its insistence on how important the temple fair was for commerce, but it is hardly unique. The Yuci Gazetteer similarly emphasizes the economic function of temple fairs, and of the City God temple (*Chenghuangmiao* 城隍廟) fair in particular. The relevant passage is worth quoting in full:

榆次廟會年共五十五，起詳述於鄉聚考中，而城內五月會（俗稱城隍廟會）獨能萬商雲集，經月不散，歷數百年，而無更變者，良由各商終歲所售之品均賴榆會購入。故也，光緒九年春太谷忽四路招商議於五月。

There are 55 temple fairs in Yuci according to a thorough investigation. The fifth month city temple fair (colloquially referred to as the fair of the city god temple) is the only one that can attract great masses of merchants. It lasts for over a month without stopping. For many centuries without changing, merchants sold their wares all year round through various Yuci fares. For this reason, in the spring of the ninth reign year of the Guangxu Emperor (1883), it was at last decided to attract merchants from all directions, and it was agreed to start a new fair on the fifth month.

In other words, the City God fair was inaugurated in 1883 in order to centralize trading in the county seat. This proved more convenient to merchants than having to attend numerous, scattered fairs throughout the county. The gazetteer then goes on to detail a fascinating story of how the Yuci City God fair competed with the neighboring Taigu Fire God temple fair (*huoshen miao*), sparking decades of conflict—sometimes violent—between the two neighboring counties. We thus see that both Wenshui and Yuci organized their wholesale commerce through massive, annual temple fairs.

While I have been able to find almost no historical material directly pertaining to temple fairs, one exception is an account book showing patronage from major Shanxi merchant houses. The account book dates from the seventh reign year of the Guangxu Emperor, or 1881, and was compiled by Weitaihou, a *piaohao* from Pingyao. Weitaihou was founded as a silk trading firm, and converted into a *piaohao* in the fourteenth reign year of the Daoguang emperor (1834).<sup>385</sup> The account book in question is a “庙会社火施舍册” (*miaohui shehuo shishe ce*), which translates to something like “accounts of donations for temple fair festivities.” The account book consists of a list of names, along with the occasional lineage trust, and small amounts of silver next to them. Notes indicate that some of the payments are made in cash, others in account transfers. This account book was discussed online in a Wechat accounting history group. The meaning of the payments remained in dispute. Some historians believe they represent payments to temple fair workers for everything from performances to fireworks to acrobatics. Others believe they represent deposits. That is, that the *piaohao* was managing the funds for the temple fair in a kind of trust account. This debate is important for understanding relations between commercial and religious institutions, but for my present purposes is not necessary to resolve. Rather, it is enough to demonstrate the *piaohao*’s participation in and patronage of the temple fair.

The final piece of circumstantial evidence is the role of religion in Shanxi merchant activities. The Cult of Lord Guan was essential to Shanxi merchant networks.<sup>386</sup> The great

---

<sup>385</sup> Zhao Haikuan 赵海宽 and Yao Zhongmin 姚中民, eds., *Xin Bian Jin Rong Da Ci Dian 新编金融大辞典* [New Edited Comprehensive Finance Dictionary], Di 1 ban (Peking: Jing ji ri bao chu ban she, 1994), 1365.

<sup>386</sup> On the evolution of the wealth god from the demonic “Wutong” to the Rotarian Cai Shen, or god of wealth, see Richard Von Glahn, *The Sinister Way: The Divine and the Demonic in Chinese Religious Culture* (Berkeley: University of California Press, 2004). Von Glahn also

“Shanxi-Shaanxi Merchant Guilds” (山陕会馆 *Shan Shaan huiguan*) and “Shanxi Merchant Guilds” (山西会馆 *Shanxi huiguan*) were all Temples to Lord Guan (关帝庙 *Guandi Miao*). There are no primary source material from these guild halls. But we do know something about the Hankou Shanxi-Shaanxi Merchant Guild, thanks to the compilation of a guild hall gazetteer during the Guangxu reign. The bylaws of the Guild commence with a reference to the west hall of the complex as a temple to the “Sacred Emperor Guan”:<sup>387</sup>

西会馆崇祀

关圣帝君，自昔有作颇称壮观，诨意粤匪过境，第有不可胜言者矣。迨后恢复有年，士商云集，同治庚午始工，重建迄今廿余载工程告竣

Consecration of the west hall

The Sacred Emperor Guan since long ago had a splendid temple here, but the Cantonese rebels [i.e. the Taiping army] entered and committed unspeakable acts. After several years of recovery, gentry and merchants gathered to commence reconstruction in the Gengwu year of Tongzhi emperor [1870]. From that time until today when the work has been completed, the construction took over twenty years.

The regulations go on to proclaim that with the physical temple to Lord Guan restored, the old ways, virtues, and traditions of the merchants can be revitalized. The sense that the divine presence in the physical building guides, or should guide, the commercial conduct of the Shanxi merchants is clear.

Equally interesting, the gazetteer includes a copy of a Guild Hall inscription with a prayer to Lord Guan. The inscription is visible in Image 19.

---

traces the divergence in northern and southern theologies, and the reimagining of the wealth god as a personification of Lord Guan in northern China.

<sup>387</sup> Guangxu Hankou Shan-Shaan Guildhall Gazetteer, 1896( 光绪二十二年汉口山陕会馆志 (卷下) ), LJMPC, 9.

Image 19. Shanxi Merchant Prayer to Lord Guan

祝文  
維  
光緒 年五月中澣之三日主祭弟子  
等謹以  
牲醴庶饒之儀敢昭告於  
關聖帝君之位前曰惟  
神德隆萬古  
道貫千秋  
丹心與日月並明  
浩氣同山河不朽情殷在桑梓之民人既無微而不到默佑來江漢之  
羈旅亦有感而斯通均沾  
聖澤共沐  
恩波際此日炎夏之交正當年風雲之會恪遵祀典聿昭明禋  
神其降臨來格來享尚  
饗

Source: Guangxu Hankou Shan-Shaan Guildhall Gazetteer, 1896(光緒二十二年漢口山陝會館志(卷下)), LJMPC, 9.

The Gazetteer places line breaks in at odd places, and may be confusing to the modern reader.

The prayer reads grammatically as follows:<sup>388</sup>

关圣帝君之位前曰：惟神，德隆万古，道贯千秋。丹心与日月并明，浩气同山河不朽。情殷在桑梓之民，人既无微不到，默佑来江汉之羁旅，亦有感而斯通。均沾圣泽，共沐恩波。际此日炎夏之交，正当年风云之会，恪遵祀典，聿昭明禋。神其降临，来格来享。尚飨。

Speak thusly before the Sacred Emperor Lord Guan: Your Holiness! Your magnificent virtue flourishes through the ages, and Your Way extends over millennia. Your loyal heart is as bright as sun and moon. Your noble spirit is as immortal as mountain and river. Your tender sympathies lie with your countrymen, none of whom are too trifling for your consideration.<sup>389</sup> You silently bless travelers in Hankou, and Your concern is offered to all equally. All are drenched in Your sacred favor, together bathed in Your beneficence. Whether in the midst of today's scorching summer or swept up in the year's wind and clouds, [we] reverently follow the religious rites and illuminate the bright sacrifices. May Your Holiness descend to enjoy Your offerings. Please eat.

The prayer is composed of three distinct parts. First, the guild member praises the virtue of Lord Guan. Second, they give thanks for his divine protection (thus ensuring divine protection).

Finally, they swear to uphold the rites and invite Lord Guan to descend and receive his offerings.

For my purposes, the significance of Lord Guan as patron deity for Shanxi merchants—and of the temple to Lord Guan as the chief commercial institution for Shanxi merchants outside of their home province—is simply to show how natural it would be for religious practices to evolve commercial or financial functions.<sup>390</sup>

---

<sup>388</sup> Guangxu Hankou Shan-Shaan Guildhall Gazetteer, 1896( 光绪二十二年汉口山陕会馆志 (卷下), LJMPC, 3. Translation by Boqun Zhou.

<sup>389</sup> “Countrymen” here refers to natives of Shanxi. Guan Yu was, as every Shanxi-er knows, one of the province's most celebrated native sons. His hometown is located in present-day Yuncheng Municipality.

<sup>390</sup> Much more could be said on the role of religion in the conduct of Chinese business. Indeed, the subject is deserving of a monograph in itself. But this is, alas, outside the scope of this dissertation.

In addition to the circumstantial evidence, there are a few, scattered historical records that directly link *biaoqi* to temple fairs. A tantalizing passage in the Guangyuan County Gazetteer from Guangyuan County in northern Sichuan, appears to offer direct evidence linking Lord Guan temple fairs to the *biaoqi* system. Unfortunately, the passage is vague and thus my interpretation of it is speculative. The gazetteer records the existence a financial fair known as a “*guanqi*” (關期), and categorizes it within the same class of fairs as the *biaoqi*:<sup>391</sup>

市有鏢期、關期，交易有錢莊經紀，九年以後，屢以軍款借派，逼逃大賈，土著各商稱八大家者，旋皆逐斬銷滅，至紅軍之役，鄉之鐵爐富農，窖藏一空，廣元封蓋，於此啟盡，銀銅兩幣市渺然莫覓矣。

The market had a *biaoqi* and a *guanqi*. Their transactions were administered by the *qianzhuang*. Nine years later, a succession of armies forced people to lend them money and took levies. This forced the large merchants to flee. Local merchants consisted of eight large companies. These gradually disappeared. Upon the arrival of the Red Army, the countryside’s mints and rich peasants were stripped of every last belonging and Guangyuan county was sealed off. The situation was extreme. The markets for silver and copper disappeared without a trace.

The compiler implies that these fairs arose thanks to the influence of Shaanxi merchants (*qinshang* 秦商), suggesting their northern origins. The reference gives no detail at all about what a *Guanqi* was. However, it is grouped with “*biaoqi*” and thus is almost certainly a Shanxi-Shaanxi merchant convention for settlements. “*Guan*” likely refers to Lord Guan, in which case the *Guanqi* would be a Lord Guan temple fair that functioned as a settlement fair.

The most direct evidence linking the *biaoqi* to the system of temple fairs comes from the Zhangbei County gazetteer. Zhangbei County is located in present-day Hebei province, roughly 40 kilometers north of Zhangjiakou, whence its name. Zhangjiakou was the key entrepot in the

---

<sup>391</sup> Luo Yingxiang 羅映湘 and Xie Kailai 謝開來, *Minguo Chong Xiu Guangyuan Xian Zhi Gao*: 28 Juan 民國重修廣元縣志稿 [Republican-Era Edited Guangyuan County Gazetteer] (Chengdu: Ba Shu shu she, 2013).

Shanxi merchant overland trade. Zhangbei sat right on the main artery of the overland tea route, and was the usual resting place after the first day's travel over the steppe from Zhangjiakou to Kulun (present-day Ulaanbatar).<sup>392</sup> In the Republican period, Zhangbei boasted over 100 general stores, as well as shops specializing in products from Beijing and Canton. Many of these stores sourced their wares from Zhangjiakou.<sup>393</sup> In short, Zhangbei was a sensible location to hold a settlement fair, albeit nowhere near the size of the Zhangjiakou fairs.

The Zhangbei Gazetteer compiled in 1935 contains a section on local temple fairs. The gazetteer laments that since the 1920s, both commerce and festivities at the temple fairs have declined. But it reminisces about the golden era of temple fairs, recalling the yearly horse and donkey fair especially fondly. The horse and donkey fair was dedicated to trading in horses, donkeys, and other livestock, as well as in rural goods such as cloth. This temple fair was held yearly on the 24<sup>th</sup> day of the sixth month, and lasted a total of six days—the same duration as the *biaoqi*. The gazetteer describes the fair in its heyday, writing, “Before 1926, the [horse and donkey] fair brought in hundreds of thousands of yuan...It hosted theater, acrobatic performances, and competitions. People from all across the countryside within a 100 li [roughly 50 km] radius, all came to attend. Men and women riding in carts, donkeys, and horses were seen in a constant succession, while the market streets were abuzz with the bobbing of heads, 70 to 80 thousand, packed so close together there was barely a crack between them!”<sup>394</sup> At its most

---

<sup>392</sup> Liu Xiaohang 刘晓航, *Chuanyue Wanli Chalu 穿越万里茶路 [Traversing the 10,000 Li Tea Route]* (Wuhan: Wuhan University Press, 2015), 124.

<sup>393</sup> Zheng xie Duolun Xian wen shi wei yuan hui 政协多伦县文史委员会, ed., *Duolun Wen Shi Zi Liao 多伦文史资料* (Hohhot: Nei Menggu da xue chu ban she, 2006), 563.

<sup>394</sup> “民國十五年前此會出入總款數目約在十餘萬元會期以六日為限戲劇雜技分別賽演在百里以內之鄉村男女乘車騎馬絡繹於途會場街市萬頭攢動幾無隙地為數不下七八萬人頗極。” Chen Jiyan 陈继淹, *Zhangbei County Gazetteer 张北县志* (Chaha'er: Chengwen chubanshe, 1935).

prosperous, the massive fair brought merchants from Zhangjiakou, Beijing, Tianjin, and even as far away as Shanghai. It is clear the compiler Xu Wenshi (许闻诗), felt emotionally invested in the temple fair, and was perhaps seeking to impress upon future generations the value of what would soon be a lost tradition.

The gazetteer goes on to say that while many temple fairs were “only for theatrical performances, leisure, and buying and selling,” the horse and donkey fair fulfilled many critical functions in the economic life of local households. Peasants relied on the fair to purchase seeds and tools for planting. Merchants would come from near and far to sell to the peasants. Crucially, the gazetteer explains that the fair was used for settlements. It states:<sup>395</sup>

各鄉農民該外、外該債務結帳、還債遠隔一方，殊形不易，大多數規定會期彼此接頭清結一切，無異他處標期。

Distance makes difficult the settlement and repayment of debts owed by and owed to peasants from all over the countryside. Therefore, the greater majority of credit agreements were scheduled to come due at the temple fair. At that time, everyone would see each other face to face, and would settle all their debts. This is identical to the *biaoqi* held in other places.

In other words, the main fair of the city functioned as a clearing mechanism for household and commercial debts in the area. Functionally, it was the same as a *biaoqi*. Incredibly, the Gazetteer makes this explicit, stating that the fair was “identical to the *biaoqi* held in other places.” This is strong evidence that the *biaoqi* evolved from temple fairs. Or to put it differently, one might say that the *biaoqi* were an unusually large class of temple fair. It is also interesting that the author of the gazetteer seems to assume his readers would know how a *biaoqi* functioned. This is noteworthy in light of how rarely they show up in the written record outside the popular sources.

---

<sup>395</sup> Chen Jiyan 陈继淹, *Zhangbei County Gazetteer 张北县志* (Chaha'er: Chengwen chubanshe, 1935).



Thus far, I have focused on how the financial role of *biaoqi* could emerge out of the commercial and religious functions of temple fairs. Another way to approach the relationship between *biaoqi* and temple fairs would be to search for the continuing presence of temple fair cultural practices, including both religious ceremony and festivals. The most direct evidence of these practices comes from Kong Xiangyi, who writes:

过标时，商会还要组织唱戏，即从“过标”的第二天起，所有商号和金融机构，要筹措资金，聘请梨园优伶到城中的财神庙或关帝庙唱戏三天，娱乐庆贺，并祈求神灵保佑，发财致富，吉利平安。”

At the time of the *biaoqi*, merchant associations would organize operas to be played on the second day. All financial institutions were expected to donate. Actors from the theater world would be invited to the city's Temple of the Wealth God or the Temple to Lord Guan, and would perform for three days. There would be great festivities as well as prayers for divine protection, wealth, good fortune, and peace.”<sup>396</sup>

This passage matches the description of a temple fair so well that it is almost decisive.

Unfortunately, Kong Xiangyi does not cite sources. It is likely that he had no specific source, but was repeating folk knowledge gained from older generations. We do, however, find a similar passage in a news clipping from 1943 describing Xi'an's Mid-Autumn festival as a *biaoqi*. The report states, “Mid-autumn festival by commercial tradition is a *biaoqi*, and by popular tradition is a festival. It greatly stimulates market activity, with sales amongst fruit and sweet shops particularly bustling.”<sup>397</sup> Once again, this description maps closely to the holiday atmosphere we associate with temple fairs.

---

<sup>396</sup> Kong Xiangyi, 124.

<sup>397</sup> “中秋节为商业习惯上一大标期，民间习惯上一大令节，颇能刺激市面相当活跃，水果点心商店，交易尤形忙碌。” “Gedi Jingji Shikuang: Xi'an (Sha'an Nian'er Nian Jiu Yue Fen 各地经济市况：西安（陕·卅二年九月份）[Market Conditions around the Country: Xi'an (9/1943)],” *Jingji Huibao 经济汇报 [Economic Reports]*, 1944.

In conclusion, very little detail remains with which to recreate the cultural origins of the *biaoqi*. But the scattered references to *biaoqi* that we do reference practices—from operas to patronage of local deities—that are at least consistent with temple fairs. Moreover, given what we know about temple fairs’ commercial importance and the role of religion in Shanxi merchant institutions, the connection makes intuitive sense. It is therefore a reasonable speculation, albeit an untestable one, to posit *biaoqi* as emerging out of temple fairs that had expanded in volume and scope with the rise of long-distance trade along the frontier. The strong possibility that *biaoqi* developed from temple fairs is significant to the social history of China. It suggests that Chinese indigenous practices were adaptable to handling trade at scale, and even to the needs of an almost modern financial system.

#### *Biaoqi*: Settlements and clearing

This section demonstrates the utility of *biaoqi* in coordinating commercial settlements. Instead of paying for goods in hard cash or by bartering for them, merchants contracted sales on credit, with payment for goods “settled” at a later *biaoqi*. By allowing merchants to conduct transactions on trade credit, *biaoqi* expanded the potential volume of commerce and enabled more effective distribution of commodities. While previous scholarship has asserted the importance of *biaoqi* in coordinating settlements, it has not brought primary sources to bear on this claim. I draw on Qing-era commercial records to establish the centrality of *biaoqi* for settling commercial transactions. More importantly, I uncover the specific practices—centered around “settlement slips”—by which firms conducted bilateral settlements.

The basic role of *biaoqi* as a fair for concentrated settlements is clear from the gazetteers. The gazetteer from Gulang County, located in Gansu near Inner Mongolia, records a *biaoqi* held twice a year:

標期之習慣 商人買貨其價銀定標期歸還若至期不償則為大失信用矣亦有至期不能償議加利者。

The Practice of Biaoqi

Merchants purchase goods, and the cost of these goods is repaid at the Biaoqi. If on that date they do not repay their debts, it is an enormous loss to their credit. They will also have to pay interest on loans repaid in arrears.<sup>398</sup>

This shows that the Gulang *biaoqi* was used for settlements. My impression is the Gulang *biaoqi* was a smaller affair than those in Shanxi and Zhili, and used mainly to settle commercial credit.

Further west, in Xinjiang, the *biaoqi* was critical to facilitating trade with the interior.

The Republican-era Xinjiang Gazetteer records:<sup>399</sup>

內地商人輸轉百貨，率賒貸約期歸償謂之標期，他商多以兌匯交易，津商獨載現金，道歸化城以達京師，每歲春秋兩標按期應付，不應則傾覆立見雖氣脈促竭。Merchants from inner China circulate all manner of goods on credit and with loans. The agreed upon time when the credit must be repaid is called the *biaoqi*. Merchants from the interior conduct trades mostly in remittances. Only Tianjin merchants carry hard silver. The road to Beijing goes through Guihua. This trade is settled twice a year, at the spring and autumn *biao*. At this time, debts must be settled or else the firm will go under. It can be immediately seen that at this time of year, many will have their pulse quicken and become exhausted.

This passage directly speaks to the distributed nature of the settlement system. Dihua (迪化), present day Urumqi, had its own *biaoqi*. The Dihua *biaoqi* was a kind of satellite of the Guihua *biaoqi*. Specifically, merchants importing into Xinjiang were financed by the Guihua *biaoqi*

---

<sup>398</sup> Tang Haiyun 唐海雲 and Li Peiqing 李培清, eds., (*Minguo*) *Gulang Xian Zhi* (民國) 古浪縣志, electronic resource (Beijing Shi: Beijing Shi : Beijing Ai ru sheng shu zi hua ji shu yan jiu zhong xin, 2013), <http://server.wenzibase.com>.

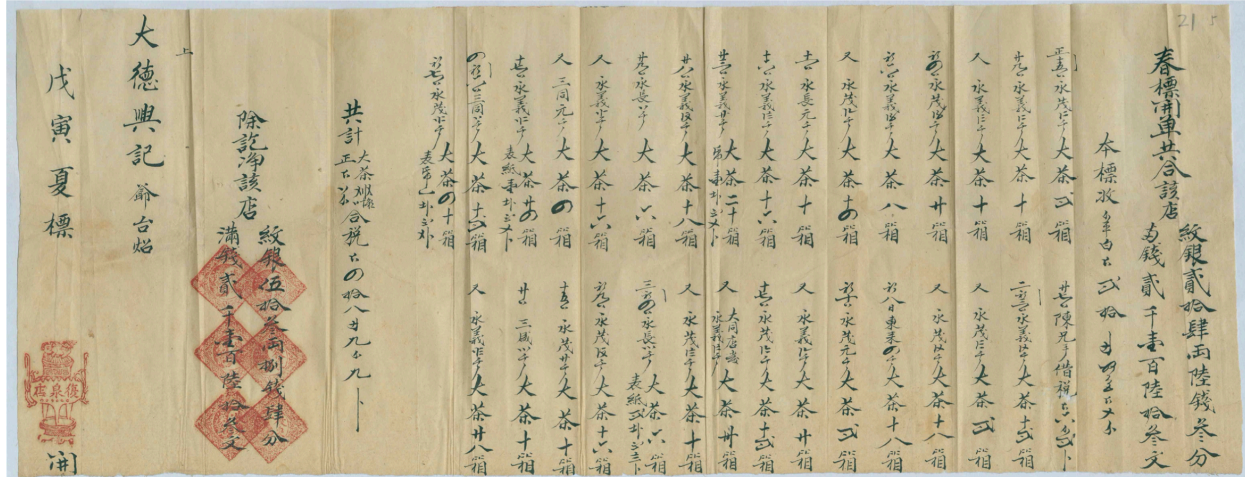
<sup>399</sup> Zhong Guangsheng 鍾廣生, (*Minguo*) *Xinjiang Zhi Gao* (民國) 新疆志稿 [Republican Period Draft of Xinjiang Gazetteer], electronic resource (Beijing Shi: Beijing Ai ru sheng shu zi hua ji shu yan jiu zhong xin, 2009), <http://server.wenzibase.com>.

system, and only had to settle obligations twice a year. At the same time, they extended credit locally through the Xinjiang system. The Gazetteer does not state how frequently the Dihua biaoqi was held, but it would likely have been four times a year. In this way, trade credit in a core financial market—Guihua—could flow to the periphery and finance commerce in Dihua.

The popular sources contain more granular detail on *biaoqi* settlements than is available in the gazetteers. One particularly revealing type of document is a “settlement slip” or *qingdan* (清单). These are documents that counterparties used to work through outstanding balances with one another. Settlement slips show how Shanxi merchant firms used *biaoqi* to conduct settlements. One highly valuable set of settlement slips available in the LJMPD dates from the mid 19<sup>th</sup> century. This slips were issued by the Fuquandian (复泉店) to the Dadexing (大德兴) company. These are shown in Image 20. At first blush, it would appear quite difficult to understand the details behind this set of transactions. But with closer scrutiny, it is possible to tease out a story.

Image 20. Dadexing Settlement Slips, 1878





Source: Dadexing Settlement slips, Settlement slips of other commercial firms (其他商号对账清单), LJMP.

The slip does not explicitly state the location of its issue, but it contains several clues indicating Baotou, in present day Inner Mongolia. The transaction is highly likely to be between two Qiao-family investees. The Qiao family was a prosperous merchant lineage from Qi County in Shanxi Province. After starting out in the Khiakta trade, the Qiao family began trading in Baotou as early as the Qianlong reign.<sup>400</sup> In the 15<sup>th</sup> reign year of the Jiaqing Emperor (1810), the Qiao family became the largest founding investor of the Dadexing company, one of the two counterparties on the tax slip. Dadexing grew to be a prominent tea distributor (*chazhuang* 茶庄) and an important player in the overland tea trade between China, Mongolia, and Russia.<sup>401</sup> As such, Dadexing had significant operations in Baotou. There is less information in the historical record about Fuquandian (复泉店), the other party in this transaction. But we do know

<sup>400</sup>Li Maosheng 李茂盛 and Wang Jin 王谨, eds., “Qixian Qiaojiabao Qiaoshi Jiazhu 祁县乔家堡乔氏家族 [The Qiao Family of Qi County’s Qiao Family Compound],” in *Jinzhong Shangye Jiazhu 晋中商业家族 [Merchant Families of Jinzhong]* (Taiyuan: Sanjin Press, 2019), 225-228.

<sup>401</sup> Li Chenguang 李晨光, *Jinshang Chalu 晋商茶路 [The Shanxi Merchant Tea Route]* (Taiyuan, Shanxi: Shanxi Chuban Jituan, 2008), 204.

that a Pingdang County Hu family invested in a Fuquandian in Baotou.<sup>402</sup> In addition, the “Fu” character itself is suggestive. Firms in Baotou associated with the Qiao family tended to name their concerns beginning with the character “Fu.” The most famous of these was the Fushenggong (复盛公) company, so-named because it was the successor company to the bankrupt Guangshenggong (广盛宫). Fushenggong was located in the heart of commercial Baotou, and immortalized in a local idiom: “First there was Fushenggong, and then there was the city of Baotou” (先有复盛公，后有包头城).<sup>403</sup> Of course this could be a coincidence. But given that we already know one of the counterparties was a Qiao investee, and the Qiao lineage named so many of their concerns “Fu,” it seems probable that the Qiao family also had a stake in Fuquandian. That would place the transaction squarely in Baotou.

Apart from the counterparties, the weights and measures serve as a second clue locating the transaction in Baotou. The copper cash balances are denominated in “manqian” (满钱). This was a kind of copper cash, so-named because of its Manchu language imprint. It circulated widely in Inner Mongolia.<sup>404</sup> In addition, a tax account settlement slip, also from Fuquandian and visible in Image 21, denominates silver balances in *qianping* silver taels (钱平白银).

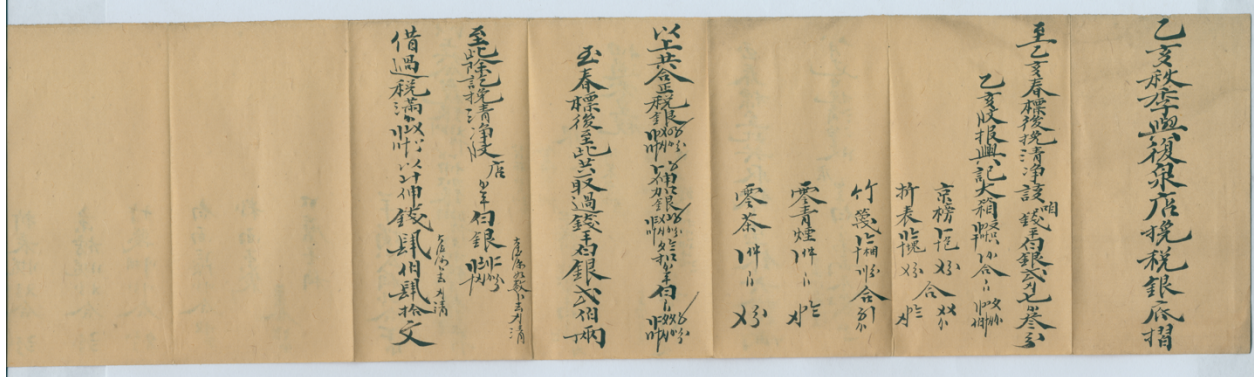
---

<sup>402</sup> Shanxisheng Zhengxie “Jinshang shiliao quanlan” bianji weiyuanhui 山西省政协《晋商史料全览》编辑委员会, ed., *Jinshang Shiliao Quanlan Yangquan Juan* 晋商史料全览 阳泉卷 [*Shanxi Merchant Historical Materials, Yangquan Volume*] (Taiyuan, Shanxi: Shanxi renmin chubanshe, 2006).

<sup>403</sup> Li Chenguang 李晨光, *Jinshang Chalu* 晋商茶路 [*The Shanxi Merchant Tea Route*] (Taiyuan, Shanxi: Shanxi Chuban Jituan, 2008), 204.

<sup>404</sup> “Qing-era Money (清朝时期货币)” in Finance Gazetteer of Inner Mongolia Editorial Committee 内蒙古金融志编委会 and Dong Huanan 董化南 et. al, eds., *Finance Gazetteer of Inner Mongolia* (内蒙古金融志), 2007, accessed 4/19/2021.

Image 21. Fuquandian Settlement Slip, 1875



Source: Fuquandian settlement slip, Tax settlement slips, LJMPIC.

“*Qianping*” refers either to the Guihua scale (城钱平 *Cheng qianping*) or the Zhangjiakou scale (口钱平 *Kou qianping*). The Guihua scale was also used in Baotou, thus both the scale and cash imprint are consistent with a Baotou transaction.<sup>405</sup>

Second, we must determine what kind of businesses these counterparties were, and the nature of the transactions involved. The nature of the Dadexing company is clear enough. As mentioned above, Dadexing was a major tea distributor, or *chazhuang* (茶庄). The Fuquandian is a more difficult case, as there is scant mention of Fuquandian in the historical record.

Nevertheless, there is enough information in the settlement slips to determine that it was a tea broker, or *chahang* (茶行). A *chahang* is a class of broker, or “*yahang*” (牙行) specializing in tea. *Dian* (店) was frequently used to denote that a commercial entity was a broker, much as *dang* denoted pawnshops and *tang* denoted lineage trusts or pharmacies. Thus, Susan Mann

<sup>405</sup> “Qing-era Money (清朝时期货币)” in Finance Gazetteer of Inner Mongolia Editorial Committee (内蒙古金融志编委会) and Hu Huanan (董化南) et. al, eds., *Finance Gazetteer of Inner Mongolia (内蒙古金融志)*, 2007, <http://116.113.96.251:8080/Search/SearchContent.aspx?RootId=20130716162701566&BookId=20140818160921031>, accessed 4/19/2021.

refers to employees of brokerages as *dianyuan* (店员).<sup>406</sup> In addition, we can see in Image 21, that the Fuquandian was financing tax payments. This is precisely the kind of service that a *yahang* would traditionally perform for its clients.<sup>407</sup> A broker-distributor relationship also makes sense. As a distributor and exporter of tea, Dadexing had always sourced its tea from a combination of its own buyers, as well as tea brokers.<sup>408</sup>

With the provenance of the slip clear, it is possible to analyze it in more detail. The settlement slip records a series of transactions from 1855, arranged in chronological order, from top to bottom and right to left, with each column entering two distinct transactions. The first is a financial transaction. Dadexing is borrowing copper cash to pay “taxes.” These taxes are the tariff on overland shipping collected at major ports of trade along the Sino-Mongolia-Russian trade route. Such tariffs had been collected on livestock since the reign of the Kangxi emperor.<sup>409</sup>

---

<sup>406</sup> Susan Mann, “Brokers as Entrepreneurs in Presocialist China,” *Comparative Studies in Society and History* 26, no. 4 (1984): 614–36.

<sup>407</sup> See Yan Hongzhong (燕红忠), “Qing Zhengfu Dui Yayang de Guanli Ji Qi Wenti 清政府对牙行的管理及其问题 [Studies of the Qing Government’s Management of Intermediary Business and Its Problems],” *Qinghua Daxue Xuebao: Zhexue Shehuikexue Ban 清华大学学报: 哲学社会科学版 [Journal of Tsinghua University (Philosophy and Social Sciences)]* 4 (July 15, 2012): 72–80; Lin Hongzhuang 林红状, “Qingdai Qianqi Yahang Zhidu de Yanbian 清代前期牙行制度的演变 [The Evolution of the Brokerage System in the Early Qing Dynasty],” *Lanzhou Xuekan 兰州学科* 9 (September 15, 2008): 126–29; Gong Guan 龚关, “Guanfu, Yahang, Yu Jishi: Ming Qing Zhi Minguo Shiqi Huabei Jishi de Shichang Zhidu Fenxi 官府、牙行与集市——明清至民国时期华北集市的制度分析 [Government, Yahang and Fair: An Analysis of Market System on Fair of North China During Ming, Qing and Minguo],” *Tianjin Shangxueyuan Xuebao 天津商学院学报 [Journal of Tianjin University of Commerce]* 1 (January 30, 2001): 18–22.

<sup>408</sup> Zhang Zhengming 张正明 and Zhang Shu 张舒, *Guotianshuhu Yirensihuhu: Shanxi Difangshi Tanlue 果天数乎抑人事乎——山西地方史探略 [Is It Cosmology or Human Endeavor? An Exploration of Shanxi Regional History]* (Shanxi jingji chubanshe, 2017), 571.

<sup>409</sup> Li Zhiguo 李治国, *Qingday Fannbubinli Yanjiu: Yi Menggu Wei Zhongxin 清代藩部宾礼研究——以蒙古为中心 [Research into the Qing-Era Board for the Administration of Outlying*



Beginning no later than the 26<sup>th</sup> reign year of Qianlong Emperor, customs officials were instructed to collect tariffs at both Shahukou and Guihua, in order to make smuggling more difficult.<sup>410</sup> The Qianlong emperor reinforced the customs system in his 32<sup>nd</sup> reign year by establishing a customs authority (监督办理 *jiandu banli*).<sup>411</sup> This authority subjected merchants to a series of tariffs and licensing regimes from Shahukou to Guihua. Thus, a more recent source writes, “The customs at Guihua mainly collected silver tariffs on goods and livestock.”<sup>412</sup> However, most sources make clear that tariffs were levied in both copper and silver. These entries show that large merchants could borrow at the *biaoqi* to meet their tariff obligations. In this way, *biaoqi* mitigated the disruption that taxes caused to long-distance commerce.

The rest of the entries record purchases of tea. The first entry in the second column, reads “廿七日，永义，元号，大茶二箱。” In English, this translates to “11/27, Yongyi, #1, Two cases of big tea.” It means that on the 11/27, Dadexing purchased two cases of tea. This tea was originally from Yongyi, a tea merchant from somewhere in southwest China, possibly from Ya’an in Sichuan.<sup>413</sup> In short, Yongyi can be considered the “brand” of tea. We know that

---

*Regions’ Rites for Receiving Officials: Centering on Mongolia*] (Neimenggu Daxue chubanshe 内蒙古大学出版社, 2014).

<sup>410</sup> Wang Jing 王静, *Gufeng Shilvuo* (古丰识略) (Nei Menggu ren min chu ban she, 2017).

<sup>411</sup> Zhang Zhengming 张正明 and Zhang Shu 张舒, *Guotianshuhu Yirenshihu: Shanxi Difangshi Tanlue* 果天数乎抑人事乎——山西地方史探略 [Is It Cosmology or Human Endeavor? An Exploration of Shanxi Regional History] (Shanxi jingji chubanshe, 2017), 179-180.

<sup>412</sup> “归化城税关主要征收货税和牲畜税” (*Guihuacheng shuguan zhuyao zhengzhou huishui he chuxushui*). In Chen Chunsheng 陈春声 and Liu Zhiwei 刘志伟, eds., *Yi da tou jian ji: ji nian Liang Fangzhong jiao shou dan chen yi bai zhou nian* 遗大投艰集: 纪念梁方仲教授诞辰一百周年, Di 1 ban (Ji nian Liang Fangzhong jiao shou dan chen 100 zhou nian ji Zhongguo she hui jing ji shi guo ji xue shu yan tao hui, Guangzhou: Guangdong ren min chu ban she, 2012).

<sup>413</sup> Zhao Guodong 赵国栋, “Zangcha Zhi Lv (Si): Ronghui de Ya’an Chachang Zhi Lishi 藏茶之旅 (四): 荣耀的雅安茶厂之历史 [Tibetan Tea Travels (IV): The Glorious History of Ya’an Tea Producers],” *Zhongguo Xizang Wang* 中国西藏网, December 10, 2019, [http://m.tibet.cn/cn/rediscovery/201912/t20191210\\_6721175.html](http://m.tibet.cn/cn/rediscovery/201912/t20191210_6721175.html).

Dadexing is the buyer and Fudiandian is the seller because of the respectful term used to address Dadexing. In addition, the slip is stamped seven times with the Fudian Shop seal, showing it was the one who had to verify the information on the form. Finally, the wording in the second slip, in Image 21, makes clear that a debt is owed to Fudian (除讫净该店纹银 53 两八钱四分、满钱二千一百六十三文”or “A net balance is owed to the shop of 53.84 taels of silver, and 2,163 of man copper cash”).

The transactions themselves cover two months, from the eleventh month of the previous year to the end of the 12<sup>th</sup> month, or New Years. On the left side of a slip, a summation of the transactions is presented as follows:

共计：茶 204 箱、纹银 1.02 两  
合该：税纹银二十四两六钱三分  
钱四千一百六十三文  
Total: Tea, 204 cases. Silver: 1.02 taels.  
Total due: Tax silver 24.63 taels  
Copper 4,163 cash

This means that Dadexing purchased a total of 204 cases of tea, and borrowed a small sum of 1.02 taels of silver. The 1.02 taels of silver was used to pay for the costs of bringing a personal opium lamp, which Fuquandian paid for and then charged to Dadexing’s account. The outstanding balance refers to taxes due on the tea. In context, it seems clear that “tax copper” and “tax silver” refer to the customs tax. The outstanding silver balance is more complicated. The settlement slip records only 1.02 taels of silver in pure financial actions. As stated, this is to pay for the cost of bringing an opium lamp. But the outstanding balance at the end is fully 24.63 taels. Thus, there is a 23.61 tael gap between the borrowings and the outstanding balance. This means that of the outstanding balance, all 4,163 copper cash and 23.61 taels of the 24.63 taels are

consideration for the tea tax. This amounts to an average tax of 23.61 copper cash and 0.115 taels of silver on each case of tea.

At the next *biaoqi*, as Image 20 shows, we see that these balances have mostly been rolled over. The summer *biao* settlement slip begins with the following statement:

春标开单共合该店：纹银二十四两六钱三分、满钱二千一百六十三文

Spring *biao* balance owed: 24.63 taels of silver, 2,163 copper cash.

Evidently, Dadexing paid down 2,000 copper cash balance last *biaoqi*, thus bringing the balance to 2,163 copper cash. The final silver balance owed to Fuquandian at the end of the summer *biao* is recorded as 53.84 taels. This comes from Dadexing making a payment of 20.4 taels at the beginning of the *biao*, borrowing another 0.62 taels and 0.8 taels, and finally owing 48.99 taels of taxes on the 424 cases of tea. Note that this tax rate is exactly the same as at the previous *biao*, a tariff of 0.115 taels per case of tea.

Essentially, what we are looking at is a kind of revolving credit account that Dadexing kept with its broker, the Fuqian shop. As part of its services, Fuqian helped its client Dadexing pay taxes on tea shipments. Dadexing would therefore not have to worry about carrying around hard silver to meet tax obligations. Dadexing would have to settle its balance at the *biaoqi* time, but even this did not mean paying it off completely. Rather, Dadexing was allowed to roll over its balance to the following *biaoqi*. As a major financial concern, Dadexing likely had excellent access to credit. But its use of slips to conduct bilateral settlements and to keep track of outstanding loans, as well as its ability to borrow funds in order to meet regular tax obligations, is probably broadly representative of how many firms trading in a wide variety of goods made use of the *biaoqi*.

Even corporate entities dealing in everyday goods used the *biaoqi* to conduct settlements. One of the earliest references to the *biaoqi* that I have found in the popular sources comes from

the correspondence book of a cotton trader from *Pingyao* county in the Daoguang reign. A letter sent in the ninth or tenth month during an unknown year of the Daoguang reign reads:<sup>414</sup>

启者，咱号买过 亨泰店郝马旧花五十包，价干银 1160，期至冬标交宝银三百两，下余银腊月廿五日全交。又买 昆源大旧现花一百三十包，价干银 1170，期至冬标，三厘起息至腊月廿五日交还。咱卖过菩萨空花五十包，每百斤价干银 12.30，冬标交宝银一百两，其余长年 5 半行息。

Respectfully, our company purchased from the Hengtai shop, 50 bundles of majiu cotton at a price of 1160 taels of gan silver. 300 taels of silver sycee will be paid at the winter *biao*, with the remainder to be paid on the 25<sup>th</sup> day of the 11<sup>th</sup> month. We also purchased 130 bundles of kunyuandajiu spot cotton at a price of 1170 taels of gan silver to be paid at the winter *biao*. This credit will accrue an interest of 0.3% per month, to be paid on the 11<sup>th</sup> day of 25<sup>th</sup> month. We also sold 50 cases of Bodhisattva emptiness cotton at a price of 12.30 taels per hundred *jin*, with 100 taels of silver to be paid at the winter *biao*, and the rest to be paid one year later, accruing an annual interest rate of 5.5%.

This letter shows the merchant buying and selling cotton. These are clearly wholesale transactions as the volumes are substantial. In all transactions in this passage, we see that consideration for the cotton is due at least in part at the upcoming *Pingyao* winter *biao* or even at next year's winter *biao*. Some of this trade credit is interest-bearing, in which case the interest is due either at a *biaoqi* or one month after the *biaoqi*.

Another correspondence book from a trading firm operating mostly in Mongolian areas “beyond the pass,” shows how firms specializing in frontier goods also relied on *biaoqi*. One letter, sent in the tenth reign year of the Guangxu emperor, references mushrooms being settled at the first month *biaoqi*. The letter reads:<sup>415</sup>

...咱卖过批蘑菇十柜，小 5，佃 1.95 钱，混菇 2 柜加一个一钱，其银大寅标全清。又卖过高批蘑菇四柜小 5，佃 2.4 钱，明年四月标全清，下余未卖。

...We sold a shipment of ten chests mushrooms, short five mushrooms for which we rebated 0.195 taels, a shipment of two chests of mixed mushrooms with an extra

---

<sup>414</sup> Daoguang era *Pingyao* cotton shop correspondence book to Xi (道光某年平遥某花店往郝书稿), LJMPC, 15.

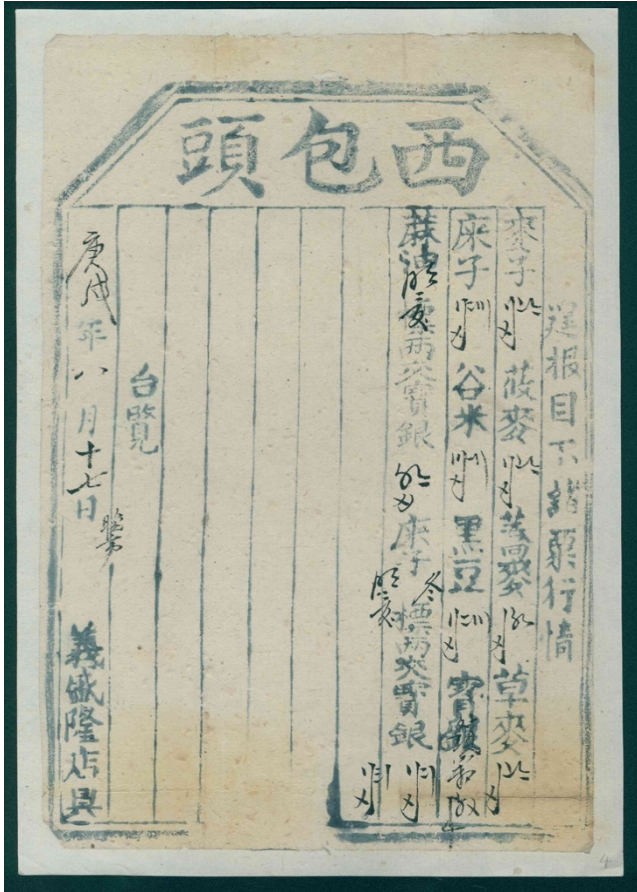
<sup>415</sup> Correspondence book of miscellaneous firm, 1/1878 (光绪十四年正月某商号信稿), LJMPC, 1.

mushroom for which we received an extra 0.1 taels of silver. This silver will be paid in full at the first month's great *biao*. We also sold a shipment of four chests of tall mushrooms that was short 5 mushrooms for which we rebated 0.24 taels. This shipment will be paid for in full at next year's fourth month *biao*. The rest of our mushrooms have not yet been sold.

This passage is quite similar to the previous passage, except that it takes place in Zhangjiakou instead of Pingyao. This is clear because of the reference to the “the great *yinbiao*”—the *biaoqi* held in Zhangjiakou during the first month of every year. In sum, we see a firm selling mushrooms. But rather than collect cash it extends trade credit to its customers, all of which must be repaid at the first month *biaoqi* and various *luobiao*.

Finally, we can look to “quotation slips” (行情单 *hangqingdan*) for a holistic view of the kinds of commodities going through *biaoqi* markets. Quotation slips were printed notices with the most recent market quotations in a given locale. The earliest quotation slip that shows commodities prices at a *biaoqi* comes from Baotou, and dates from the 17<sup>th</sup> day of the eighth month of the Gengxu year (庚戌年), or 1910. The quotation slip can be seen in Image 22.

Image 22. Quotation slip, Baotou, 1910



Source: Quotation slips, LJMP, 10.

The slip shows a series of price quotations for wheat, oats, buckwheat, grass wheat,<sup>416</sup> broomcorn millet, millet, black soya beans, and silver. These prices are mostly spot prices, and

<sup>416</sup> This refers to wheat grown in the grassland, i.e. in Mongolian regions “beyond the pass.” As with wheat in Shanxi province, grass wheat was often made into flour and mixed with sorghum, buckwheat, broomcorn millet, mungbean, or oat flour before being made into noodles. This is still common in much of northern China, and informs an old Shanxi peasant rhyme: “三十里莜面，四十里糕，十里的荞面饿断腰。” In English this means, “Thirty *li* on oat noodles, forty *li* on broomcorn millet. Ten *li* on buckwheat and you’ll buckle in hunger!” In other words, oat noodles are filling enough that a person can walk thirty *li* on them. Broomcorn millet noodles are so filling that a person could walk forty *li* on them. But buckwheat noodles are so insubstantial, that if you walk a mere ten *li* after eating them you will double over in hunger. In some versions of this rhyme, “豆面”—or mungbean noodles—is substituted for buckwheat.

do not necessarily have anything to do with the *biaoqi*. But the final line of quotations are prices for commodities at the *biaoqi*. This line reads:

麻油：明春标两交宝银 5.7 两。糜子：冬、明春标两交宝银 2.21 两、2.31 两  
Sesame oil: at next year's spring *biao* pay 5.7 taels of silver sycee. Broomcorn millet: at the winter and next year's spring *biao* pay 2.21 taels and 2.31 taels of silver sycee, respectively.

This is nothing less than a futures market in commodities! It means there is a liquid market for sesame oil and for broomcorn millet that is settled at the *biaoqi*, and which is distinct from spot markets in these commodities (and trades at different price). A merchant without cash on hand—but with sufficient credit—could purchase winter *biao* glutinous millet. Then, when the winter *biao* arrived, he would receive his millet and pay 2.21 taels per *dan*.

This section has established the importance of the *biaoqi*'s role in coordinating settlements. It has provided overwhelming evidence to show how wholesale commodity transactions in the northern frontier were not done via cash or barter, but via a system of trade credit. This trade credit often came due at *biaoqi*, meaning the merchants were using *biaoqi* fairs to settle commercial transactions. In short, *biaoqi* were a kind of “node” in the northern system of wholesale, overland commerce. They allowed merchants to conduct large-scale trade without having to carry around bulky bullion or barterable goods. Furthermore, this section has touched on two other aspects of the *biaoqi*. First, it has hinted at liquid credit markets. In the event that a solvent firm had inadequate cash to meet their *biaoqi* obligations, we have seen that they could roll their obligations over to a future *biaoqi*. Furthermore, some examples of trade credit cited above accrued interest. This indicates that there was a *market* in credit. Credit markets at the *biaoqi* are the subject of the following section. Finally, this section has shown that some

commodities traded as futures, due at *biaoqi* dates; futures markets are discussed in more depth later on in this chapter. For now, it is enough to point out that futures are another form of financing trade and production; thus, futures markets were another way that *biaoqi* transmitted price signals throughout northern China about relative supply and demand for key commodities. This means that just as village markets coordinated the flow of economic resources in the countryside, so *biaoqi* and similar fairs coordinated the flow of commodities and financial capital across northern China.

#### Credit markets and interest rates at the *biaoqi*

This section discusses credit markets at the *biaoqi*. First, I examine four different types of loans available at a *biaoqi*: *manjia*, short-term, monthly, and annual loans.<sup>417</sup> In doing so, I demonstrate that *biaoqi* settlement fairs hosted liquid credit markets, with interest rates that fluctuated daily. These credit markets were forward looking one year in advance, with different rates quoted for different loan terms. In other words, a loan due at the *biaoqi* one quarter out would accrue interest at a rate different from a loan due at the *biaoqi* three quarters out. Second, I show that these liquid credit markets could be accessed even by individuals or institutions without a physical presence at the *biaoqi*. This is because financial institutions offered brokerage services to clients. The importance of these findings cannot be overstated. They constitute strong evidence that financial “exchanges” were developing in China, albeit in embryonic form, prior to the arrival of western-style stock exchanges.

---

<sup>417</sup> This taxonomy comes from Jiang Xuekai, 18.



The *manjiali* lending market was open daily, with rates fluctuating continuously throughout the year. But all *manjiali* loans settled at the *biaoqi*. Indeed, the word “*manjiali*” is short for *manbiao jiali* (满标加利), or “interest added upon completion of the *biao*.” *Manjiali* loans were forward-looking one *biaoqi* in advance. In Jiang Xuekai’s words, “trading in summer *biao* loans commenced at the spring *biao*, trading in autumn *biao manjiali* loans commenced in the summer *biao*, trading in winter *biao manjia* loans commenced at the autumn *biao*, trading in the following year’s spring *biao manjia loans* commenced at the winter *biao*, and so on.”<sup>418</sup> Several months prior to the *biaoqi*, there was also “pre-trading” (预开 *yukai*) in *manjiali* futures, allowing firms to lock in their rates ahead of time. Loans yielding the *manjia* rate could be borrowed at any time, but had to be repaid at a settlement fair.<sup>419</sup> This meant that *manjiali* lending markets operated continuously from one *biao* to the next. As a result, the term of *manjia* loans varied dramatically, from anywhere between a few days to a full three months. For example, if the spring *manjia* rate (春满加利) were quoted at the winter *biao*, there would be three months before the loan came due. But if it were quoted close to the start of the spring *biao*, the loan term might only be a matter of days.

What exactly a *manjiali* rate meant—i.e., how it was quoted—remains a matter of scholarly dispute. Jiang Xuekai characterizes *manjiali* as a floating rate quoted in terms of the taels of interest due at the following *biao* on 1,000 taels of principal. Kong Xiangyi disagrees; according to Kong, “If at the seasonal *biao* or *luobiao*, a firm did not have sufficient deposits to meet its payments, it had to borrow silver from financial institutions. At this time, the interest

---

<sup>418</sup> “春标开夏标，夏标开秋标，秋标开冬标，冬标复开次年春标。依此循环。” Jiang Xuekai, 18.

<sup>419</sup> Jiang Xuekai and Chen Tianyi emphasize this as well.

rate would be relatively high. On top of the base interest rate on silver, firms would have to add a floating premium. This premium was called the *manjiali*.<sup>420</sup> In other words, Kong believes the *manjiali* was a floating rate conceived of as a premium to a base, monthly rate, or *biaoli*. This understanding of the *manjiali* would be familiar to present-day bond trade traders, who quote credit precise in terms of a premium to a floating benchmark such as the Fed Funds rate, LIBOR, or SHIBOR. Unfortunately, I believe it is inaccurate. The popular materials provide overwhelming support for Jiangn Xuekai's understanding of the *manjiali*. That said, I hesitate to dismiss Kong's view entirely. Kong draws on the Xugou county gazetteer, while the popular materials are mostly from Pingyao, Taigu, and Qi Counties. We cannot rule out the possibility of regional variation in how *biaoqi* and *manjiali* credit markets functioned.

The most detailed popular sources with evidence of *manjia* loans are the ledgers of Qing-era *zhangju*. *Zhangju* kept account books called *jiedaizhang* (借贷账), or "loan books."<sup>421</sup> The information in these account books includes the term, rate, and amount of loans and deposits. One of the most information-rich account books comes from a *zhangju* named Tianshunkui (天顺奎). Tianshunkui was located in Qi County's Big West Street (西大街), where many of the

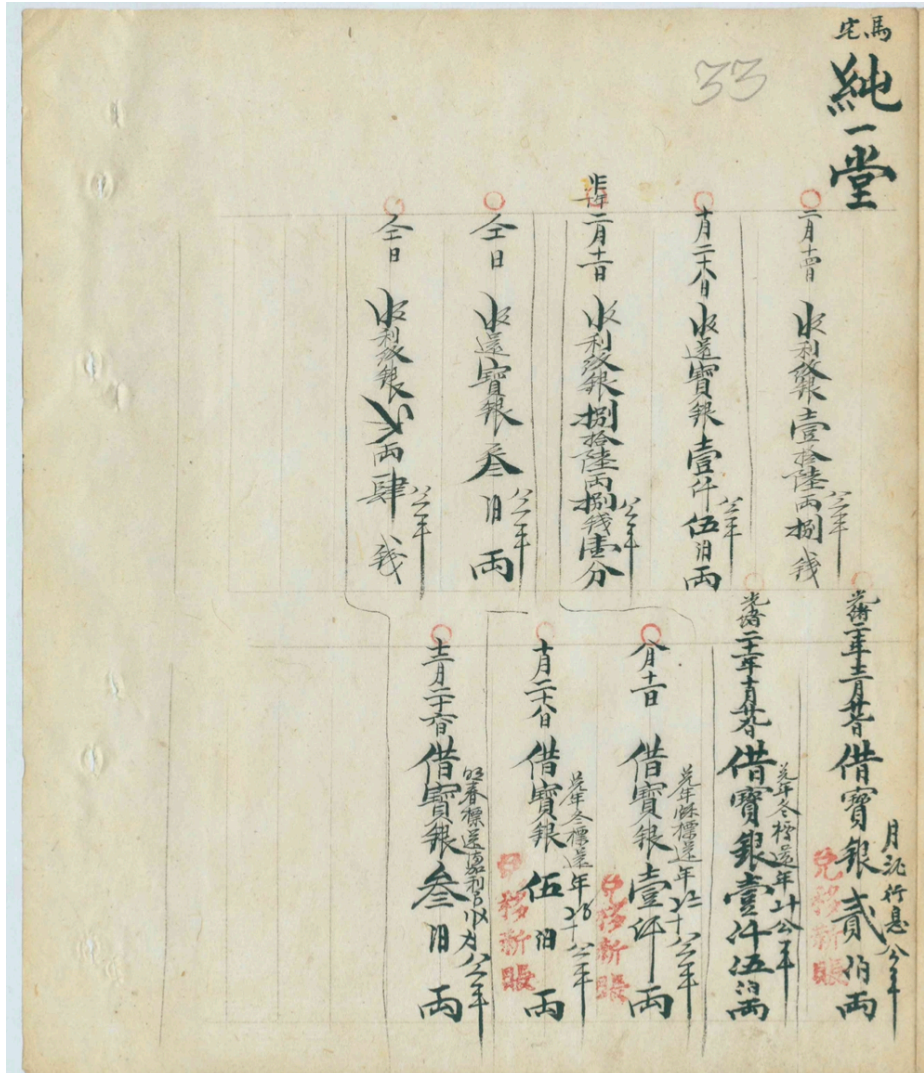
---

<sup>420</sup> “如果遇到季鏢、驛標，本商号存款不足 支付，必須向金融机构借用銀兩，此時利息較高，要在既定的銀兩借貸利率基礎之上臨時 議加若干，謂之滿加利。” In Kong Xiangyi, 123.

<sup>421</sup> In traditional Chinese bookkeeping, client accounts (*fenhuzhang* 分戶賬) were a key component of the accounting system; they played part of the role that a “general ledger” would play in western accounting, and fed directly into the “four pillar” final accounting of assets. Cao Shuji 曹樹基, Li Jinzhang 李錦章, and Wang Guojin 王國晉, “‘Tong Yi Zhang, Ji Liang Bu’: Qingdai Fengshengtaihao Zhangben de Fushi Buji ‘同一賬，記兩簿’：清代丰盛泰號賬本的複式簿記 [One Transaction, Recorded Twice: Qing-Era Double-Entry Bookkeeping in the Accounts of the Fengshengtai Company]” (Unpublished).

Shanxi merchant's most important financial institutions were based.<sup>422</sup> An example of one of its client accounts can be seen in Image 23.

Image 23. Tianshunkui client account, Chunyi Hall, 1895



Source: "Tianshunkui loan book, 1895" (光绪二十一年天顺奎借贷账), LJMPC, 33.

The account is for the Chunyi Hall (纯一堂), a lineage trust of a family surnamed Ma. The Qi County Ma family appears to have gotten its start in business in the early Qing as cloth

<sup>422</sup> Ma Shaohua (马绍华), "The Qi County Ma's: A Story of a Shanxi Merchant Family (祁县马姓晋商家的故事)," Blog, *Chunyi Hall (纯一堂)* (blog), February 17, 2012, [http://blog.sina.com.cn/s/blog\\_9c4b8a5301010101bk.html](http://blog.sina.com.cn/s/blog_9c4b8a5301010101bk.html).

merchants and livestock traders along the frontier. The Qi County Ma's may also have been investors in Tianshunkui.<sup>423</sup>

This account records five loans made from Tianshunkui to its client, Chunyi Hall. The first loan accrues monthly interest, the second through fourth loans accrue annual interest, while the final loan accrues “*manjia*” interest. From the text of the fourth loan, we see that the Qi County winter *biao* in the 21<sup>st</sup> reign year of the Guangxu Emperor (1895) was held on the 28<sup>th</sup> day of the 10<sup>th</sup> month. We then see that the fifth loan was made two months later—well before the spring *biao*. This loan was repaid, with interest, 50 days later on the eleventh day of the second month, or the 1896 spring *biao*.

The Tianshunkui accounts give us an unprecedented window into the world of Qing-era high finance. The clients of Tianshunkui are virtually all institutional accounts, either corporate entities (字号 *zihao*), lineage trusts (堂号 *tanghao*). Moreover, nearly all of the loans extended are due at various *biaoqi*, and quote in the *manjia*, annual, or monthly rates. This shows that *biaoqi* were indeed much more than logistical conveniences for settling commercial transactions. They were liquid, rolling credit markets that allowed merchants to settle obligations and purchase inventory—in short, to trade—without worrying overmuch about cash on hand.

More importantly, the Tianshunkui accounts show an interest *payment* that is identical to the recorded *manjiali* rate! That is, the quoted rate entered upon extending a loan—and visible in the bottom-left-hand corner of Image 23, reads “明春标还，满加利银 2.4 两，公平”，or “Due at next year's spring *biao*, *manjiali* 2.4 taels, public scale.” This means that the loan of 300 taels

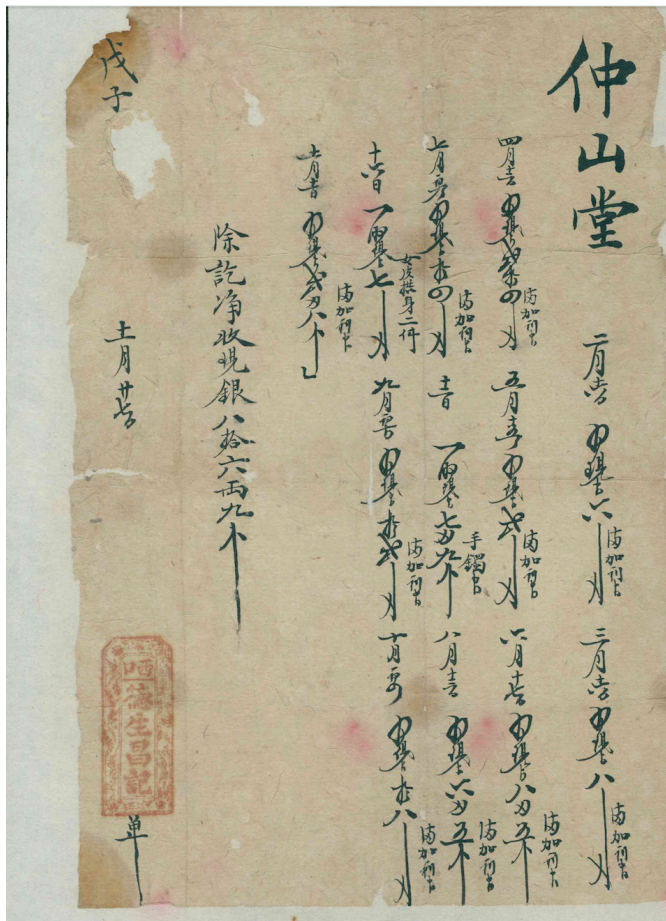
---

<sup>423</sup> Ma Shaohua 马绍华, “Qixian Maxing Jinshangjia de Gushi 祁县马姓晋商家的故事 [The Qi County Ma's: A Story of a Shanxi Merchant Family],” Blog, *Chunyi Tang 纯一堂* (blog), February 17, 2012, [http://blog.sina.com.cn/s/blog\\_9c4b8a53010101bk.html](http://blog.sina.com.cn/s/blog_9c4b8a53010101bk.html).

was a *manjia* loan, accruing an interest of 2.4 taels. The final entry on the left-hand side of the top of the ledger records this interest payment, of exactly 2.4 taels. This proves that the *manjiali* rate was not being added to a benchmark rate, but was simply the total interest due on a loan. This suggests that when quoted without respect to principal, as a market quotation, the *manjiali* rate was simply the interest due on 1,000 taels; not the premium to a benchmark rate.

Settlement slips similar to those displayed in section three also reference *manjia* loans. An example of such a slip can be seen in Image 24.

Image 24. Settlement slip, Deshengchang and Zhongshan Hall, 1888



Source: Settlement slips of other commercial firms (其他商号对账清单), LJMP, 41.

This settlement dates from the year Wuzi (戊子年), or 1888. The seal on the lower left-hand corner tells us the provenance of the slip. “Xi kou” (西口) refers to Guihua, or present-day Hohhot. Deshengchang (德生昌) was a Guihua qianzhuang.<sup>424</sup> The client, in the upper-right-hand corner is Zhongshan Hall (仲山堂), a lineage trust that apparently had borrowed money from Deshengchang. The slip shows regular, monthly collections of *manjia* interest. These vary considerably, though there is no way to know if this fluctuation is due to changes in the underlying principal or changes in the market rate. The slip also shows two advances that Zhongshan Hall received from Deshengchang for the purchase of a bracelet, and for two women’s, body-covering furs, respectively. The fact that collection of interest occurs once a month is significant. These dates are the *biaoqi* and *luobiao*, that is, the quarterly and monthly settlement fairs. Note also the crucial fact that interest payments—but not principal payments—are being made regularly. This shows that the *manjia* loans was a kind of rolling credit. In other words, it was a source of long-term funding for liquid assets similar to a present-day revolving loan. Since it is frequently alleged that indigenous Chinese finance was incapable of long-term financing, this is a significant finding. It is also significant that *manjiali* is being paid, again, without reference to any kind of underlying base rate. “Manjiali silver” is stated as the item that is being collected, in the same way that a bracelet is listed as the item being paid for. Given Shanxi merchant bookkeeping conventions, the implication can only be that *manjiali* was a free-standing interest rate—and not a premium over a base rate.

---

<sup>424</sup> Finance Gazetteer of Inner Mongolia Editorial Committee (内蒙古金融志编委会) and Dong Huanan 董化南 et. al, eds., *Neimenggu Jinrongzhi 内蒙古金融志 [Finance Gazetteer of Inner Mongolia]*, 2007, <http://116.113.96.251:8080/Search/SearchContent.aspx?RootId=20130716162701566&BookId=20140818175519539>, accessed 4/19/2021.

In addition to *manjia* loans, Jiang Xuekai mentions a market in short-term credit. He states that interest on short-term loans was calculated daily and short-term loans settled at the *liangbiao*. This makes it sound like an interbank overnight rate—not unlike the Shanghai *yinchai* (银拆)<sup>425</sup>—but that used the settlement fair system to facilitate settlements and clearing. However, I have yet to find a single piece of evidence for short-term loans in the popular sources. This may reflect a failure on my part to recognize them, a bias in the source material, an object-level relative unimportance of the daily market, or perhaps—and I suspect this is the case—all of the above. There are a handful of Republican-era publications that touch on the *liangbiao*. I discuss these later in this chapter, in the section on exchange markets.

The third credit market in the *biaoqi* system was the market in monthly loans. These are loans borrowed at a settlement fair and payed back at a later settlement fair. The price of these loans were denominated in monthly interest (月息 *yuexi*), whence the name. These markets were, like *manjia* loans, forward-looking. At a given *biaoqi*, there was a market for monthly loans extending three *biaoqi* in advance.<sup>426</sup> Reference to monthly loans are abundant in the popular sources. We can turn to another account book for an example, shown in Image 25.

---

<sup>425</sup> Austin Dean, “The Shanghai Mint and U.S.-China Monetary Interactions, 1920-1933,” *Journal of American-East Asian Relations* 25, no. 1 (01 2018): 7–32, <https://doi.org/10.1163/18765610-02501002>.

<sup>426</sup> Jiang Xuekai, 19.

Image 25. Yushungong Co, Pingyao Yin hao (Name unknown) Client Accounts, 1852

裕順公記

保生息賬移未廿八年十月廿六日借去本之數卅肆十元

保日賬移未收數卅七拾元

月元秋擇邊批有約

折

Source: Miscellaneous *yinhao*, client accounts, 1852 (咸丰二年正月平遥某银号银钱来往账), LJMPC, 1.



This image shows a client account from the loan book of an *yinhao* (银号), or “native bank” dealing in silver loans, deposits, and notes, based in Pingyao county.<sup>427</sup> Unfortunately, the name of the *yinhao* is unknown. The text of the account reads as follows:<sup>428</sup>

裕顺公记

(保) 生息账移来, 廿八年十月廿六日, 借去本足纹银一千两  
月 4 厘, 秋标还, 批砒有约砒平

(保) 旧账移来收纹银七佰〇七两叁钱四分

折

Yushungong Company

(seal) Recorded from interest-bearing accounts, 28<sup>th</sup> reign year [of the Daoguang Emperor; i.e. 1848], loan principal of 1,000 taels of pure silver  
Interest of 0.4% monthly, due at autumn biao, scale agreed upon in contract. Scale

(seal) Recorded from old accounts. Received 707.34 taels of pure silver.

Moved

This customer account records two transactions with a client Yushungong. We cannot be sure who Yushungong was, but during the Republican-period it was the name of an *yinhao* from Lingshi County (灵石县) in Shanxi as well as another *yinhao* in Xingtai (邢台城) in Zhili.<sup>429</sup> It seems likely that these were named after an older *yinhao* in the heart of the northern financial

---

<sup>427</sup> Andrea Lee McElderry, *Shanghai Old-Style Banks (Ch'ien-Chuang), 1800-1935: A Traditional Institution in a Changing Society*, Michigan Papers in Chinese Studies, no. 25 (Ann Arbor: Center for Chinese Studies, University of Michigan, 1976) writes that *Yinhao* and *Qianzhuang* were identical, a claim repeated frequently throughout the literature. This is incorrect for reasons that deserve thorough elaboration in an article of their own. In brief, *yinhao* kept their books in silver while *qianzhuang* denominated accounts in copper. This simple difference in bookkeeping went in tandem with different emphases in operations. In short, *yinhao* and *qianzhuang* were “the same” only inasmuch as to an outsider familiar with an alien financial system, present-day banks, brokerages, and investment banks might seem more or less the same.

<sup>428</sup> Miscellaneous *yinhao*, client accounts, 1852 (咸丰二年正月平遥某银号银钱来往账), LJMPC, 1.

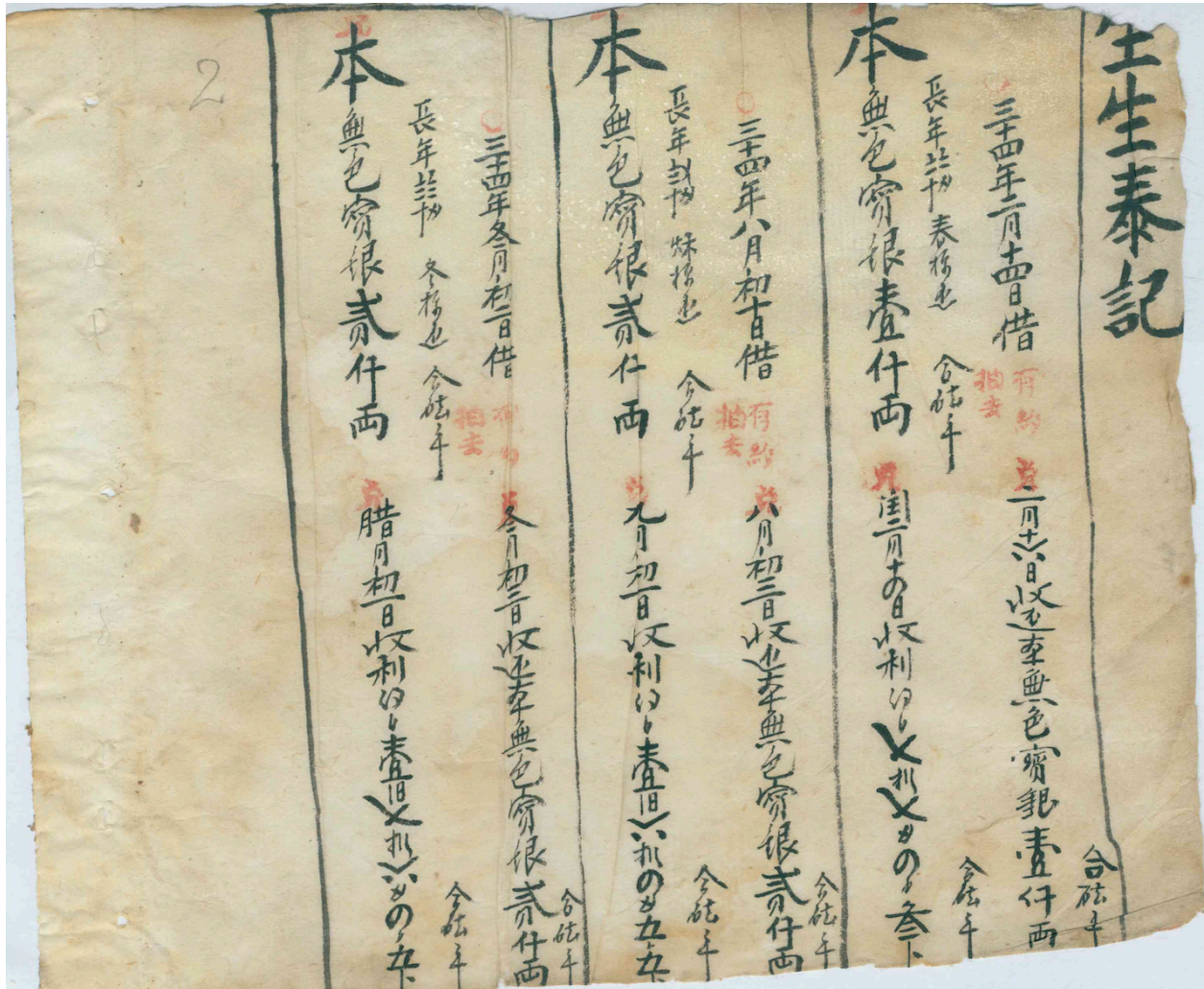
<sup>429</sup> Wang Jinding 王金钉 and Wang Rujie 王儒杰, *Zhongguo Lishi Jingsheng Shihai gouchen 中国历史静升史海钩沉 [Delving Deeply into the Waters of Chinese History]* (Dongfang Chubanshe, n.d.), 318. Zhang Boqian 张佰仟, “Jingsheng Xiejie Wenwu Baohu Xiufu 静升西街文物保护修复,” *KKNews*, October 22, 2018, <https://kknews.cc/zh-sg/culture/2za6qyr.html>.

system, Pingyao County. Thus, it is at least plausible that this account is an “interbank” account between two *yinhao*.

This client account displays two distinct transactions. The first transaction, on the bottom half of the ledger, is a loan that the unnamed *yinhao* extended to Yushungong on the 26<sup>th</sup> day of the tenth month of the 28<sup>th</sup> reign year of the Daoguang emperor (1848). The loan was for a principal of 1,000 silver taels, and accrued interest of 0.4% monthly, due at the autumn *biao*. This is precisely the kind of “monthly loan” that participants in the *biaoqi* depended on for medium-term financing. Similar entries, in the books of multiple financial institutions, abound. The 0.4% monthly rate is well within the range of typical rates seen in *biaoqi* monthly loan markets—and, of course, far lower than the conventional wisdom on pre-modern Chinese credit markets would predict.

The fourth and final category of loan was an annual loan, known as a *changnian* (长年) loan. These were borrowed at a given *biaoqi*, and repaid one year later at the *biaoqi*. Annual rates are quoted in the same way as *manjia* loans, in terms of silver taels of interest per 1,000 taels of principal. Typical rates run from anywhere between 20 to 80 taels of silver per thousand, or 2% to 8% annually. Annual loans are the most common kind of loan found on loan books of *zhangju*. An example of such a loan can be seen in Image 26.

Image 26. Client accounts of Pingyao Zhangju (unnamed), 1908



Source: Miscellaneous *zhangju* loanbook, 1867(光緒三十四年帳局借貸帳), 2.

Image 26 is a page from the client account book of an unnamed *zhangju* from Pingyao county. The account book dates from the 34<sup>th</sup> and final reign year of the Guangxu Emperor (1908), but contains loans going back to the first year of the Guangxu imperial reign (1874). The text in the first box of the image, starting from the right, is transcribed as follows:<sup>430</sup>

生生泰記

(兑) 三十四年二月初四日借 (有约拍去) 本无色宝银一千两  
 長年 77 两春标还 合砵平

<sup>430</sup> Miscellaneous *zhangju* loanbook, 1867(光緒三十四年帳局借貸帳), 2.

(兑) 二月十六日收还本无色宝银一千两 (合砵)

(兑) 闰二月十四日收利宝银七十七两四钱三分 合砵平

Shengshengtai Co.

(seal) 2/14/34, loan of (recorded in contract) principal 1,000 taels of colorless silver sycee

*Changnian* 77 taels, to be repaid at the spring *biao* standard scale

(seal) 2/16, received repayment of principal 1,000 taels of colorless silver sycee (standard scale)

(seal) Leap month 2/14, received interest of 77.43 taels of colorless silver sycee at the standard scale

This account shows that the *zhangju* lent the Shengshengtai Co. 1,000 taels of silver at a rate of 7.7% per year. The loan was extended at the 1908 spring *biao*, and repaid one year later, at the 1909 spring *biao*. Note that the interest was not paid until the following month, in the intercalary second month of 1909. This is in keeping with a common Shanxi merchant convention that allowed interest to be paid after principal. The slight 0.43 tael charge above the quoted interest rate is to compensate the lender for the fact that the 1905 spring *biaoqi* fell two days later than the 1904 spring *biaoqi*.<sup>431</sup>

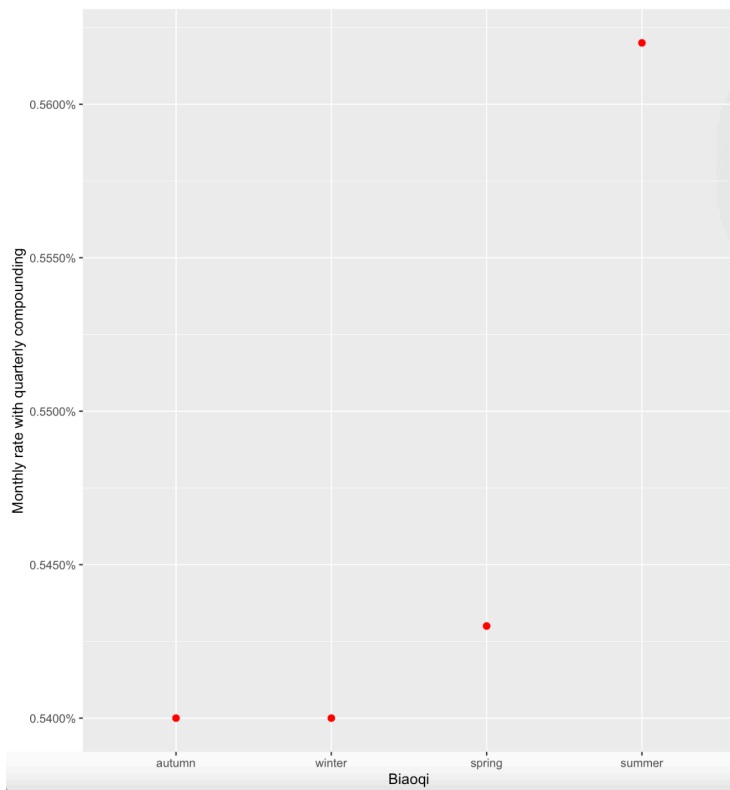
The fact that *biaoqi* markets quoted different prices for different terms of credit meant that it formed what economists call a “term structure of interest rates,” more commonly known as a “yield curve.” In layman’s terms, this means that the price of borrowed money depends on how long you want to borrow it for. Intuitively, this should make sense. In a market economy, supply and demand of credit varies with the term of a loan; the number of homebuyers looking for thirty year mortgages and the number of day traders looking to finance positions over the next three days are governed by entirely different factors. Thus, the markets for short-term and long-term credit are never identical. They are, however, “integrated” in the sense that when rates

---

<sup>431</sup> As is typical with Shanxi merchant accounting, the math works out precisely. 0.43 taels is exactly equal to two days of non-compounding annual interest at 7.7%.

diverge, it opens opportunities for speculative or perhaps even arbitrage profits. This brings relative short-term and long-term rates back to equilibrium. In other words, changes in one rate can impact other rates. The term “yield curve” refers to a geometric representation of the relationships between credit prices at different terms. When the interest rate of short- to long-term credit is plotted, it tends to form a curve, with credit rates at medium-term usually falling between short-term and long-term rates. Moreover, while this curve can have any shape, in practice it tends to be upward sloping. This means that long-term credit is costlier than short-term credit. An example of a *biaoqi* yield curves can be seen in Figure 9.

Figure 9. Summer *biao* yield curve, Qi County, 1892

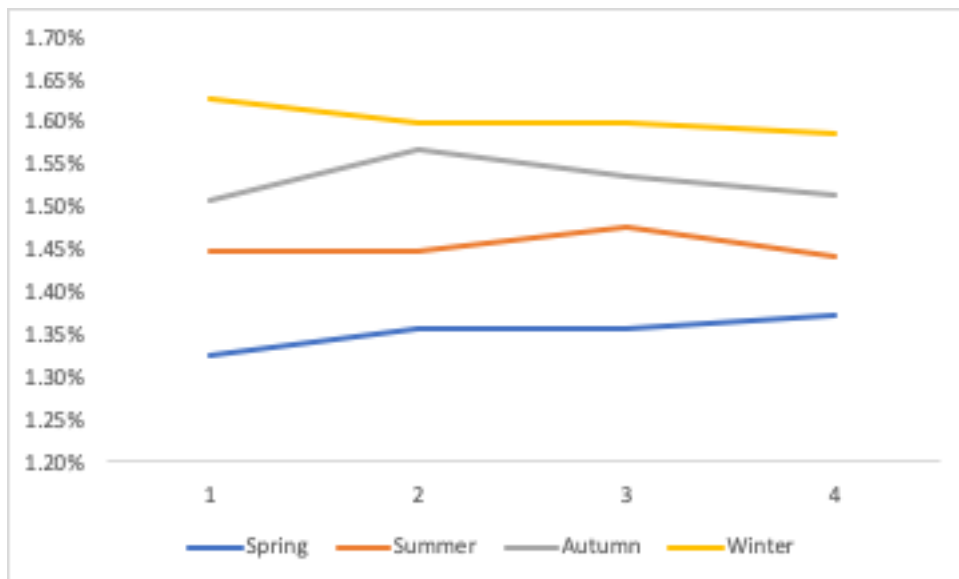


Source: Wu family correspondence (武氏), LJMPC, 7-3.

The data supporting this diagram is taken from the Wu family correspondence. Note that it is upward sloping. It is impossible to draw conclusions from the shape of one yield curve.

Moreover, data from Tianshunkui—visualized in Figure 10—show four flattish curves.

Figure 10. Tianshunkui yield curves by quarterly *biaoqi*, 1895



Source: “Tianshunkui loan book, 1895” (光绪二十一年天顺奎借贷账), LJMPC, 1.

But the fact that such a curves existed is significant. It means that *biaoqi*, like modern financial markets, were capable of market-based price differentiation for credit of different terms.

The existence of a yield curve is also where my disagreement with Kong Xiangyi becomes most important. In Kong’s model, the *manjiali* is a premium charged on “normal” interest rates. This means that there is an effective floor on interest rates, and also makes markets less able to discriminate between yields on credit of significantly different term. With the *manjiali* trading as a completely different rate without reference to a base rate, we see that it is simply a “yield to maturity”, with maturity fixed at the next *biaoqi*. This meant that manjia rates could fluctuate apart from monthly rates, providing greater scope for price differentiation.

Finally, this section will examine how institutions engaged in *biaoqi* credit markets through brokerage arrangements with financial intermediaries. To do so, I draw on a series of letters from the Hengyidian (恒益典) Pawnshop. This correspondence includes the envelopes of the letters as well as the letters themselves. This is fortunate, as the envelopes allow me to precisely locate the origins of the pawnshop in Shiyong Village, Wenshui county, Shanxi Province (文水县石永镇). This can be seen clearly from Image 27.<sup>432</sup>

*Image 27. Correspondence from Baohuitong to Hengyidian, Envelope*



Source: Letters from Wenshui Hengyi Pawnshop (文邑恒益当信件), LJMP, 12.

---

<sup>432</sup> As a brief aside, the envelope is interesting in itself. It enclosed a letter written in 1915. This was fully 20 years after the establishment of a formal post office, yet the letter was sent by private courier. The back of the envelope states the name of the courier, the Zhang Pan Li Courier Service (张攀釐信局). On the history of the post office see Lane Jeremy Harris, “The Post Office and State Formation in Modern China, 1896-1949,” *ProQuest Dissertations and Theses* (Ph.D., Ann Arbor, University of Illinois at Urbana-Champaign, 2012), ProQuest Dissertations & Theses Global (1426157426), <http://proxy.uchicago.edu/login?url=https://www.proquest.com/dissertations-theses/post-office-state-formation-modern-china-1896/docview/1426157426/se-2?accountid=14657>.

The front of the envelope reads:<sup>433</sup>

领带至文邑石永镇，祈交

恒益宝典，升启

Carry to Wen County [i.e. Wenshui], Shiyong village, and please deliver to:

The honorable Hengyidian, respectfully

The Wenshui *wenshiziliao* also include a reference to the Hengyidian pawn shop, as does a stone stele in Shiyong village from 1887. In addition, a 1928 account of pawnshop layoffs mentions Hengyidian, still operating in Shiyong village.<sup>434</sup> Thus, we can feel quite confident that this collection of letters were business correspondence sent to a pawnshop named Hengyidian, in Shiyong village, Wenshui.

The most interesting correspondence is a series of letters sent to Hengyidian from Baohuitong (宝汇通). Baohuitong appears to have been a small *piaohao* located in Pingyao. I find no record of its existence, apart from a blog post.<sup>435</sup> I would prefer more reliable sources, but the blog post account is at least reasonable. The characters “hui tong” are appropriate for a piaohao. We also know that the Baohuitong responsible for the letters to Hengyidian was indeed located in Pingyao. This is so because its official seal, visible in Image 28, reads “晋平，宝汇通记” (*Jinping, Baohuitongji*) meaning “Shanxi Province, Pingyao County. Baohuitong Company.”

---

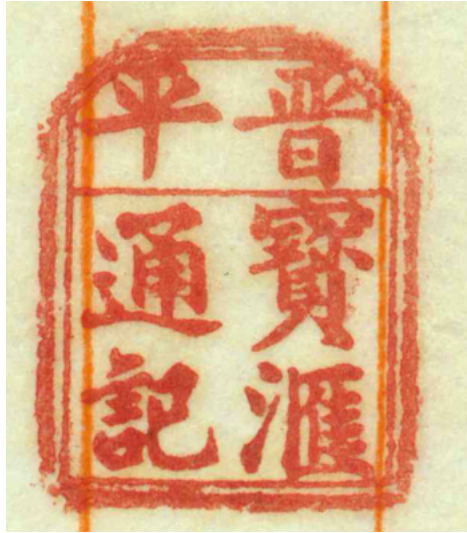
<sup>433</sup> Letters from Wenshui Hengyi Pawnshop (文邑恒益当信件), LJMPC, 5.

<sup>434</sup> Zhengxie, Wenshui xianweiyuanhui wenshiziliao bianji weiyuanhui 政协文水县委员会文史资料编辑委员会, ed., *Wenshui Wenshi Ziliao Di 12 Ji* 文水文史资料 第12辑, n.d.

<sup>435</sup> Shanxi Chonghe wenhua 山西崇和文化, “Wenshui Hejia Yu Qixian Qujia de Youyuan 文水贺家与祁县渠家的渊源 [The Wenshui He Family and the Origins of the Qi County Qu Family],” *Kuaibao.Qq.Com*, May 23, 2019, <https://kuaibao.qq.com/s/20190523A04P3100?refer=spider>.



Image 28. Baohuitong seal



Source: Letters from Wenshui Hengyi Pawnshop (文邑恒益当信件), LJ MPC, 7.

The content of the correspondence concerns a deposit kept by the Hengyi Pawnshop with the Baohuitong *piaohao*.<sup>436</sup> A typical letter reads:<sup>437</sup>

恒益宝典，文览迩发财祺懋畅事业  
...宝号本标一款随开行  
利，而转出冬标，满加一层等语，庄诵  
之余即照遵办，以按旧章为是，特  
此奉，覆顺侯  
秋安财祉  
呈报现数 1,697  
甲寅六月十八日

Honored Hengyidian Pawnshop, hoping this letter reaches you well, and wishing you riches and good business  
...Your honorable firm has funds that are due to pay interest this *biaoqi*. We have rolled the funds to the winter *biaoqi* at the relevant *manjia* level, etc. Excess funds will be dealt with in the typical fashion.  
Yours sincerely,  
Wishing you a safe Autumn and riches.

<sup>436</sup> For an excellent analysis of this relationship in Chinese, see Chen Tianyi, 85-87. My analysis builds on Chen Tianyi's interpretation, which I accept entirely. To the extent they seem to diverge, it is because I focus on the *biaoqi* while primary interest is on the deposit and loans business of the *zhangju*.

<sup>437</sup> Letters from Wenshui Hengyi Pawnshop (文邑恒益当信件), LJ MPC, 7.

Reporting spot silver at 1,697 copper cash  
1914/6/18

In this letter, Baohuitong has informed the Hengyidian Pawnshop that their deposit is maturing at the upcoming *biaoqi* (本标 *benbiao*). Given that the letter was written in the sixth month, we can assume this was the autumn *biao*. This deposit was rolled to the next *biaoqi*, that is, the winter *biao*, at the new *manjia* rate.’

The next letter tells a similar story, and helps us to establish a general pattern. This letter was written in 1915, and reads:<sup>438</sup>

恒益宝典电览启者日昨，华函辱  
临兹悉一切所谓本标有宝号到期  
满加利一笔，随开行利，仍按旧章转去，  
冬标满加利随统去开利单一纸，以拱  
台鉴  
后批有去年冬标满加利一纸，望即捎来为要 sa  
乙卯年七月廿八日

To the Honorable Hengyidian Pawnshop, telegraph, written yesterday by Hua Hanru, respectfully,  
We are writing to inform you about all of your funds, which are soon to mature at the upcoming *biaoqi*. We continue to accrue interest at the *manjia* rate on your 1,000 taels deposit. When the *manjia* rate is opened, we will as always roll your funds at the winter *biao manjia* rate. When appropriate we will send a note with the interest rates for your records.  
Respectfully.  
Addendum:  
There is one note with the winter *manjia* rates from last year, please be sure to receive this.  
1915/7/28

This letter is also from the Baohuitong *piaohao*. Once again, it is informing the Hengyidian Pawnshop that its deposits are about to mature, and that it will roll them over to the next *biaoqi*.

---

<sup>438</sup> Letters from Wenshui Hengyi Pawnshop (文邑恒益当信件), LJMP, 9.

In this case, the upcoming *biaoqi* is again the autumn *biao*, and the funds are being rolled to the winter *biao*. Letters continue in this vein throughout the collection. That is, Baohuitong sends frequent letters right before each *biaoqi* informing Hengyidian Pawnshop that its deposit are about to mature and that they will be automatically rolled over to the next *biaoqi*. What is critical in all of these letters, is the fact that Hengyidian is earning a *manjia* rate. This means, it is not simply negotiating bilateral deposit rates with Baohuitong; rather, it is using Baohuitong to access credit rates in *biaoqi* financial markets.

A third letter provides more detail on this relationship:<sup>439</sup>

恒益宝典大鉴，启者，兹呈敝邑大众议  
开本冬标，长利 76 两，明春月息 6.2 厘，夏秋  
均 6.1 厘，于前晚，议开满加利 17 两，共做二万  
之谱，所谓宝号到期之款，并添之数，  
仍按旧章照办矣，至祈勿念，为是  
即日，现数 1899，迟期 1902，专此奉  
寿安

乙卯年十月廿五日

Dear honored Hengyidian Pawnshop, respectfully, we inform you that our humble county has assembled and opened the winter *biao* with an annual rate of 7.6%, a monthly rate for next year's spring *biao* of 0.62%, and a monthly rate of 0.61% for both summer and autumn *biao*. This is later than before. The *manjia* rate has been opened at 17 taels, and loan volumes are roughly 20,000 taels. The funds of your esteemed firm that are expiring, as well as the ones you wish to add, we will treat as always. Have no worries on this account. That is all.

Today, spot silver is at 1,899 copper cash and the forward rate is 1,902 copper cash.

Respectfully.

Good health.

1915/10/25

This letter informs the pawnshop that their deposits have been rolled, as in other letters. But more than that, it also informs Hengyidian of the going rates in different money markets. Annual rates were 7.6%, with monthly rates for the up-coming Spring and Autumn at 0.67% per month.

---

<sup>439</sup> Letters from Wenshui Hengyi Pawnshop (文邑恒益当信件), LJMP, 10.

The manjia rate was 1.7%. These rates are extremely telling. Because the winter *biao* has just opened, the term on the manjia loan is equal to the term on the spring biao monthly loan—i.e., they are both approximately three months. That explains why the manjia rate is so close to three times the spring biao monthly rate. Indeed, even the very slight difference in rate (1.6 taels over three months) has a market logic. The 1.6 tael difference in rate over the course of three months, works out to exactly eight extra days of interest. This is because interest on monthly loans was often due later than principal, in this case, eight days later.

This letter is important for two reasons. First, it is proof positive that *manjiali* loans are quoted as a standalone yield to maturity rate, not as a premium to a benchmark. Otherwise, the coincidence of having the *manjiali* rate exactly equal the monthly rate would be simply incredible, and the cost of credit implausible. In short, Jiang Xuekai and I are right about how *manjiali* loans functioned, at least for Pingyao county. Second, this shows that the rate on the two kinds of loans—*manjiali* and monthly—converge as the terms converge. This demonstrates an integrated market, capable of efficiently pricing the time value of money.

The final line of the letter is also noteworthy. It states money market prices in both spot rates, as well as future rates. The future rate, *chiqi* (迟期) is likely the price of silver at the next *biaoqi*, i.e., at the spring biao. This means that exchange rates were both relevant to predicting interest rate changes, and also suggests brokerage arrangements in *biaoqi* exchange markets. I will present more direct evidence of such arrangements in the next section.

Thus far, we have established the existence of a brokerage arrangement. However, it is still not clear how the piaohao profited from it. Another piece of correspondence indicates that its client, Hengyidian pawnshop, was not quite earning the *manjia* rate—or at least not always.

Rather, Baohuitong offered *biaoqi* investments to Hengyidian at a rate pegged to, but slightly, below, the *manjia* rate. The correspondence reads as follows:<sup>440</sup>

恒益宝典，青鉴，启者，兹呈敝邑今年大众议  
开本标长年利银 77 两，秋冬标月息 5.7 厘，明春标  
5.8 厘，满加利银 17 两，所有宝号到期之款，仍遵旧章下二两展出秋标满加，至祈  
勿念，即日现  
数 1884 余，无别许，端此布  
知兼候  
财安  
丙辰年四月廿七日

To the honorable Hengyidian, respectfully, we are reporting to you that our humble area this year has agreed to open the current *biao*. with an annual rate of 7.7%, and a monthly rate for the autumn and winter *biao* of 0.57%. Next year's spring *biao* has a monthly rate of 0.58%. The *manjia* interest is 17 taels. All of your honored firm's funds that are scheduled to mature will, as always, be rolled forward to the autumn *biao* and will earn a rate of 2 taels less than the Autumn *manjia* rate. Please rest assured of this. [Exchange] quotations for the day are over 1,884. That is all, please know this.

This meant that the *piaohao*, Baohuitong, could profit from an interest spread, or the difference between its client's return on funds and the market rate. We also see evidence again of the yield curve. The credit prices that Hengyidian quotes to its clients are an annual rate of 7.7%, monthly rates of 0.57% per month over the next three months, and a *manjia* rate of 1.7% (effectively a quarterly rate since we are at the beginning of the *biaoqi* term), and monthly rates of 0.57% and 5.8% quoted for the winter and next year's spring *biao*. Note that once again, *manjia* rates are exactly equal to monthly rates. This time, the extra time allowance for monthly interest payments works out to half a day, indicating they are due at about the same time as the *manjia* loans.

---

<sup>440</sup> Letters from Wenshui Hengyi Pawnshop (文邑恒益当信件), LJ MPC, 17. Also see the excellent reading of these letters offered by Chen Tianyi, 86. Chen Tianyi treats Baohuitong as a *zhangju*, but offers no sources for this. Nevertheless, her interpretation is also quite plausible.

To conclude, this section has established the existence of liquid, fluctuating credit markets at the *biaoqi*. These markets were forward looking one year, thus offering both short- and medium-term financing and savings. Importantly, *biaoqi* assigned different rates to loans of differing terms, thus forming a crude yield curve. This means that the *biaoqi* system was able to effectively modulate supply and demand for credit over time. In addition, the *biaoqi* system included a sophisticated brokerage mechanism. Clients without a physical presence at the *biaoqi* could invest their savings through a financial intermediary. This indicates that *biaoqi*—while organized on entirely different principles from western exchanges—appear to have been evolving remarkably similar functions. Importantly, this section has also settled an old question about the nature of *manjiali* loans—one of the key lending markets at the *biaoqi*. It has shown that *manjiali* loans were a free-floating rate, and not a premium charged on top of a base rate or to the monthly rate. This in turn strengthens the larger argument that *biaoqi* were highly effective, market mechanisms able to differentially price the time value of money.

#### Currency exchange: the *biaoqi* money market

This section analyzes the market for silver/copper exchange at the *biaoqi*. Silver/copper exchange was one of late imperial China's most important money markets. Prices in the exchange market were known as the *qianpan* (钱盘)<sup>441</sup> or *qianshu* (钱数). This translates directly

---

<sup>441</sup> *Qianpan* (钱盘) also has a more technical meaning. Along with the “silver plate” or *yinpan* (银盘), it is required to calculate the difference between the scales used in exchange market price quotations, and the *gongpingfa* (公平砝) or “public scale” (for a given locality). In other words, it was a constant, specific to a given place and market, used in conjunction with the silver plate (also a constant) to swap between silver/copper exchange rates denominated in weight and nominalist silver prices denominated in “copper cash.” Over time, this technical term came to be a synecdoche for the copper cash price of silver.

to “copper cash plate” or “copper cash number,” and referred to the copper price of silver, measured in copper cash (钱文 *qianwen*) needed to purchase one silver tael (银两 *yinliang*). Under China’s bimetallic system,<sup>442</sup> exchange was an essential part of any market. This is because in the normal course of business, firms would accumulate assets and liabilities in both currencies. In order to meet settlement obligations, they therefore required a way to swap one form of money for the other. In addition, since copper was more difficult to transport, the copper price of silver served as a price signal alerting merchants to regions where silver was scarce or excessive.<sup>443</sup> A “copper number” higher than normal might make physical shipments of silver profitable. On the other hand, financiers might bet on mean reversion, and short silver in areas where it was too dear.

In much of northern China, wholesale copper/silver exchange contracts were frequently timed to settle at *biaoqi* settlement fairs. Indeed, the exchange market was the single most active financial market at the *biaoqi*. In spite of this, its importance in the *biaoqi* has been entirely overlooked. It is clear, however, that *biaoqi* and similar settlement fairs allowed for highly liquid markets in exchange, including not only spot markets for physical stocks of silver and copper,

---

<sup>442</sup> See Manhong Lin, *China Upside down: Currency, Society, and Ideologies, 1808-1856*, Harvard East Asian Monographs 270 (Cambridge, Mass: Harvard University Asia Center, 2006); Debin Ma, “Chinese Money and Monetary System, 1800–2000, Overview,” in *Handbook of Key Global Financial Markets, Institutions, and Infrastructure*, ed. Gerard Caprio, Jr. (Academic Press, 2012), 57–64..

<sup>443</sup> This finding fits in nicely with Akinobu Kuroda, “Another Monetary Economy : The Case of Traditional China,” in *Asia-Pacific Dynamism 1550 - 2000*, ed. A.J.H. Latham and Heita Kawakatsu (New York: Routledge, 2000), 187–98. Kuroda argues that copper currency allowed localities to self-regulate their supply of money, since copper was so difficult to carry and of such low value per weight. If he is correct, then it would make sense for copper/silver exchange to send price signals about where credit and capital was needed in the economy, much as today forex exchange rates send similar signals to international markets.

but futures markets represented by the price of exchange at future *biao*. Without these markets, the *biaoqi* would not have been able to function.

Sources documenting *biaoqi* exchange markets abound. The Republican-era Guisui Gazetteer writes:<sup>444</sup>

錢鋪買人銀兩，到標期賣銀者必須將銀兌清，買銀者亦須將錢清付。只因錢缺，是以文有名目，假如某甲錢鋪買到某乙銀

Money shops purchase silver, and at the *biaoqi* the sellers of the silver must settle this silver. Buyers of silver must also settle their copper cash obligations.

In short, the gazetteer says that institutional purchases of exchange are settled only on *biaoqi* days. This means that a financial institution, say, a *qianzhuang* or a pawn shop, could buy or sell copper any day of the month, locking in prices ahead of time. But they had to wait for a *biao* to complete the transaction. The gazetteer goes on to say that settlements do not consist of physical transfers of silver sycee or copper strings, but are largely done with paper notes. In other words, participants in the exchange market would receive a draft on another financial institution. These drafts were in principle exchangeable for physical bullion, but in practice could be difficult to exchange. Thus, the chronicler laments the money shops' "abuses" in dodging redemption requests. I suspect that these paper notes were drafts on larger financial institutions that specialized in dealing physical bullion. But this is speculative.

The "quotation slips" (行情单 *hangqingdan*) found in the LJMPCC abound with information on *biaoqi* exchange markets. Quotation slips were printed notices with the latest market prices and were distributed by firms specializing in disseminating such information to their clients. They were in essence Qing-era China's equivalent of the Bloomberg terminal.

---

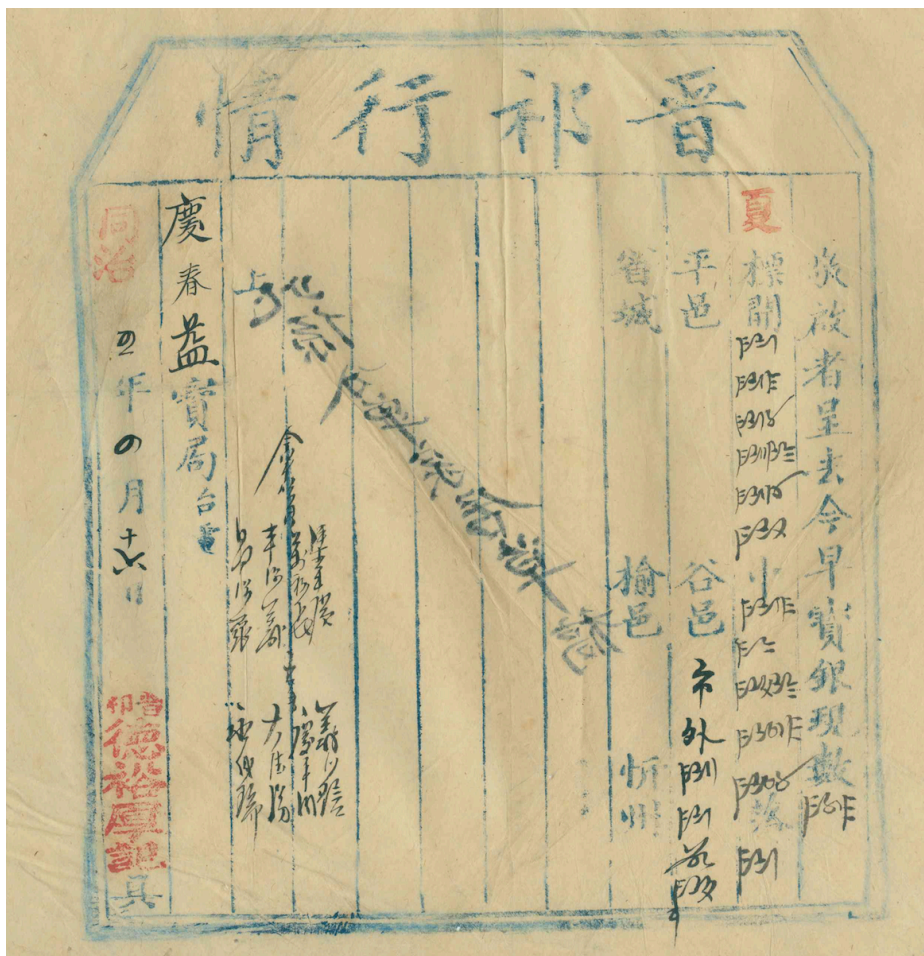
<sup>444</sup> Zheng Yufu 鄭裕孚, "Guisui Xian Zhi: Bu Fen Juan 歸綏縣志：不分卷 [Guisui County Gazetteer: Not Broken out by Volume]," electronic resource, *Zhongguo Fang Zhi Ku*, 1947, <http://server.wenzibase.com>.



Quotation slips could include information on any traded commodity, from grain and cloth prices to exchange market and interest rates. They were used throughout the late Qing and Republican periods, with Republican-era slips increasingly packed with more and more market data.

The earliest quotation slip in the LJMPC dates from the sixth day of the fourth month of the fifth Tongzhi Reign year (1866) and comes from Qi County in Shanxi.<sup>445</sup> The back and front of the slip are reproduced in Image 29.

Image 29. Qi County Quotation Slip, 1866



Source: Quotation slips (行情单), LJMPC, 1.

<sup>445</sup> Quotation slips (行情单), LJMPC, 1. My interpretation of this is based on a workshop held jointly between Shanxi University, Shanghai Jiaotong University, Hebei University, and the Shanghai Museum of Accounting.

The note should be read from top to bottom and right to left. Quotation slips are crowded with information, making them difficult to transcribe. I have thus numbered different sections of the slip, and can thus transcribed and discuss each section separately.

Section 1 is the heading, on which is printed“晋祁行情 *Jin Qi Hangqing*”, or “Shanxi Qi County Market Quotations.” This tells us that we are looking at market quotations for Qi County in Shanxi province, one of the three counties where *piaohao* were headquartered and home of a major quarterly *biaoqi*. Section 2 reads, “敬启者呈去今早宝银现数 1,351.3”; in English, “Respectfully, submitting to you today’s silver sycee spot number: 1,351.3.” This means that spot prices of silver opened at 1,351.3. In other words, this was the copper price of silver, per silver tael and denominated in copper cash, prior to market open.

The next column, Section 2, lists that day’s hourly exchange market quotations. The columns, including the numbers, are:

夏  
开标

- 1371
- 1372.3
- 1371.5
- 1,373.7-1,3723.8
- 1,372.5
- 1,379
- 中
- 1,372-1,373
- 1,370
- 1,369.7-1,369.8
- 1,375.2-1,375.3
- 1,3755
- 落
- 1371

These numbers record hourly fluctuations. The market was open for 11 hours, which means exchange traders had a 12 hour work day, including one hour for lunch—denoted as “中” (*zhong*). The quotations show silver prices fluctuating between a low of 1,370 copper cash and a high of 1,379. Note that “夏” (*xia*) or “summer” is stamped onto the slip, while “开标” (*kaibiao*) “中” and 落 (*luo*) are printed. *Xia kaibiao* indicates that this slip is giving quotations for the Qixian summer *biao*. The quotations are handwritten in ink. *Luo* or “close” indicates the market closed at 1,371 copper cash per silver tael.

Section three, the next two columns, consist of five printed place names. In order, they read, “平邑” (*pingyi*), “谷邑” (*guyi*), “省城” (*shengcheng*), “榆邑” (*yuyi*), and “忻州” (*xinzhou*). These refer to Pingyao County, Taigu County, the Shanxi provincial capital of Taiyuan, Yuci County, and Xinzhou (or Xin Prefecture), respectively. These are mostly left blank, but provide a space to mark quotations from neighboring *biaoqi* exchange markets. The space for Taigu is completed in handwritten ink. It reads: “市外: 1372、1371、落: 1369.” The quotations tell us that the Taigu market opened at 1372, fell to 1371 at midday, and closed at 1369.

Section four contains some difficult handwriting, but reads as follows: “今早吃银: 集丰庆、万福长、丰源义、昌源成; 出银: 义川信、庆丰川、大德胜、永成瑞,” or “This morning buyers of silver: Jifengqing, Wanfuchang, Fengyuanyi, Changyuancheng. Selling silver: Yichuanxin, Qingfengchuan, Dadesheng, Yongchengrui.” 今早 (*jinza*) simply means “this morning,” while 吃银 (*chiyin*) is slang for “buying silver.” We know this because it is contrasted with 出银 (*chuyin*), or those “putting out” silver. This information thus tells us which buyers and sellers are participating in that day’s exchange market. In other words, market participants wanted to know—as they still do—who the buyers and sellers are.

The final two columns in section five show us the date, as well as the relationship between buyer and seller of the market information. The first column reads, “庆春益宝局台鉴” (*Qingchunyi baoju taijian*), or, “For the perusal of the honorable Qingchunyi Company.” Qingchunyi is written in ink, while the rest is printed. Thus, Qingchunyi was the customer of the market information, and receiving the quotation slip. The final column reads, “同治五年四月十六日, 晋印德裕厚记具.” This means “Tongzhi reign fifth year, fourth month, sixteenth day, sealed by Deyuhou Co.” We thus know that Deyuhou Company was the provider of this market information, and that the slip was produced on the fifth reign year of the Tongzhi emperor, on 4/16 in the lunar calendar, or 1866/5/29 on the western calendar.

With the literal meaning of the quotation slip clear, a more vivid picture of the *biaoqi* market comes into focus. First, the fact the slip was printed with a woodblock press is extremely important. This means that there must have been many copies of the slip, indicating consistent, high demand for timely market information. It appears the “Bloomberg terminal” analogy, albeit whimsical, is apt. The provider of the slip, Deyuhou, must have had numerous customers that it provided with this information, not just on that day, but every day leading up to each *biaoqi*. This is further confirmed by the fact that the customer’s name, Qingchunyi, and the date are written in ink rather than printed, while the “summer” in summer *biao* was stamped rather than printed. In short, this is a standard form used for many *biaoqi* and many customers.

Closer scrutiny of the document reveals that this is a market not merely in exchange, but in exchange *derivatives*. The first column is an exception; *xianshu* (现数) specifically means spot prices of silver. But the next column lists prices of silver at the summer *biao*. The summer *biao*

in Qi County took place in the fifth month of the year.<sup>446</sup> But the quotation slip is dated at the sixteenth day of the fourth month—at least two weeks and possibly a full month in advance of the summer *biao*. This means the column of hourly prices are not prices for physical silver and copper being swapped across a marketplace. Rather, they are prices of silver that will trade hands at the summer *biao*: in short, this is a futures market.

The final set of prices on this slip records prices in Taigu. These prices read, “市外：1372、1371、落：1369.” In English, “Outside the *shi*: 1372, 1371, closed at 1369.” The meaning of *shi* is ambiguous; unfortunately *shi* can mean a market in the abstract sense, as well as a geographical region with a market or even just a large urban area. Several of my Chinese colleagues thus believe “市外” simply emphasizes that the quotations are not from the Qi County *biaoqi*. I do not think this is a plausible explanation; the slip already tells us that these are Taigu prices, and the fact that Taigu and Qi County are not the same place hardly seems worth emphasizing. I believe *shiwai* means “outside the market” rather than “outside of Qi County.” In other words, they are prices either from a village nearby Taigu, or perhaps “outside the market” means that this is a curb market that is operating prior to formal trading in Taigu *biaoqi* futures.

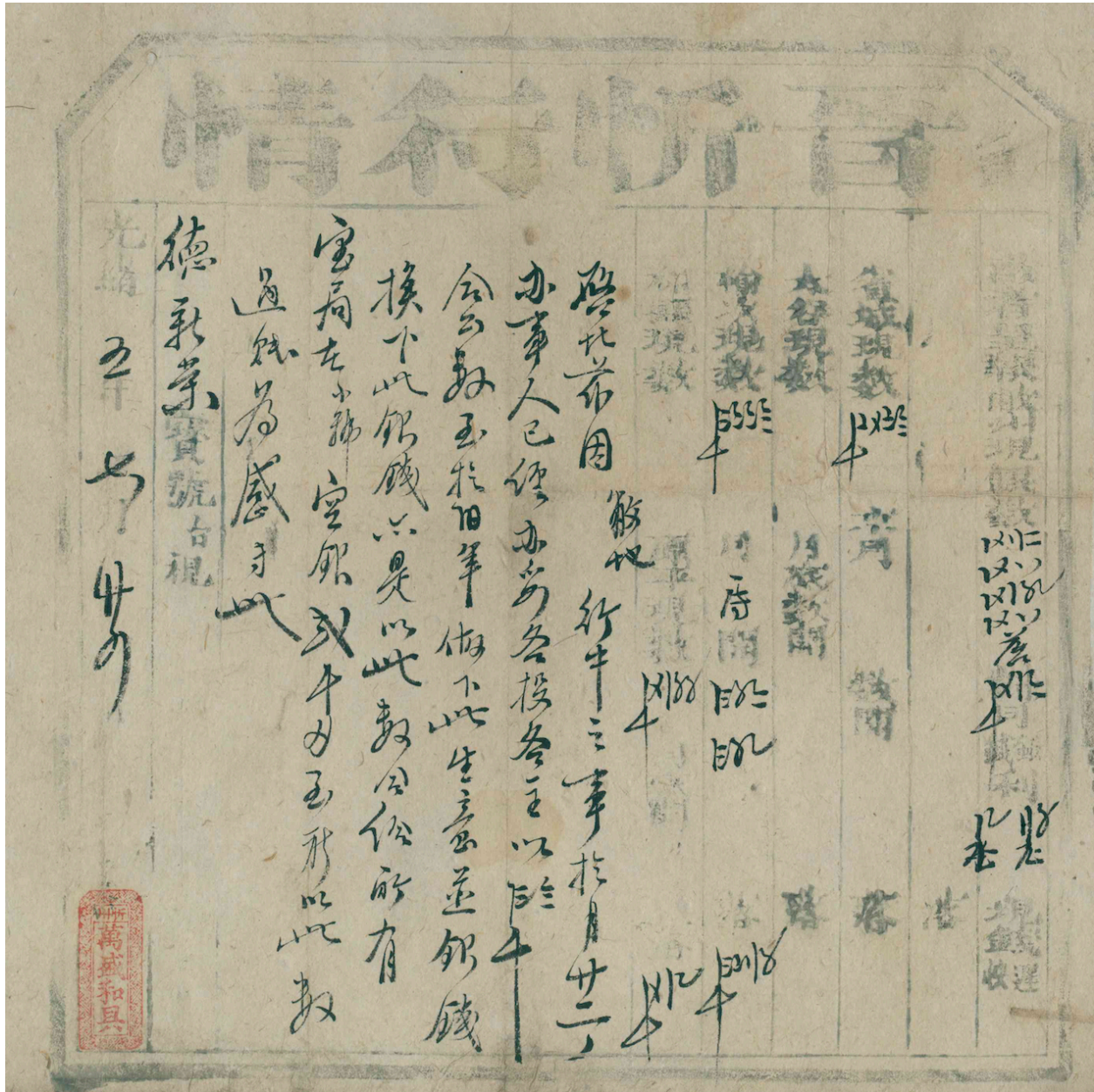
Another quotation slip from the fifth reign year of the Guangxu emperor (1879), visible in Image 30, contains information on the interest rate as well as a brief note to the client.<sup>447</sup>

---

<sup>446</sup> This is clear from dates in Tianshunkui’s loan book. “Tianshunkui loan book, 1895” (光绪二十一年天顺奎借贷账), LJMPC. Jiang Xuekai also states that the Taifen *biaoqi*, which included Qi County, took place in the fifth month. Jiang Xuekai, 18.

<sup>447</sup> Quotation slips (行情单), LJMPC, 5

Image 30. Xin Prefecture Quotation Slip, 1879



Source: Quotation slips (行情单), LJMPC, 5.

This slip comes from Xinzhou, or Xin Prefecture, in the north of Shanxi. In the first column, it lists the silver prices for the day, which are 1422, 1420, 1415.6, 1420, and then close at 1417 copper cash per silver tael. Beneath the silver prices, the slip gives interest rate quotations of 0.16% per month on copper and 0.25% on silver. This interest spread is highly unusual, and may

be the only instance I have seen of silver interest in excess of copper interest. The slip also has printed areas for writing silver prices in Taiyuan, Taigu, Yuci, and two locales that I cannot read (probably Pingyao and Qi County). Only some of these are filled in.

The provider of the quotation slip is an enterprise named 万盛和 (Wanshenghe). Wanshenghe was a financial institution—probably a *qianzhuang*—based in Xin Prefecture. It appears that Wanshenghe, in its capacity as *qianzhuang*, was supplying brokerage and intermediary services to other financial institutions, possibly throughout Shanxi province. Indeed, this quotation slip is an example of such services. We know this because of a letter scrawled on top of it, written to a client named Dexinrong (德新荣). In this note, Wanshenghe updates Dexinrong on the market with regard to that client's particular business interests. The letter reads:<sup>448</sup>

敬启，兹银 敝地行情之事，于月廿二日，办事人已经办妥，各投各主，以 1380 千，会之数，至于旧笔，做钱，此生意并银钱、换钱，此银钱亦是以此数 XX 所有。

宝局在小号宝银二千两，至祈此数

过贱为感 X 此

德新荣，宝号台视

光绪五年七月廿四日

Respectfully, informing you of business related to quotations of silver in our humble area. In the previous month on the 22<sup>nd</sup>, the relevant people have proceeded to handle these affairs appropriately with each looking after their own affairs and was done at a price of 1,380 copper cash. As for the older transactions, these were done in copper cash. This business involved both silver and copper, and was converted to copper. The silver and copper was moreover at this amount XXX.

Your honored business has deposited at our humble business 2,000 taels of silver. We believe present prices are too low to sell this.

To the honored Dexinrong

1879/7/24

---

<sup>448</sup> Quotation slips (行情单), LJMPC, 5.

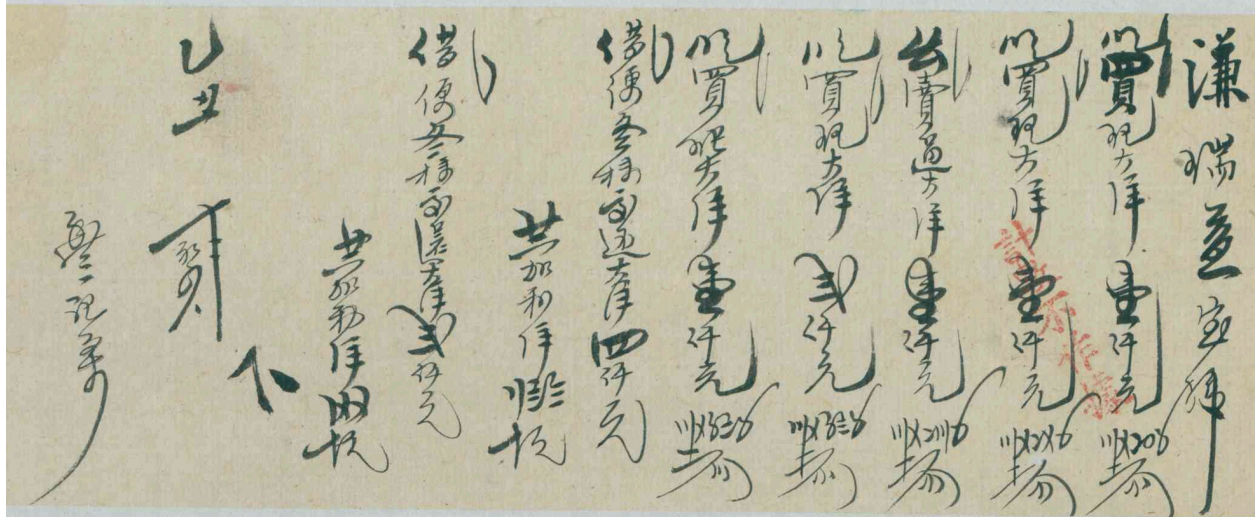
This letter means that the Wanshenghe qianzhuang and Dexinrong have a brokerage relationship. Specifically, Wanshenghe is acting as a broker for Dexinrong. In this instance, Wanshenghe is trying to help Dexinrong sell off a substantial sum of silver, but believes current prices are too low. The letter is not entirely clear, but it seems as though there are two transactions that Wanshenghe is conducting for Dexinrong. The “older transaction” has already been accomplished, that is, a sum of silver was sold for copper. But the a new deposit of 2,000 taels of silver, also slated to be exchanged for copper, has not yet been completed. Wanshenghe is recommending Dexinrong hold off until prices rise.

This slip teaches us two interesting things. First, it gestures toward the relationship between credit markets and exchange markets. It is notable that the same client would be interested in both of these quotations, and that a financial institution would print them both on the same slip. We also see that just when the spread between silver and copper interests is abnormally high in favor of silver, silver is abnormally cheap relative to copper. This suggests a relationship between the two markets, much as in contemporary finance. Second, and more important, is that the existence of institutional brokerage relationships extended to *biaoqi* exchange markets. This meant people or institutions could access *biaoqi* exchange markets—either for commercial or speculative purposes—without a being present at the settlement fair.

A final useful set of materials pertaining to *biaoqi* exchange markets are a series of documents from the Qianruiyi Company (谦瑞益). Qianruiyi was a grain merchant active in Shouyang county in the 1920s. It also participated in silver/copper exchange markets. One receipt, shown in Image 31, dates from the Yichou year (1925). It records a series of transactions settled at the *biaoqi*.



Image 31. Qianruiyi Silver/Copper purchases, 1925



Source: Qianruiyi purchases and sales of silver and copper receipt (谦瑞益买入卖出银钱单), Other receipts, JSSLC, 1.

The image can be transcribed as:

谦瑞益宝号

吃买现大洋壹仟元, 34605 合钱

吃买现大洋壹仟元, 34645 合钱

出卖过大洋壹仟元, 34635 合钱

吃买现大洋式仟元, 34585 合钱

吃买现大洋壹仟元, 34575 合钱

借便冬标还大洋四仟元

共加利洋 28.8 元

借便冬标还大洋式仟元

共加利洋 14.4 元

乙丑十月四日, 下

丰记条

Honored Qianruiyi Company

Purchased spot silver of 1,000 yuan at a price of 3,460.5 copper yuan

Purchased spot silver of 1,000 yuan at a price of 3,464.5 copper yuan

Sold silver of 1,000 yuan at a price of 3,463.5 copper yuan

Purchased spot silver of 2,000 yuan at a price of 3,468.5 copper yuan

Purchased spot silver of 2,000 yuan at a price of 3,457.5 copper yuan

Repaid loans due at winter biao of 4,000 yuan

Added interest totaling 28.8 yuan

Repaid loans due at winter biao of 2,000 yuan

Added interest totaling 14.4 yuan

1925/10/4, recorded in accounts

## Feng Co. Receipt

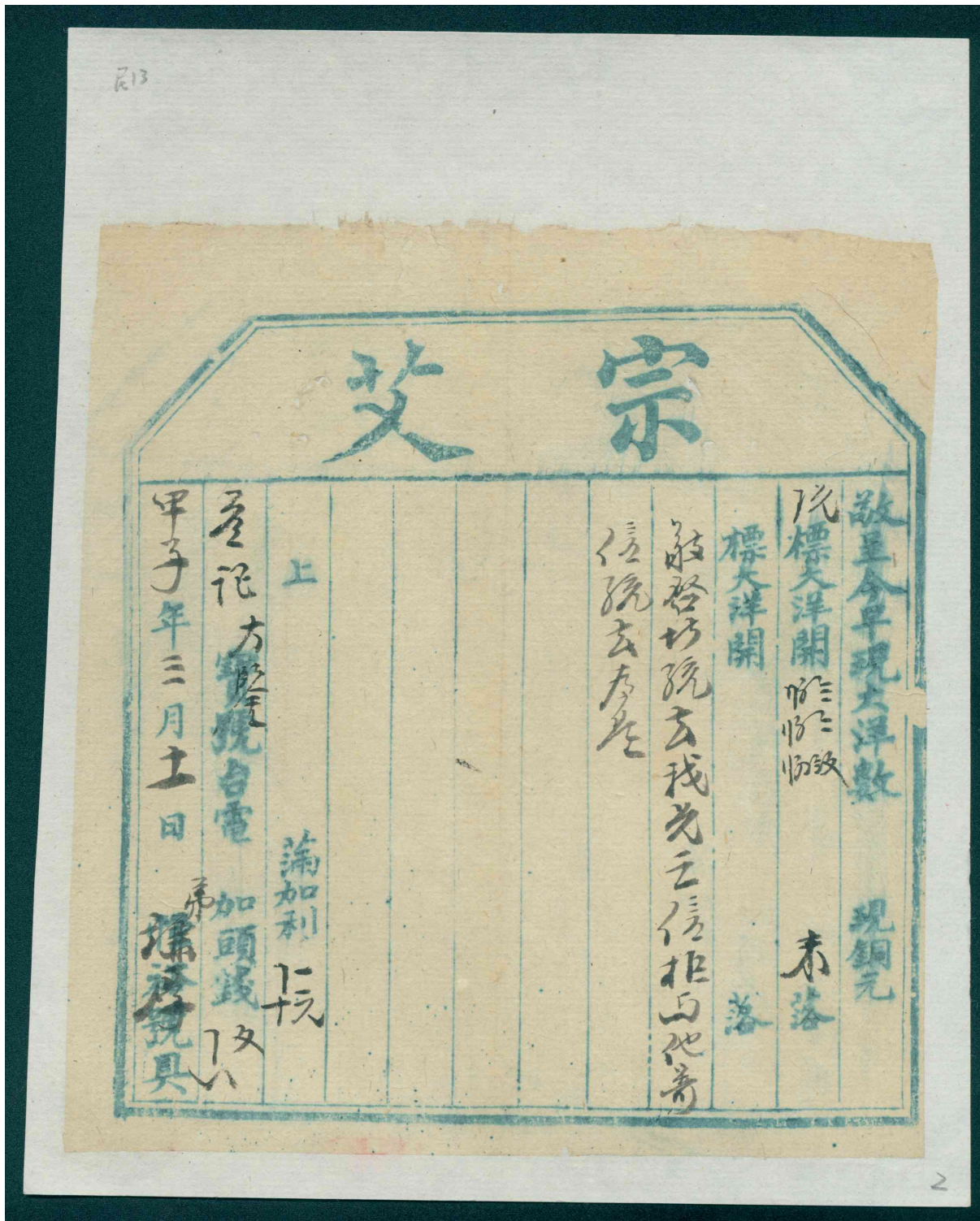
This is a receipt issued to Qianruiyi by the Feng Company. The receipt shows Qianruiyi purchasing 6,000 yuan of silver in return for copper, and selling 1,000 yuan of silver. In addition, we see that Qianruiyi has repaid a silver loan of 6,000 taels due at the winter *biao*, along with interest (probably *manjia* interest). The fact that the principal repayment is equal to the amount of silver borrowed is significant. It illustrates how vital it was to have a silver/copper exchange market at the *biaoqi*. Qianruiyi was either swapping currencies to meet obligations arising out of the normal course of its business, or to engage in currency speculation. Either way, the mechanics of *biaoqi* settlement would be the same; firms required exchange markets to settle obligations since their assets and liabilities were denominated in different currencies.<sup>449</sup>

The Qianruiyi documents are a treasure trove for a financial historian. One Qianruiyi quotation slip, shown in Image 32, provides nothing less than proof positive of regional exchange arbitrage.

---

<sup>449</sup> Many scholars, particularly in the Chinese-language literature, exert much analytical effort trying to tease apart commerce and speculation. But for commodities traders, then as today, there is really no fine line between the two. Any firm that in the course of business acquires assets and liabilities in volatile currencies or commodities is subject to exchange/futures risk, and is thus already a “speculator.” This is different from real estate or equities, in which a cleaner distinction—or at least more varied continuum—can be drawn between investors buying underlying cash flows, vs. those buying out of an expectation of short-term appreciation.

Image 32. Zong'ai market quotation slip, 4/1924



Source: Quotation slips (行情单), LJMPC, 31.

This quotation slip is worth transcribing in full:<sup>450</sup>

呈今早 数 现大洋数  
现洋开 2595-6、2593、2600、2605-6、2608  
启，缘来信所定放满加之事，利洋不至，未做，奉到呈艾数后，大者接新数，便鸽  
信之家吃买之，故耳。  
上 满加利 9.2 元  
谦瑞益宝局，台电由交要各差  
民国 13 年四月 X 一日，德逢豫具

Reporting today's morning market open spot silver price

Spot silver:

2595-6

2593

2600

2605-6

2608

Respectfully, regarding the matter of making loans, hard silver is unavailable and we have not done this. When you receive this quotation slip, if silver prices in your location are higher than these new market quotations then please send immediately a letter by way of homing pigeon and we will gobble it up. That is all.

Enclosed. Manjiali rate 9.2 元

To the honorable Qianruiyi, sent via telegram

4/1934, Defengyu

This is a quotation slip sent by Defengyu in Zong'ai to Qianruiyi. Qianruiyi is either Defengyu's client or an affiliate. The slip reports spot market prices in copper in the market town of Zong'ai.

It appears that Qianruiyi had asked Defengyu to make *manjiali* loans in silver on its behalf.

However, Defengyu explains that it cannot fulfill Qianruiyi's request because silver stocks are in short supply. This makes sense given that the year is 1934, and silver was scarce in the entire country.<sup>451</sup> Instead, Defengyu proposes they engage in exchange arbitrage. Specifically,

Defengyu tells Qianruiyi that if silver where Qianruiyi is located—probably the Shouyang

---

<sup>450</sup> Quotation slips (行情单), LJMPC, 31.

<sup>451</sup> Tomoko Shiroyama, *China during the Great Depression: Market, State, and the World Economy, 1929-1937*, Harvard East Asian Monographs 294 (Cambridge, Mass: Harvard University Asia Center : Distributed by Harvard University Press, 2008).

county seat—is dearer than in Zong'ai, then Qianruiyi should immediately report back by carrier pigeon. Defengyu would then buy—or “gobble”—up as much silver as possible and expect to make money when silver prices in Zong'ai rose in sympathy with Shouyang prices.

For our purposes, what is interesting is what the slip tells us about market integration. We are looking at a *biaoqi*, as seen by the fact that there is a *manjiali* market. More importantly, this slip splendidly demonstrates how the *biaoqi* served to integrate interregional financial markets. The low interest rate on silver shows how lending markets had to compete with returns in exchange markets. At the same time, we see interregional integration in the form explicit exchange arbitrage between different locales. Indeed, the fact that these two affiliates, Qianruiyi and Defengyu, are literally communicating by telegraph and carrier pigeon in order to get in front of the market shows just how efficient these markets would have been: even the slightest edge in timing what essential to realizing arbitrage profits.

Bustling markets in exchange were found not only at the *biaoqi*, but at related settlement fairs such as the smaller but more frequent *liangbiao* mentioned by Jiang Xuekai and Kong Xiangyi. The closest thing to a primary source I can find on *liangbiao* relate not to credit markets, but to exchange markets. These are Republican-era reports on the Manchurian version of these fairs, known as the “maoqi.” Ha'erbin merchants distinguished between two kinds of *maoqi*, the “grain market maoqi” (粮市卯期 *liangshi maoqi*) and the “money market maoqi” (钱市卯期 *qianshi maoqi*). Grain market *maoqi* were held on the 15<sup>th</sup> of each month, and are analogous to the Shanxi *liangbiao*. The primary activity at such fairs was settling soy bean and wheat futures. These futures were forward-looking three months in advance. Thus, grain due on the 15<sup>th</sup> of the following month was called the “near mao” (近卯 *jinmao*), grain due on the 15<sup>th</sup> two months out was called the “middle mao” (中卯 *zhongmao*), while that of three months out

was the “far mao” (远卯 *yuanmao*). As elsewhere, a liquid credit market traded in tandem with grain. This produced a lively trade in futures arbitrage and ensured that the implied interest in futures—known as the “mao interest” (卯利 *maoli*)—trended toward rates in credit markets.<sup>452</sup>

The “money market maoqi” was probably even more widespread, existing in Manchurian markets of any considerable size.<sup>453</sup> Money market *maoqi* took place every ten days, and were used to settle exchange futures. By the Republican era, such exchange futures included domestic and foreign exchange (i.e. silver cash in return for anything from Shanghai notes, to Russian rubles, to Changchun bank paper).<sup>454</sup> But in the Qing, most exchange markets were probably trading silver/copper exchange. Indeed, this remained the case for many smaller, Shanxi and Inner Mongolian commercial centers even into the Republic. In Republican-era Guisui (Qing-era Guihua; present-day Hohhot), for example, *maoqian* (卯钱) referred to the process of settling silver/copper exchange futures traded on *biaoqi* futures markets.<sup>455</sup> In the latter Republic, at least some of these markets moved onto formal securities exchanges.<sup>456</sup> This further evidences the “intermediate” nature of *biaoqi* as a kind of proto-exchange.

---

<sup>452</sup> “Commercial Practices around the Country: Ha’erbin Branch: Ha’erbin: Grain Market Maoqi and Money Market Maoqi (各地商业习惯:哈行所属:哈尔滨:粮市卿期及钱市卯期),” *Bank of Communications Monthly* (交通银行月刊), 1923.

<sup>453</sup> “Commercial Practices around the Country: Ha’erbin Branch: Heilongjiang Maoqi (各地商业习惯哈行所属黑龙江卯期),” *Bank of Communications Monthly* (交通银行月刊), 1923.

<sup>454</sup> “Commercial Practices around the Country: Ha’erbin Branch: Ha’erbin: Grain Market Maoqi and Money Market Maoqi (各地商业习惯:哈行所属:哈尔滨:粮市卿期及钱市卯期),” *Bank of Communications Monthly* (交通银行月刊), 1923.

<sup>455</sup> Yufu Zheng, “(Minguo) Guisui Xian Zhi: Bu Fen Juan,” electronic resource, *Zhongguo Fang Zhi Ku*, 2009, <http://server.wenzibase.com>.

<sup>456</sup> 黄世礼., 谷昆山., and 本书编写组., *Chongqing Jinrong* (重庆金融) (重庆: 重庆出版社, 1991), 291-292.

But the most intimate view of settlement fair exchange markets is neither from quarterly *biaoqi* nor short-term *maoqi*, but from the monthly *luobiao* settlement fairs. This is thanks to a phenomenally rich correspondence book from a Shanxi merchant firm that was both a *qianzhuang* and a *buhang* (布行 “cloth trader”).<sup>457</sup> This means that the firm specialized in trading cloth, exchange, and in making loans. The correspondence book consists of 129 letters from the firm’s headquarters to its branch in Chifeng, in present-day Inner Mongolia. The letters are dated from between the first month of the fifth reign year of the Guangxu emperor to the eleventh month of the sixth Guangxu reign year (1879-1880), with a gap between the fourth and eighth month of the sixth year. The letters include detailed reports of the firm’s own business transactions, as well as regular market quotations. These quotations consist of exchange rates, sorghum, and millet, along with occasional quotes on interest rates.

The correspondence book is in some ways difficult to interpret. Unfortunately, there is no way to locate the firm’s headquarters with precision. In its correspondence, headquarters refers to its own location as *Jundi* (郡地), but no such place name exists. Originally, I had thought that “jun” simply meant “here,” but this is not the case. The letters refer to the local scale as the “*jun* scale” (郡平), suggesting that “Jundi” was shorthand for a specific, fixed location that would have been obvious to Shanxi merchants during the Qing. Without pinning the location of Jundi down exactly, we can at least venture an informed guess as to its whereabouts. The character “*jun*” indicates that the location was once a commandery, though this only slightly narrows down our possibilities. It is also possible to triangulate its location by looking at other areas mentioned

---

<sup>457</sup> Miscellaneous *qianzhuang* and cloth merchant correspondence book, 1879 (光绪五年正月某钱庄布店来信稿), LJMPC.

in the correspondence. It took a minimum of four days for couriers to deliver letters to and from Chifeng, placing headquarters somewhere in either Zhili province, Inner Mongolia or Manchuria. Headquarters also references correspondence received from Luanzhou in southern Zhili and from Beiji (北集), Nanji (南集), and Qidong (齐东) in Shandong, where it purchased significant amounts of cloth and engaged in regional exchange arbitrage. It was also extremely close to Rehe (热河), which it treated as a market for offloading idle capital. We can thus be sure that it was either in southern Manchuria or northern Zhili.

This still leaves numerous possible locations. But the most probably is somewhere in the former Qin Dynasty Liaoxi Commandery. Lulong (卢龙), generally the seat of government in the region, is the single most likely candidate.<sup>458</sup> In classical Chinese, Lulong is often called “*jun cheng*” (郡城), as were other former commanderies.<sup>459</sup> Most suggestively, Lulong was the site of a major Qing dynasty copper/silver exchange market,<sup>460</sup> making it a perfect location for the headquarters of a *qianzhuang* specializing in exchange within the Shandong-Inner Mongolia-Zhili triangle.

---

<sup>458</sup> Chen Tianyi identified Lulong as the most likely location in the work of Chen Tianyi’s impressive sleuthing. On Lulong as the seat of government administration, see Lai Xinxia 来新夏 and Hebei Sheng di fang zhi ban gong shi 河北省地方志办公室, eds., *Hebei Di Fang Zhi Ti Yao* 河北地方志提要, Di 1 ban (Tianjin: Tianjin da xue chu ban she, 1992), 166.

<sup>459</sup> See for example Li Lifeng 李利锋 and Zhou Yanqing 周艳清, *Minguo Lulong Xian Zhi Jiao Zhu* 民国卢龙县志校注, Di 1 ban (Beijing Shi: Guang ming ri bao chu ban she, 2019), 580.

<sup>460</sup> Liu Kexiang 刘克祥, “Jindai Nongcun Diqu Qianzhuangye de Qiyuan He Xingshuai: Jindai Nongcun Qianzhuangye Tansuo Zhi Yi 近代农村地区钱庄业的起源和兴衰——近代农村钱庄业探索之一 [The Origins, Rise, and Fall of the Modern Rural Qianzhuang Industry in Rural Areas: An Exploration into the Modern Rural Qianzhuang Industry],” *Researches in Chinese Economic History* 2 (2008): 3–16.



With this in mind, we can begin to examine the contents of the correspondence book. They consist of letters from Jundi—probably Lulong—to Chifeng, and offer an excellent record of how institutions traded in exchange markets. The first letter gives us a series of exchange transactions, along with market quotations:<sup>461</sup>

新正月十九日收到

元号：内函咱于十四日卖出本标银 1000 两，价 3485，今早市开  
三月标，咱买银 2000 两，价 3444，开盘 3470，下市 3435。本标银  
未开，约行 3460 价

New Year's Month, the 29<sup>th</sup>, received

First letter: Enclosed stated that on the 14<sup>th</sup> we sold 1,000 taels of current *biao* silver at a price of 3,485 copper cash. This morning the third month *biao* opened. We purchased 2,000 taels of silver for 3,444 copper cash. The price was 3,470 at market open and closed at 3,435. This *biao*'s silver market hasn't opened yet, but should be about 3,460.

This gives us a firsthand glimpse of the wholesale exchange market. Headquarters informs the Chifeng branch that yesterday the firm purchased 1,000 taels of “current *biao* silver” (本标银 *benbiao yin*) for 3,485 copper cash.<sup>462</sup> This is a near-term futures contract, due at the upcoming *biao*—i.e., at the second month *luobiao*. On the day the letter was written, the 19<sup>th</sup> of the first month, the third month *biao* market opened. These are medium-term futures for copper trades that settle at the *luobiao* in the third month, or roughly two months later. The market for this third-month *biao* silver opened at 3,470 and closed at 3,435 copper cash per 1,000 taels. Headquarters purchased in the middle of the price drop, buying 2,000 taels at a price of 3,444 copper cash per taels, and so lost money. The letter ends by saying the silver market for the present *biao* has not yet opened, but they forecast a price of around 3,460 copper cash per 1,000

---

<sup>461</sup> Miscellaneous qianzhuang and cloth merchant correspondence book, 1879 (光绪五年正月某钱庄布店来信稿), LJMPC, 1.

<sup>462</sup> This bookkeeping convention, of quantifying exchange transaction volumes in silver taels and exchange prices in copper cash, is standard practice in Shanxi merchant correspondence.

taels. This is somewhat confusing, since they had already traded in current *biao* silver the previous day; I am not certain what to make of this.

In the next letter, the “current biao” market opens, and the *qianzhuang*’s transactions start coming fast and furious. One get the sense that the real trading has started, and that the feeling at the *luobiao* would be reminiscent of a modern day trading floor. The letter reads:<sup>463</sup>

二十九日收到

二号：内云前捎去第吉号之信，大约收阅，于十六日隆记还钱 1 仟千，是日咱买过本标银 2000 两，价钱 3462，十七日咱顶卖与永茂泉银 3000 两，福盛长银 1000 两，价俱 3444，彼时价 3425 显疲，自后价长因口理来脚信之故，二十日咱买过现银 1600，价 3460，买本标银 500 两，价 3460，连现银前后净赔钱 12.5 吊，于廿二日收到元号一信，内情领明所言，与源远流长去信，于廿三日已经托便捎去，

Received on 29<sup>th</sup>

2<sup>nd</sup> Letter: Enclosed confirmed that the first letter we sent had been received and read. On the 16<sup>th</sup>, Long Co. repaid 1,000,000 copper cash. On that day we purchased current biao silver of 2,000 taels at a price of 3,462 cash. On the 17<sup>th</sup> we brokered 3,000 taels of silver to Yongmaoquan and 1,000 taels to Fushengchang, at a price of 3,444. At that time the market price was 3,425 and looking weak. Afterward, the price went up. This is because of information brought by couriers from within the pass. On the 20<sup>th</sup>, we purchased 1,600 taels of spot silver at a rate of 3,460. We purchased 500 taels of current biao silver at 3,460. Including the spot purchases of silver, in total we lost 12,500 copper cash. On the 22<sup>nd</sup>, we received your first letter. We understand all that the letter reported and have already sent a reply care of Yuanyuanchang. This was sent on the 23<sup>rd</sup>.

This letter takes us into a series of credit and exchange transactions. First, the *qianzhuang* repays a loan of one million copper cash. It then goes on to buy 2,000 taels of current *biao* silver futures at a price of 3,462 copper cash per tael. But it is the next transaction that is most interesting. The verb in the next transaction is not simply *mai* (卖) or “sell,” but *dingmai* (顶卖).

---

<sup>463</sup> Miscellaneous *qianzhuang* and cloth merchant correspondence book, 1879 (光绪五年正月某钱庄布店来信稿), LJMPC, 2.

The methodological cornerstone of interpreting popular sources is that every single character is meaningful. Thus, *dingmai* cannot mean the same thing as *mai*; it must mean something more than “sell.” Originally, I interpreted *dingmai* as an account transfer. This is close to the contemporary meaning of *ding*. But this would have been unusual usage in the Qing and Republic, when account transfers were generally denoted with a *bo* (拨). Moreover, in the correspondence book, any simple “buy” or “sell” (买卖) transaction is followed by the transaction volume, while a buy or sell with a *ding* is followed by the character 与 (*yu*, “and”) and the name of a specific counterparty. Finally, we see in this passage that there are two different prices. There is the *dingmai* price of 3,444 at which the *qianzhuang* sold silver to Yongmaoquan and Fushengchang, as well as the “market price” or “current price” (时价 *shijia*) of 3,425 copper cash. The only explanation is that the *qianzhuang* was acting as a broker for Yongmaoquan and Fushengchang to participate in the *luobiao* exchange market, much as the Baohuitong piaohao was acting as broker for the Hengyidian pawnshop to participate in the *biaoqi* credit market. The razor-thin margin may also indicate what a competitive market brokerage services was (though we might also be looking at a particularly favored customer; there are simply enough sources to know for sure). The difference in the brokered price and the market price was the margin that the *qianzhuang* hoped to earn on the exchange transaction, just as Baohuitong earned a spread on its business with Hengyidian. This is an important discovery; it demonstrates that the brokerage arrangements witnessed in Chapter 2 at the grassroots also obtained in the world of “high finance.” Indeed, this is a key reason why it makes sense to think of *biaoqi* as more than fairs but as proto-exchanges. In this case, the trade went sour for the

qianzhuang; they misjudged the market, which had been “looking weak” but went on to rebound. Thus, by selling silver early, they lost money over the course of the day’s trading.

In the second segment of the letter, headquarters moves from reporting specific transactions, to communicating market information. Most of this part of the letter consists of market quotations. It reads:<sup>464</sup>

再报滦州近信

钱盘 9060，期米 15.3 千，迁邑钱盘 9612，小米 3190，高粮 19 千  
郡地大布现标交钱 88 千，四月标交钱 90 千，共成六、七十块  
银庄三月标 25.8 两，再报临笔宝银 3530，碑银 3430，  
本标银结事，三月标银 3288，市小米 15 千上下，高粮 7,800  
来信所言布块麻油之事按赤地景况看相办理。

Further reporting Luanzhou latest information:

Copper plate 9060. Millet futures 15,300. Tangshan copper plate 9,612. Millet 3,190. Sorghum 19,000. Jundi: large cloth at the current biao settled 88,000 copper cash; for the fourth month biao settled 90,000 copper cash. In total, 60 to 70 pieces.

Yinzhuang for the third biao at 25.8 taels. Also reporting current prices: Sycee 3,530. Loose silver 3,430. Current *biao* silver ended. Third month *biao* silver 3,288. Market millet around 15,000. Sorghum 7,800.

As stated in your letter, cloth and sesame oil affairs will be done in accordance with the situation at Chifeng.

This segment contains an enormous amount of information. It is the first of many references to Luanzhou prefecture, where the *qianzhuang* engages in frequent trading. Luanzhao is a prefecture near Tangshan in present-day Hebei Province. It was a trading hub for Shanxi merchants in the Qing and Republican periods. The letter goes on to give some basic market quotes. The “copper plate” price is 9,060 copper cash, which refers to the Luanzhou price of silver taels denominated in “Luan copper cash” (滦钱 *luannqian*). Silver prices in Luanzhou are three times what they are in Jundi, not because of any true price divergence but because of

---

<sup>464</sup> Miscellaneous *qianzhuang* and cloth merchant correspondence book, 1879 (光绪五年正月某钱庄布店来信稿), LJMPC, 2.

different copper cash currencies. Luanzhou cash was also known as “east cash” (东钱 *dongqian*) because it circulated in Zhili east of Beijing, including in Luanzhou and Tangshan. It was less valuable than the copper elsewhere, hence the high price.<sup>465</sup> The quotations go on to state the prices for staple goods, and we learn that Luanzhou has a market in “millet futures” (期米 *qimi*). The market in millet futures is an interesting discovery, and worth pursuing as a separate topic, but is beyond the scope of this chapter.

The quotations then move on to the qianzhuang headquarters’ location, or *Jundi*. Again, this is most likely Lulong county in present-day Hebei province, just west of Shanhaiguan. The letter tells us that in Jundi, cloth market transactions amount to 60-70 cloth pieces for 88,000 and 90,000 copper cash, to be settled immediately and at the fourth month *biao*, respectively. We are also told that the *yinzhuang* price is 25.8 taels. I do not know what this refers to, but it is some kind of cloth price. The letter then lists market quotations for Jundi, which are similar to the quotations in the previous letter, except that trading in current *biao* silver has ended.

This correspondence does not merely catalogue the various exchange, futures, and credit markets at the *luobiao*. It also offers a holistic view of how physical transfers of silver, exchange

---

<sup>465</sup> Luanqian was also known as Dongqian; sources give its exchange rate with the silver tael as between 6,000 and 9,000 wen. See Qinhuangdao Shi di fang zhi bian zuan wei yuan hui 秦皇岛市地方志编撰委员会, ed., *Qinhuangdao Shi Zhi Di Wu Juan* 秦皇岛市志 第五卷 [*Qinhuangdao Municipal Gazetteer: Volume 5*], electronic resource (Hebei: Tian jin ren min chu ban she, 1994), <http://c.wanfangdata.com.cn/LocalChronicle-FZ011865.aspx>, 190 and Li Zhenzhen 李真真 and Pan Sheng 潘晟, “Wanqing Huabei Xiangcun Shangye Jingying Ji Xiangguan Wenti: Yi Dong’anxiaan Xiaohuizhuang Sanchenghao Caipu Pancundan Wei Li 晚清华北乡村商业经营及相关问题——以东安县小惠庄三成号材铺盘存单为例 [Commerce and Society in Rural North China in the Late Qing Dynasty: Based on the Sancheng Hao’s Inventory Lists in the Xiaohuizhuang, Dongan County],” *Zhongguo Jingjishi Yanjiu* 中国经济史研究 [*Researches in Chinese Economic History*] 3 (2019): 58–70.

prices, and interest rates were intertwined. One telling letter, sent on the fourth day of the second month, reads:

大标于初三日出街共走银 90000 余两，按目下郡地无甚存项，现银加钱过多，众号借贷银两看式，亦得晚上咱柜。

The large armed courier left town on the third, taking with it over 90,000 taels of silver. Right now, *Jundi* is left without silver reserves, and the exchange premium for silver is excessive. All firms are trying to borrow silver and see how the situation develop, and repayments to our firm will probably be late.

This passage means that after the *biao*, the armed couriers have left the city and have taken enormous stocks of silver with them. The “large biao” refers to the biggest armed courier that regularly went to and from Lulong. It is distinguished from the “east biao” (referenced elsewhere in the account book) that connected Lulong to Shandong province.

This passage is important for two reasons. First, we see the tremendous amount of silver that was carried by the armed couriers. Ninety thousand silver taels is roughly three tons of hard silver! Furthermore, it is impressive that the *qianzhuang* even has this number; it means that businesses were keeping track of physical flows of silver—likely to help predict market fluctuations. Second, the passage showcases the mechanics of the exchange market. It shows how the sudden outflux of silver impacted both the exchange and credit markets. Silver prices went up, and lending markets seized up. This is the hallmark of a competitive financial market governed by supply and demand. Numerous similar passages can be found throughout the correspondence book.

To conclude this section, *biaoqi* and similar settlement fairs hosted key wholesale markets in silver/copper exchange. These markets included both spot and futures markets, and were forward-looking at least three months in advance. More importantly, exchange markets and

credit markets were tightly bound. Arbitrageurs made certain that implied interest rates in grain and exchange futures stayed close to interest rates in lending markets. Scarcity of silver—either due to the normal cycle of the armed couriers or other factors—made silver interest rates and copper prices rise in tandem.

#### Domestic exchange: Remittance markets and the *biaoqi*

The final key financial market at *biaoqi* settlement fairs was the market in remittances. Wang Luman recognizes the importance of remittance settlements at the *biaoqi*. Her work thus poses the question of how concentrated settlements constituted a market. In fact, the *biaoqi* remittance market was another class of exchange market with similarities to silver/copper exchange. But instead of exchanging silver for copper in one location, it was a market for exchanging silver in one location for silver in another location. This simple fact—that remittances were not a service performed for a fee, but an exchange *market* similar to modern-day foreign exchange markets—is unintuitive. It has eluded even some specialists in the field, who continue to view remittances as a service, and remittance fees as compensation for movement of silver over long distances.<sup>466</sup> When a *piaohao* charged, for example, a remittance

---

<sup>466</sup> See Meng Wu, “How Did the Chinese Shanxi Merchants Determine the Remittance Fees? Micro Firm Analysis of Rishengchang Piaohao,” *Frontiers of Economics in China* 13, no. 3 (September 2018): 484–504. Wu’s work is superb, but is unclear how she allows for the different *kinds* of *piaohao* remittance income. I am therefore not sure how to interpret her results. My best guess is that her statistical conclusions, which purport to show a direct relationship between distance between branches and remittance fee, are directionally correct. However, I suspect one could add some useful nuance to this. Namely, I suspect that rather than uncover, as Wu believes, a linear relationship between fees and distance, that she has detected greater *scope* for fluctuation between “silver points” as distance increases. In layman’s terms, I believe that the economics of a *piaohao* look more like those of an investment bank trading floor, than those of a taxicab (otherwise they would add no value beyond the armed couriers).

fee of 10 taels in return for remitting 1,000 taels from Guangzhou to Shanghai, the ten tael fee had little to do with the cost of shipping silver between Guangzhou and Shanghai.<sup>467</sup> Rather, the piaohao was in essence selling 1,010 Shanghai taels in return for 1,000 Guangzhou taels. This also explains why *piaohao* so frequently “lost” money (贴费 *tiefei*) on their transactions. This apparent loss was not a loss at all, but simply buying relatively dear silver in exchange for relatively cheap silver.<sup>468</sup> During the Republican-period, the market logic of the remittance prices became more transparent, with domestic exchange<sup>469</sup> (*neihui* 内汇) rates fluctuating on formal securities exchanges. This is the subject of a later chapter.

As with other financial markets, remittances were timed to settle at the *biaoqi*, with Zhangjiakou, Guihua, and Xinzhou, along with the three counties where *piaohao* were headquartered—namely, Pingyao, Taigu, and Qi County—forming the six key nodes in the northern remittance network. This meant that merchants and *piaohao* swapping silver in one locale for silver in another need only settle at specific dates and at a specific commercial hub,

---

<sup>467</sup> Transport costs factor in by helping define the “silver point,” or the scope of potential interregional price fluctuations beyond which physical shipments of bullion become profitable, and which therefore induce arbitrage activity to bring prices back toward par. Debin Ma and Liuyan Zhao, “A Silver Transformation: Chinese Monetary Integration in Times of Political Disintegration, 1898–1933,” *Economic History Review* 73, no. 2 (01 2020): 513–39, <https://doi.org/10.1111/ehr.12939>.

<sup>468</sup> In other words, from the *piaohao*’s point of view, it had not lost “ten taels” any more than you lose “five money” when you trade six Renminbi for one US dollar. This is highly counterintuitive, especially since silver in both locales are made of the same material, and so in terms of silver the loss is real. But what is important is silver’s exchange value, which fluctuates within the boundaries of a “silver point.”

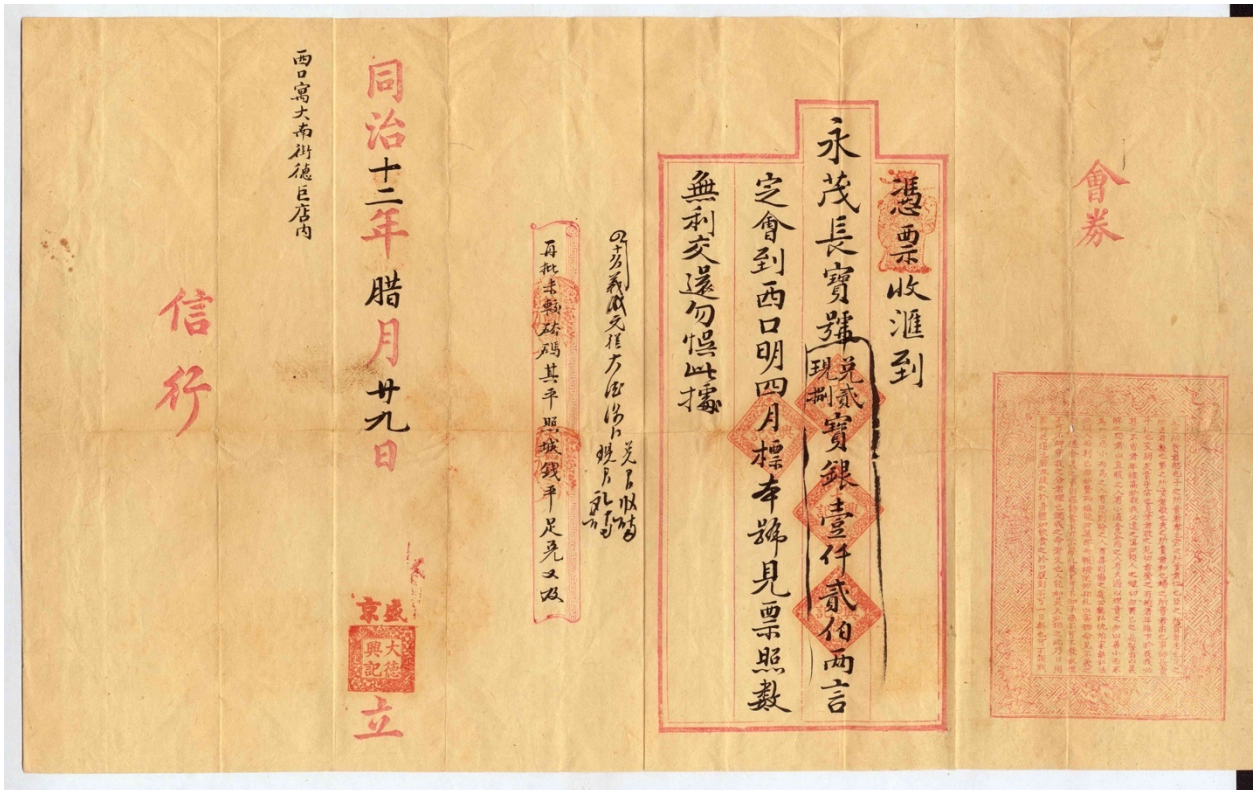
<sup>469</sup> On domestic exchange markets, see Yan Hongzhong 燕红忠 and Li Yuwei 李裕威, “Jindai Zhongguo Neihui Shichang de Fazhan Ji Qi Tedian 近代中国内汇市场的发展及其特点 [The Development and Characters of the Internal Exchange Market in China from the 19th to 20th Century],” *Jinan Xuebao (Renwen Kexue Yu Shehuikexue Ban) 暨南学报(人文科学与社会科学版)* *Jinan Journal (Philosophy and Social Sciences)* 5 (May 2019).



when that hub would have particularly ample silver stocks. It therefore allowed *piaohao* and merchants alike to economize on physical silver. Moreover, this was of use not only to those doing business at *biaoqi* fairs, but anywhere in northern China. This is because remittance flows between lesser commercial hubs could use *biaoqi* as nodes in the transfer network, much as today Wall Street, Hong Kong, London, and other money centers act as “nodes” for international capital flows.

The importance of *biaoqi* as nodes in the remittance network are apparent simply by looking at the imprints on Qing-era remittance notes. One such remittance note, issued in the twelfth reign year of the Tongzhi emperor (1873), is presented as Image 33.

Image 33. Remittance note, 1873



Source: “Hui piao” collection, LJMP, 1.

The text of the remittance note reads:<sup>470</sup>

凭票收汇到永茂长宝号  
兑式现捌宝银壹仟贰佰言  
定会到西口，明四月标本号见票照数，  
无利交还，勿误此据。  
四月十二日，义 XX 大德源兑银 240 两，现银 960 两  
再批未较砵码其平照城钱平足兑又及  
同治十二年腊月廿九日 盛京，大德兴立  
西口寓大南街德巨店内  
信行

Upon presentation of this note, the honorable Yongmaochang Company shall receive: a remittance paid 20% in account transfer and 80% in hard currency, to the amount of 1,200 taels of silver sycee. Stated clearly that the remittance will be sent to the Xikou fourth month biao, where upon presentation of this note we will return the appropriate amount without interest. Do not lose this note.

Marginalia: On the 12<sup>th</sup> day of the 4<sup>th</sup> month, XXX and Dadeyuan paid 240 silver taels in account transfer and 960 silver taels in hard silver.

Addendum: the scale had not been specified. The Guihua scale will be used.

On the 29<sup>th</sup> day of the twelfth month the in 12<sup>th</sup> reign year of the Tongzhi Emperor.

Issued in Shengjing [Shenyang] by Dadexing.

Marginalia: Xikou, Yuda Southern Street, in the Deju shop.

By post

This is a remittance note issued by the Dadexing (大德兴). Dadexing was founded as a tea merchant in the first reign year of the Xianfeng emperor (1851), but quickly went into the remittance business.<sup>471</sup> This particular remittance note was redeemable at Dadexing's Guihua branch. We know this because "Xikou" is written in the marginalia. By the late eighteenth

---

<sup>470</sup> "Hui piao" collection, LJMPC, 1.

<sup>471</sup> Fan Weiling 范维令, "Chapiaoye Jianying Zhi Chenggong Dianfan: Dadexing Piao Zhuang 茶票业兼营之成功典范——大德兴票庄 [The Model of Success for Combined Operations in Tea and Notes: Dadexing Piao Zhuang]," in "Xingshang Qianyao" Shidu Yu Yanjiu 《行商遗要》释读与研究 [ "Xingshang Qianyao": Interpretation and Research ], ed. Zhang Yalan 张亚兰 (Taiyuan: Shanxi jingji chubanshe, 2018), 213–16.

century, Xikou nearly always meant Guihua. We also see that the silver is to be weighed using the Guihua scale, making it clear that the transaction is being settled there.

The remittance note was thus issued by Dadexing in Shenyang, where the piaohao received 1,200 taels of silver from the Yongmaochang company. In return, the Yongmaochang company received this remittance note. Once the fourth month *biao* commenced in Guihua, Yongmaocheng could take the note to the Dadexing branch in Guihua to redeem the silver. In this case, the silver was paid out by its affiliate Dadeyuan, operating out of the Deju shop on Yuda Southern Street. Dadeyuan was a related party, as both firms were investees of the Qi County Qiao family.<sup>472</sup> The other addendum tells us that only 80% of the silver was redeemed in cash. The remaining 20% was redeemed through a *dui* (兑), or an account transfer (i.e. 拨兑 *bodui*). In other words, Yongmaocheng's account was credited with the money or else it received a draft on Dadexing's account with a local *zhangju* or *yinhao*. Note also that the remittance note matures at the fourth *biao* in Guihua. Since the *biao* is denominated by month, it is a *luobiao*, or monthly settlement fair. This shows that, much as merchants and lenders used *biaoqi* to coordinate commercial settlements, piaohao used them to coordinate remittance settlements.

Another remittance note from the third reign year of the Guangxu emperor (1877), also issued by Dadexing, shows a settlement date on one of the quarterly *biaoqi*. The image is reproduced below as Image 34.

---

<sup>472</sup> Zhang Gongde 张巩德, *Shanxi Piaohao Zonglan 山西票号综览 [Shanxi Piaohao Overview]* (Beijing: Xinhua chubanshe, 1996), 54.

Image 34. Remittance note, 1877



Source: “Hui piao” collection, LJMPC, 4.

The text of the remittance note reads:

凭票收会到

德兴宝号拨兑宝银壹仟两整，言定会至化成冬标，本号见票照数无利交还，勿误此据

旁批: 其平公较去具备伍拾两，钱砵壹副，至日公拆比兑

光緒貳年八月廿一日，京都大德兴记立，

旁批: 寓大南街德巨店内

信行

Upon presentation of this note, the honorable Dexing Company shall receive: a remittance paid in account transfers to the amount of 1,000 taels of silver sycee. Stated clearly that the remittance will be sent to Guihua winter *biao*, whereupon presentation of this note this company will return the appropriate amount without interest. Do not lose this note.

Marginalia: The measurements will be according to the 50 tael public scale, weighed in public at the appointed day with a single scale.

On the 21<sup>st</sup> day of the 8<sup>th</sup> month in the second reign year of the Guangxu Emperor

Issued in Beijing by the Dadexing Company

Marginalia: Yuda Southern Street, in the Deju shop.

By post

This remittance note is extremely similar to the previous note. It was issued by the Dadexing Company in Beijing. The note matured at the 1877 winter *biao* in Guihua, at which point

Dadexing owed the bearer 1,000 silver sycee. This note was, however, not redeemable in hard currency, meaning no physical silver would be exchanged. Rather, it was redeemable entirely in account transfers. This meant that the bearer of the note from the Dexing Company would not receive actual silver sycee—but a draft on an account at a local *zhangju* or *yinhao*.

A holistic impression of how important *biaoqi* were for coordinating remittances requires more than a few, scattered remittance notes. Fortunately, correspondence between *piaohao* branches provides greater detail on how the remittance network depended on *biaoqi* for settlements. Several useful correspondence books comes from the Jinshengrun (锦生润) *piaohao*. Jinshengrun was founded in Taigu in the 29<sup>th</sup> reign year of the Guangxu Emperor (1903), and operated until 1917.<sup>473</sup> Its surviving correspondence was written by one of its major investors and its de-facto manager, Cao Runtang (曹润堂) of the Taigu Cao family.<sup>474</sup> Cao Runtang's letters are filled with references to Taigu's quarterly *biaoqi*, as well as settlement fairs in Pingyao, Qi County, Xin Prefecture, and Guihua. The very first letter in a book of correspondence from headquarters in Taigu to the Tianjin branch, sent on the ninth day of the eight month of the 30<sup>th</sup> reign year (1905 ), reads:<sup>475</sup>

报：会来谷冬标交锦丰泰宝银 15000 两，又会来谷冬标交大昌玉宝银 1000 两，又会来谷冬标交谦源生宝银 1000 两，又会来平冬标交魁泰和宝银 15000 两，又会来忻冬标交，公义 X 宝银 4044 两，又会来忻冬标交元复 X 宝银 3033 两，又会来忻冬标交双兴厚宝银 3033 两，又会来

---

<sup>473</sup> Yan ai'ying 阎爱英, Hou Wenzheng 侯文正, and Hou Pingyu 侯平宇, *Jinshang Shiliao Quanlan Jinrong Juan* 晋商史料全览 金融卷 [*Shanxi Merchant Historical Materials, Finance Volume*] (Taiyuan, Shanxi: Shanxi ren min chu ban she, 2007), 333.

<sup>474</sup> Shanxi Zhengxie Jinshang Shiliao Quanlan Jinzhong Juan 山西省政协《晋商史料全览》编辑委员会, *Jinshang Shiliao Quanlan Jinzhong Edition* 晋商史料全览 晋中卷 [*Shanxi Merchant Historical Materials, Jinzhong Volume*] (Taiyuan, Shanxi: Shanxi People's Press, 2006), 325.

<sup>475</sup> "Jinshengrun, Cao Runtang correspondence to Tianjin book, 8/1904" (光绪三十年八月锦生润曹润堂致天津信稿), LJMPC, 3.

忻冬标交恒升昌宝银 2062.44 两，又会来忻冬标交双义公宝银 1011 两，又会来忻今冬标、明春标均交，又交聚恒昌宝银 6066，又会来汾府见信迟五、七天交郭承仁兄宝银 30 两，又会来祁八月半交岳怀琳兄宝银 30 两，无报平码等等，均照来函录底俟期交结暨。

Reporting: remittance to Taigu winter biao delivered to Jinfengbao worth 15,000 taels of silver sycee remittance to Taigu winter biao delivered to Dachangyu worth 1,000 taels of silver sycee; also remittance to Taigu winter biao delivered to Qianyuansheng worth 1,000 taels of silver sycee; also remittance to Pingyao winter biao delivered to Kuitaihe worth 15,000 taels of silver sycee; also remittance to Xinzhou prefecture winter biao delivered to GongyiXXX worth 4,400 taels of silver sycee; also remittance to Xinzhou prefecture winter biao delivered to YuanfuXXX worth 3,300 taels of silver sycee; also remittance to Xinzhou prefecture winter biao delivered to Shuangxinghou worth 3,300 taels of silver sycee; also remittance to Xinzhou prefecture winter biao delivered to Hengshengchang worth 2062.44 taels of silver sycee; also remittance to Xinzhou prefecture winter biao delivered to Shuangyigong worth 1,100 taels of silver sycee; also remittance to this year's Xinzhou prefecture winter biao and next year's this year's Xinzhou prefecture spring biao delivered to Juhengchang worth 6,066 taels of silver sycee; also remittance to Fenyang prefecture payable 5 to 7 days upon receipt of this letter to Mr. Guo Chengren in the amount of 30 taels of silver sycee; also remittance to Qi County payable in the middle of the 8<sup>th</sup> month to Mr. Yue Hualin the amount of 30 taels of silver sycee. No scales have been recorded. All of these will be conducted as your letter instructed and as we have copied here, with the transactions settled on their maturities as appropriate.

Here we see the importance of *biaoqi* as a mechanism for settlements and for coordinating financial flows across the entire region. This passage lists transactions contracted by the Tianjin branch. In this letter, the headquarters in Taigu is confirming to the Tianjin branch that it has received notice of these contracts and stands ready to settle down at the relevant places and dates. Virtually all of the above transactions settle at various *biaoqi*. Indeed, the only transactions that settle outside the *biaoqi* are for smaller amounts to individuals. Large, commercial remittances are without exception are settled at either the Taigu, Pingyao, or Xinzhou *biaoqi*. This is typical of remittance contracts in northern China.

One letter that showcases the dynamics at play in *biaoqi* remittance markets dates from fifteenth day of the 8<sup>th</sup> month in the 30<sup>th</sup> reign year of the Guangxu emperor. It is sent from headquarters at Taigu to the Tianjin branch, and reads:

呈知谷地景况，逾标以来迄今，银势日渐起色，皆由于现银竭缺，来源支绌，刻下满加冬标利 15 两，去宝寥寥，照此来历往后银势恐有岌岌紧迫之局，冬标银势万难看松，祈城见信万勿收会，咱处冬标交票以谷择点，咱城七月标余银甚巨，亦未得八九月骤之利，约必临近许有交款更望善，为布治，至于十月标之银亦是余事役，若临标出有交款务，宜抽收剔虞，即是抽收东口亦非所宜，不过凉事为之，若有划算未尝不可收办，统祈妥宜办理，是本。

Reporting marketing conditions in Taigu. Since the end of the biaoqi until now, silver has been hot. This is because physical stocks of silver are exhausted and sources of silver are insufficient. At present the *manjia* rate is 15 silver taels, such is the preciousness that comes from scarcity! In such circumstances, it is possible that silver will continue to be extremely tight, and it is impossible to imagine silver loosening by the winter biao. Upon receiving of this letter, please entreat the Guihua branch not to take our silver. This area is the mean payments place for the winter biao while our Guihua branch has ample silver left over from the seventh month, and has yet to receive its interest due at the 8<sup>th</sup> and 9<sup>th</sup> luobiao. Basically, it's a good thing if they make net deliveries in the near future. That is what to tell them. On the 10<sup>th</sup> month biao there will also be ample silver. When the luobiao leaves, if they make deliveries, it will be easy to scrape up a few contracts for silver receipts. Even receiving silver from Zhangjiakou is undesirable. This is the situation. Even if they think they have a good opportunity, they should not receive silver from other branches. This is the comprehensive entreaty for how to operate. That is all.

This passage means that physical silver has been in increasingly short supply in Taigu since the previous biaoqi, or autumn biao. Evidently, at that time silver traders misjudged the market and shipped excessive silver out of town. The Chinese phrase *qise* (起色) is hard to translate directly, but means something like the market is “hot”, i.e., that prices are rising amid considerable market activity. The interest rate that the passage references is the *manjiali* for short. A *manjia* rate of 15 silver taels in the middle of the 8<sup>th</sup> month, only a few weeks prior to the autumn *biao*,<sup>476</sup> is extremely steep. Lack of silver and high interest rates of course go together, and they also impact the remittance market. Headquarters has implored the Guihua branch not to “receive” silver from Taigu or Zhangjiakou, even if remittance prices appear attractive. By this, it essentially means that Guihua should not accept or initiate orders to sell Taigu and

---

<sup>476</sup> The Taigu autumn *biao* took place at the end of the eight month.

Zhangjiakou silver in return for Guihua silver. This is because with silver abnormally tight in Taigu, it will be easy to entice Guihua into selling Taigu silver at rates that would normally be lucrative, but under present conditions would be unprofitable. The logic behind headquarters' instructions would be familiar to any present day forex trader. This passage has larger significance for the history of China. It demonstrates a regionally integrated wholesale financial market encompassing remittances and interest rates across vast geographic space.

Similar passages abound. Two letters are particularly revealing about the mechanics of the remittance market and the role played by the *biaoqi*. One, sent on the 25<sup>th</sup> day of the eighth month, shows the importance of competition in driving financial prices. The letter reads:<sup>477</sup>

呈知，谷地景况，福泉涌在谷冬标收至津十月半，交长盛蔚银 10000 两，涌记每千两贴银 15 两，照此行市咱班无人随办，其余亦无甚事。

Reporting marketing conditions in Taigu. Fuquanyong is remitting funds from the Taigu winter *biao* to Changshengwei in Tianjin in the middle of the tenth month in the amount of 10,000 silver taels. Fuquanyong is losing 15 taels on the transaction. At these market prices, there is nothing that our group can do. Nothing further to report.

Fuquanyong was a *piaozhuang* (票庄) or “note house”—essentially a bank—based in Tianjin that was owned and operated by Shanxi merchants. It did significant business in silver remittances, note issuances, and currency arbitrage between Tianjin and Shanxi.<sup>478</sup> In this passage, it has contracted with Changshengwei—a trading firm specializing in foreign imports and headquartered in Pingyao<sup>479</sup>—to remit 10,000 taels to Tianjin at a loss of 15 taels. In other

---

<sup>477</sup> “Jinshengrun, Cao Runtang correspondence to Tianjin book, 8/1904” (光绪三十年八月锦生润曹润堂致天津信稿), LJMPC, 9.

<sup>478</sup> Huang Jianhui 黄鉴晖, *Zhongguo ren min yin hang, and Shanxi cai jing xue yuan*, eds., *Shanxi Piao Hao Shi Liao* 山西票号史料, Zeng ding ben, di 1 ban (Taiyuan: Shanxi jing ji chu ban she, 2002), 694.

<sup>479</sup> Jin Kaicheng 金开诚, *Pingyao Gucheng* 平遥古城 [*The Old City of Pingyao*] (Changchun: Jilin wenshi chubanshe, 2010), 104.



words, at the Taigu winter biao, Changshengwei will deliver 9,985 taels to Fuquanyong. In the middle of the tenth month, Changshengwei will receive 10,000 taels from Fuquanyong's Tianjin branch. The keen interest that Jinshengrun takes in its competitors demonstrates the competitive nature of the market and is typical of piaohao correspondence. In this case, it directly states that the remittance discount is so steep that Taigu piaohao (“*zan ban*” 咱班), have temporarily dropped out of the market.

Another letter, sent shortly after the new year on the fifth day of the first month, shows a similar dynamic. Too many competitors at the biaoqi have driven prices down, thus pushing some of the more conservative *piaohao* out of the market. The letter reads:<sup>480</sup>

呈知谷地景况，日前志成信等开盘，以谷春标收协成涌银 20000 两，至汉三月底交银，每千两谷收主得费银 3 两，汉五月半、底均交者，每千两谷收主贴银 9 两；又协成乾等开盘，以谷春标交元吉生银 28000 两，至京五月即收银，每千两谷交主得银 6 两，照此行市交主显稀。

Reporting marketing conditions in Taigu. Yesterday, at market open Zhichengxin and others contracted to remit 20,000 taels on behalf of Xiechengyong. The taels will be received at the Taigu spring biao, and paid in Hankou at the end of the third month. The receivers will earn a remittance fee of 3 silver taels. For those delivering silver in Hankou the middle and end of the fifth month, there is a loss of 9 silver taels per every 1,000 taels received in Taigu. In addition, at market open Xiechenghan and others others contracted to remit 28,000 taels payable to Yuanjisheng at the Taigu spring festival, and received in Beijing in the fifth month at a remittance fee of 6 silver taels. At these market prices, there are few delivering silver.

In other words, with remittance fees higher on receiving silver than on delivering silver in Taigu—meaning Taigu silver was trading at a larger discount to silver in Hankou than its premium to Beijing—few people were willing to sell silver in Taigu. This is because they

---

<sup>480</sup> “Jinshengrun, Cao Runtang correspondence to Tianjin book, 8/1904” (光绪三十年八月锦生润曹润堂致天津信稿), LJMPC, 41-42.

expected its value to go up, and so wanted to hold Taigu silver. In short, low Taigu silver prices pushed firms out of the market.

Finally, a letter from earlier in the year clearly demonstrates the connection between credit rates, remittance rates, and physical shipments of silver via armed courier. In this letter, dated the 15<sup>th</sup> of the 11<sup>th</sup> month of Jiachen (1904), headquarters writes:<sup>481</sup>

谷地景况：今日无甚新，开刻下满加明春标利 19 两，祁邑满加今天涨至 22 两。又闻中兴和开盘，以祁明春标收至汉明三月半、低，均交长裕川银 20000 两，和记每千两得银 5 两，大盛川随盘收过川记汉票银 15000，照此行市收主显稀，大德恒等于月半往京运去现银 70000 来银，票班由省领出洋款 50000 余两，并呈知之，再者即日宝银之元数 1181。

Taigu market conditions: Today there is nothing major new. The manjia rate for next year's spring *biao* opened at 19 taels. The Qi County manjia rate today rose to 22 taels. We also heard that in Qi County, Zhongxinghe opened the market by actively receiving silver in exchange for Hankou silver, delivering 20,000 taels at each of the middle and end of the next year's third month to Changyuchuan. These deliveries have earned a fee of 5 taels per 1,000 taels. Dashengchuan [another major *piaohao*] followed [Zhongxinghe into] the market and accepted 15,000 taels of silver from Changyuchuan in the form of Hankou notes. With the market like this, there are not many willing to receive remittances. Dadeheng and others have shipped about 70,000 taels of hard silver to Beijing. The *piaohao* industry has received 50,000 taels in silver yuan from Taiyuan. Please make a note of this. PS, as of today sycee is at 1181 yuan.

The passage offers a glimpse into Qing-era remittance market mechanics. It mentions four different parties. Zhongxinghe and Dashengchuan were major *piaohao*. Changyuchuan was among the largest Shaanxi-merchant tea trading firms and was based in Qi County.<sup>482</sup> Dadeheng was a Qi County *piaohao* and an affiliate of Dadexing mentioned earlier in the chapter. It shows an interest rate rise in Qi county. This rate spike appears to be sparked by large shipments of physical silver out of Qi County to Beijing. High rates have, in turn, prompted large contracts for

---

<sup>481</sup> “Jinshengrun, Cao Runtang correspondence to Tianjin book, 8/1904” (光绪三十年八月锦生润曹润堂致天津信稿), LJMPC, 29.

<sup>482</sup> Liu Liben 刘立本 and Fan Weiling 范维令, eds., *Qujia Da Yaun 渠家大院 [Qu Family Compound]* (Taiyuan: Shanxi jingji chubanshe, 2013), 53.

receive silver in Qi County, which in turn crowds out other receivers of silver. The *piaohao* industry has responded by bringing more silver to Qi County from Taiyuan. The important exchange rate is no longer the silver/copper rate, but the tael/yuan rate or *yangli* (洋厘).<sup>483</sup>

Finally, we can observe the relationship between money markets and remittance markets from the point of view of a *piaohao* customer. The correspondence book from the anonymous *qianzhuang* cited earlier in the chapter includes passages in which the *qianzhuang* remits money from Chifeng back to headquarters in Jundi. The passage reads:

惟会来德源盛银两会票至今未到，待票到就为付给郡地借贷，景况按时下银钱俱快，咱柜亦无存项，信至郑州如有会项回些亦可。郡街利息暂不能小，昨咱放与永泰和银 1000 两，月利 9 厘，八九月还。

Although the silver remittance note sent to Deyuansheng has not yet arrived, once it arrived we will use it to make loans in Jundi. Market conditions at this moment are such that both silver and copper rates are rising. But we have no funds available. We have also written to Zhengzhou that if they have any remittances available, they should send some back here. In the near future, the interest rate on the Jun market won't be negligible. Yesterday, we loaned Yongtaihe 1,000 taels of silver at a monthly rate of 0.9%, due in the eighth and ninth months.

---

<sup>483</sup> There was a notional, physical exchange rate between the tael and the yuan. But in practice, the value almost always fluctuated in a liquid exchange market. See Austin Dean, “The Shanghai Mint and U.S.-China Monetary Interactions, 1920-1933,” *Journal of American-East Asian Relations* 25, no. 1 (01 2018): 7–32, <https://doi.org/10.1163/18765610-02501002>; Debin Ma and Liuyan Zhao, “A Silver Transformation: Chinese Monetary Integration in Times of Political Disintegration, 1898–1933†,” *Economic History Review* 73, no. 2 (May 2020): 513–39. This was not true of all markets; I believe Chongqing was the largest financial center with a truly fixed *yangli*; but this hardly made its finances more stable. Rather, it meant exchange volatility was concentrated in the Shanghai exchange (申汇 *shenhui*) market. See conclusion, as well as Li Yixiang 李一翔, “Zhongguo Jindai Chengshi Fazhan Yu Shehuijingji: 1922-1931 Nian Chongqing Shenhui Shichang de Jiage Biandong Qushi 中国近代城市发展与社会经济: 1922—1931 年重庆申汇市场的价格变动趋势 [Modern Chinese Urban Development and Social Economy: The Direction of Chongqing’s Shanghai Exchange Market Fluctuations, 1922-1931],” in *Zhongguo Jindai Chengshi Fazhan Yu Shehui Jingji 中国近代城市发展与社会经济 [Modern Chinese Urban Development and Social Economy]* (Shanghai: Shanghai she hui ke xue yuan chu ban she, 1999), 131–45.

This passage shows how rapidly changes in interest rates could prompt activity in the remittance market. The *qianzhuang* in Jundi has loaned out all of its funds, and has no more ready cash. But interest rates in Jundi are high. As a result, it has notified Chifeng that it will use remittances sent to Jundi (by way of the Deyuansheng Co.) to make more loans. It has also written to a branch or an affiliate in Zhengzhou, saying that if Zhengzhou is receiving remittances from Jundi, it should return some of them so that the funds can be deployed in the Jundi lending market.

To conclude, this section has expanded on our previous understanding of the *biaoqi*'s relationship to the remittance market. The *biaoqi* was far more than a convention that allowed *piaohao* to save time negotiating the terms of remittance contracts. Rather, *piaohao* knew that the *biaoqi*'s liquid financial markets would keep the system solvent, and were thus able to economize on their reserves of physical silver. This meant, in effect, that the *biaoqi* were a way of unifying credit, exchange, and remittance markets. Changes in the price of one financial market would affect rates in other markets. In this way, the *biaoqi* nervous system communicated price information to the entire country, alerting merchants to where capital and credit were most needed—i.e., most lucrative.

#### The Banker's Bank: Zhangju and the *biaoqi*

This section discusses the *zhangju* (账局) or “accounts bureau,” and its relevance to the *biaoqi*. It argues that the *zhangju* were the institutional core of settlement fairs. They collected savings, thereby allowing numerous parties to invest in *biaoqi* markets. At the same time, they furnished credit to *biaoqi* participants. This allowed firms to meet settlement obligations even in

the case of a liquidity shortfall. In short, the *zhangju* was a kind of pre-modern, distributed “banker’s bank” that fulfilled many of the functions associated with present-day central banks.

I have only found three works in the English-language literature to engage with Zhangju, and even then it is largely in passing. One article explains that these were lending institutions that financed the overland trade between Russian and China. It goes on to state that, “Zhangju emerged to meet this [i.e. savings and loan] demand. Usually located in one city, zhangju provided savings and loan services. They could not, however, solve the problem of large-scale cash transfers.”<sup>484</sup> Meng Wu notes that, “Pawnshops, native banks (qianzhuang 钱庄) and credit-debt bureaux [i.e. zhangju] served deposit and loan functions and issued silver notes for local circulation.”<sup>485</sup> The only other reference I can find is in George Qiao’s dissertation on the Shanxi merchants. Qiao does not dwell on zhangju, but characterizes them as a “newly developed form of institution that specialized in providing large sum loans to officials and merchants.”<sup>486</sup> Both works are quite right to recognize the importance of *zhangju* in overland trade, but neither takes *zhangju* as a primary focus. In sum, the zhangju is perhaps China’s most important historical economic institutions that almost no one has heard of.

In Chinese, the zhangju is also understudied. Li Jinzhang’s primer on Shanxi merchant materials, *Jinshang Laozhang* (晋商老账) contains a chapter on them. He describes zhangju as depositary and lending institutions, and one of the “five great financial institutions” in Qing

---

<sup>484</sup> Ye Tian and Richard W. Wilson, “Commercial Development and the Evolution of Political Cultures: Ming/Qing China and 17th Century England,” *East Asia* 19, no. 3 (September 1, 2001): 147–80, <https://doi.org/10.1007/s12140-001-0013-1>.

<sup>485</sup> Meng Wu, “How Did the Chinese Shanxi Merchants Determine the Remittance Fees? Micro Firm Analysis of Rishengchang Piaohao,” *Frontiers of Economics in China* 13, no. 3 (September 2018): 484–504.

<sup>486</sup> George Qiao, “The Rise of Shanxi Merchants Empire, Institutions, and Social Change in Qing China, 1688-1850” (Ph.D., Stanford, 2017), <http://purl.stanford.edu/bg803zm7823>, 334.

China. According to Li Jinzhang, they principally serviced commercial enterprises and state officials.<sup>487</sup> Chen Tianyi's recent dissertation, "Research on the Zhang Ju During the Qing Dynasties to the Republic of China" (清代民国时期账局研究) is a study of zhangju in Beijing and Shanxi, and is by far the best work on this institution. Chen Tianyi identifies them as a key source of funds for commercial enterprises, and highlights their role in providing funds for *biaoqi*.<sup>488</sup> Hers is the first scholarly effort to give *zhangju* the attention they deserve, and I am heavily influenced by her work, particularly her researching showing zhangju effecting account transfers between financial institutions.

To understand the role of the Zhangju, we can return to the account book of Tianshunkui, the zhangju from Qi County referenced earlier in the chapter.<sup>489</sup> Its essential function as a provider of credit at *biaoqi* settlement fairs is immediately apparent from the customer accounts. For an example, we can look at the account of the Jiyi Hall lineage trust, owned by the Guo family in Qi County. An image can be seen in Image 35.

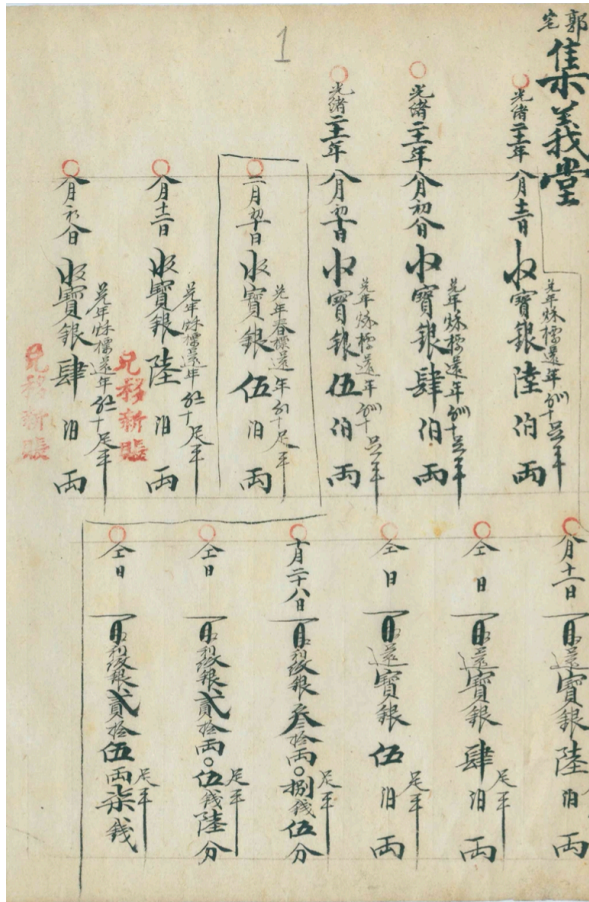
---

<sup>487</sup> Li Jinzhang 李锦章, *Jin Shang Lao Zhang 晋商老账 [The Historical Accounts of Shanxi Merchants]*, Beijing di 1 ban (Beijing Shi: Zhonghua shu ju, 2012), 220.

<sup>488</sup> See Chen Tianyi, especially pp. 183-196.

<sup>489</sup> Chen Tianyi.

Image 35. Tianshunkui client account, Jiyi Hall, 1895



Source: “Tianshunkui loan book, 1895” (光緒二十一年天順奎借貸賬), LJMPC, 1.

I have transcribed this account in Table 12. I have changed the orientation to make it possible to enter into Excel and easier for the modern reader to understand. The “top” of the original account is now on the left, and the bottom is on the right. The top represented payments made to the zhangju, and is labeled “receipts.” The bottom is payments from the zhangju, and is labeled “disbursements.” In Image 35, one can also see that each entry on the top is followed by a column of marginalia. These marginalia record the due date and the interest rate of the deposits. I have entered these under a separate column, also on the left side of the ledger, called “notes.”

Table 12. Tianshunkui client accounts, Jiyi Hall

集义堂 (郭宅)		
收	备注	付
光绪二十一年八月十二日收宝银六百两	兑年秋标还年53足平	八月十一日取还宝银六百两, 足平
光绪二十一年八月初八日收宝银四百两	兑年秋标还年53足平	同日取还宝银四百两足平
光绪二十一年八月初十日收宝银五百两	兑年秋标还年53足平	同日取还宝银五百两足平
二月初十日收宝银五百两	兑年春标还年51足平	十月二十八日取利纹银三十两〇捌钱伍分, 足平
八月十二日收宝银六百两	兑年秋标还年57足平	同日取利纹银贰拾两〇伍钱陆分, 足平
八月初八日收宝银四百两	兑年秋标还年57足平	同日取利纹银拾伍两柒钱足平
八月初十日收宝银五百两	兑年秋标还年57足平	23年二月十一日取还宝银五百两, 足平
		23年五月十二日取利纹银式拾四两柒钱叁分, 足平
Jiyi Hall (Guo family)		
Receipts	Notes	Disbursements
1895/8/12, Received 600 taels of baoyin	Next year, Autumn biao, repay 53, common scale	1896/8/11, Repaid baoyin 600 taels, full scale
1895/8/8, Received 400 taels of baoyin	Next year, Autumn biao, repay 53, common scale	1896/8/11, Repaid baoyin 400 taels, full scale
1895/8/10, Received 500 taels of baoyin	Next year, Autumn biao, repay 53, common scale	1896/8/11, Repaid baoyin 500 taels, full scale
1896/2/10, Received 500 taels of baoyin	Next year, Spring biao, repay 51, common scale	1896/10/28, Paid interest of 30.85 taels wenyin, full scale
1896/8/12, Received 600 taels of baoyin	Next year, Autumn biao, repay 57, common scale	1896/10/28, Paid interest of 20.56 taels wenyin, full scale
1896/8/8, Received 400 taels of baoyin	Next year, Autumn biao, repay 57, common scale	1896/10/28, Paid interest of 25.7 taels wenyin, full scale
1896/8/10, Received 500 taels of baoyin	Next year, Autumn biao, repay 57, common scale	1897/2/11, Repaid baoyin 500 taels, full scale
		1897/5/12, Paid interest of 24.73 taels, full scale

Source: “Tianshunkui loan book, 1895” (光绪二十一年天顺奎借贷账), LJMPC, 1-2.

The table reflects a relationship between Tianshunkui and a client, a lineage trust named Jiyi Hall. The account shows that Jiyi Hall made six deposits over the course of two years. In 1895, it deposited 600 taels, 400 taels, and 500 taels of silver on the 12<sup>th</sup>, 8<sup>th</sup>, and 10<sup>th</sup> days of the eighth month, respectively. These deposits were due at the following year’s autumn *biaoqi*, and paid an interest of 5.3%. The *duinian* (兑年) characters are shorthand for “the following year,” and *huan* 53 (还 53) is short hand for “interest rate of 53 taels per 1,000 taels”. The right-hand column of disbursements then lists the interest payments. The following year, in 1896, Jiyi Hall made another four deposits for 500 tls, 600 tls, 400 tls, and 600 tls. The interest rate on the deposits were 5.1% and 5.7% for the deposits made in the second and eighth month, respectively. In effect, the Jiyi Hall rolled over its deposits from the previous year, at a higher interest rate.

For our purposes, what is most important is the marginalia. Rather than specify a repayment date, each note specifies the *biaoqi* at which the deposit would mature. This shows



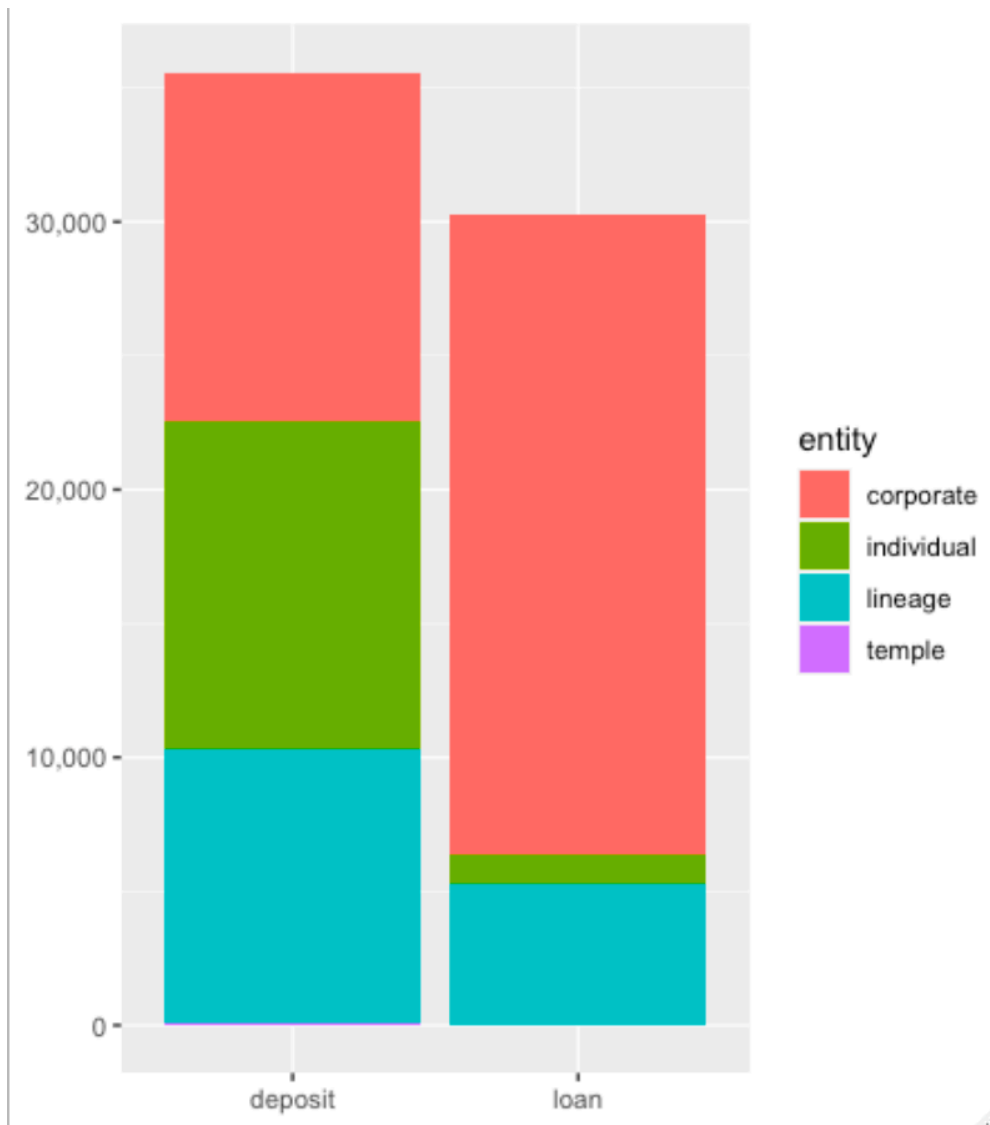
that the *zhangju* timed its deposits to mature at the *biaoqi*. Indeed, literally every single entry in the book that lists a yearly rate also specifies the *biaoqi* that the deposit or loan matured at. The more accounts one reads through, the clearer it becomes that Tianshunkui was essentially dedicated to *biaoqi* finance. In the 113 transactions found in the account book, including both loans and deposits, only 19 fall outside the *biaoqi*. Even those transactions tend to fall suspiciously close to *biaoqi* dates, such that only two transactions appear to have nothing to do with the *biaoqi* at all. These, moreover, are petty transactions with personal accounts, not wholesale institutional transactions. In short, Tianshunkui is mainly accepting deposits and making loans with other institutions at *biaoqi* dates—soaking up credit of institutions with too much cash, and furnishing credit to those with a shortage of it.

The source of deposits and recipient of loans in Tianshunkui's book of business is noteworthy. Chen Tianyi has found that the majority of deposits come from lineage trusts, or *tanghao*, while the majority of loans go to commercial entities.<sup>490</sup> She calculates this by number of transactions, but the relative weight of lineage trusts, individuals, and commercial entities is even more stark when we break them out by transaction volume, as in Figure 11.

---

<sup>490</sup> Chen Tianyi, 162.

Figure 11. Tianshunkui Deposits and Loans by Counterparty type, in silver taels

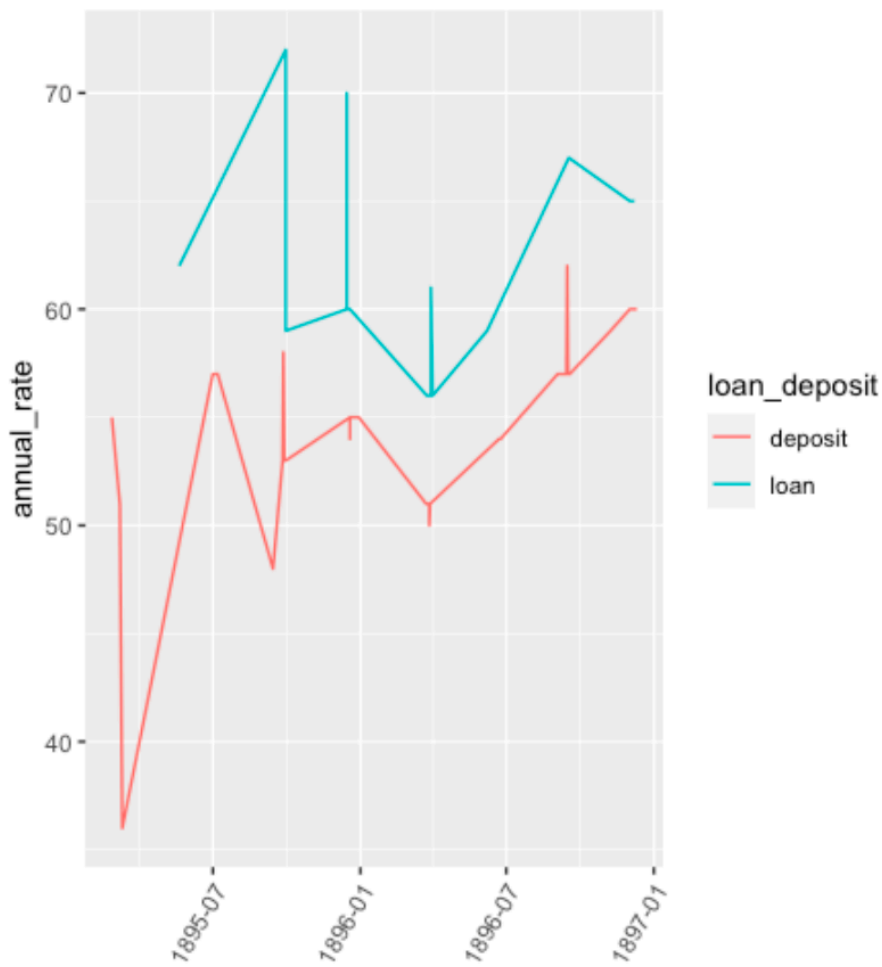


Source: “Tianshunkui loan book, 1895” (光绪二十一年天顺奎借贷账), LJMPC.

Roughly two thirds of deposits come from lineage trusts and individuals, while the greater majority of loans go to commercial entities. Here, we see evidence that the *zhangju* is a vehicle for mobilizing the wealth of families, and deploying it—by way of *biaoqi* financial markets—into commerce and industry. They allow lineage trusts and wealthy individuals to accumulate liquid savings, as well as for merchants and other financial institutions to access capital.

A quantitative analysis tells us much about the economics of a zhangju. There is a widespread misunderstanding that deposits were not as important for Qing-era financial institutions as for modern banks. But this account book shows enormous deposit financing. I have calculated average and weighted-average deposit and lending rates. For long-term deposits and loans at the *changnian* rate, which comprised more than half of all deposits and loans, the spread was 6.5% and 5.2%, respectively. But it gets trickier than that, because averaging all loans together ignores seasonality. As shown in Figure 12, spreads fluctuated with each *biaoqi* from anywhere between 5% and 10%.

Figure 12. Annual rates, deposits vs. loans, by season, Tianshunkui, 1895



Source: “Tianshunkui loan book, 1895” (光绪二十一年天顺奎借贷账), LJMPC.

Clearly, zhangju were taking deposits that paid a lower rate than loans, and thus earning an interest spread. This is strong evidence that Chinese high finance was governed by competitive markets in credit and capital.

While individuals could interface with zhangju—particularly as depositors—the overwhelming majority of zhangju clients were corporate accounts. Of these, financial institutions feature especially prominently. Thus, one account book from the Henglongguang (恒隆光) zhangju based in Zhangjiakou features a client list that is almost entirely made up of financial institutions, mainly *piaohao*. However, it also served as clients several banks, including the Russo-Chinese Bank and HSBC.<sup>491</sup> Other Zhangju have more variety in their client base, but still serve a disproportionately large number of financial institutions. In short, they had become “banker’s banks”—supplying credit and even expanding the supply of credit—when the market underwent shortfalls. Republican-era publications contain evidence of the *zhangju*’s continuing role as a local, quasi central bank. Gazetteers tell us that a premium was charged on merchants who wanted to settle at the *biaoqi* using their own cash—they were supposed to pay in account transfers! An article on the Baotou settlement fairs explains, “...whenever there is a transaction, it will be settled with a transfer of funds at the *biaoqi* or *luoqi*. Transfers of funds are mainly conducted through account book transfer. When one wants to use hard silver sycee, there will be a discount charged of anywhere from four or five to twenty silver taels.”<sup>492</sup> We saw evidence of

---

<sup>491</sup> Henglongguang *piaohao* Zhangjiakou summary accountns, 1904/12 (光绪三十年十二月恒隆光票号张家口总结账), LJMPC.

<sup>492</sup> “Gedi Shangye Xiguan: Jinhang Suoshu: Baotouzhen: Sibiao Baluo 各地商业习惯：津行所属：包头镇：四标八骡 [Commercial Practices around the Country: Tianjin Branch: Baotou: Four Biaoqi and Eight Luoqi],” *Jiaotong Yinhang Yuekan* 交通银行月刊 [*Bank of Communications Monthly*], 1923.

the importance of account book transfers in the popular sources as well; both remittance notes were payable in partial or complete transfers. The institutions behind these transfers—the banks that kept the wheels of *biaoqi* finance spinning—were the *zhangju*.

## Conclusion

This chapter has introduced *biaoqi* settlement fairs. These fairs allowed for concentrated settlements of commercial and financial transactions, and constituted liquid markets in credit, exchange, and remittances. At the heart of these markets were *zhangju*, a kind of proto-central bank that soaked up idle capital, and furnished it to commercial and financial institutions who needed to meet *biaoqi* settlement constraints. Geographically, the *biaoqi* and related fairs stretched from Xinjiang in the west to Manchuria in the east. They thus served as central nodes in a financial system that covered a vast geographical expanse, and knit together the credit markets of northern China. These fairs constituted a class of wholesale financial and commercial market that existed above the level of Skinner's markets, and integrated China proper with the Qing's Inner Asian empire.

But *biaoqi* settlement fairs are of interest to more than just scholars of China. Since at least Braudel, historians have associated dynamic capitalism with “high finance.” The implication is often that high finance could only arise in the west, under western forms of domination and exploitation. The World Systems theorist Giovanni Arrighi, elaborating on Braudel, was particularly emphatic on this point. According to Arrighi, high finance is a parasitic

enterprise that infects and weakens political hegemons.<sup>493</sup> His magnum opus on China—which is simultaneously a comparison between the intellectual history of Smithian and Marxian political economy, as well as a comparative economic history of China and the west—is predicated on the assumption that high finance is a uniquely western phenomenon, at least in its pervasiveness in the economy.<sup>494</sup> More recently, Sven Beckert suggests that liquid futures markets arose a result of industrial capitalism; and perhaps even of slavery.<sup>495</sup> My chapter challenges an important implication of these works. By showing a booming high finance industry in Qing China—and one, moreover, that was developing remarkably similar financial technology—it suggests that financial development may be less contingent on western institutions and colonial exploitation than these authors believe.

Finally, we should not miss a rather big tree for the sake of a mere forest. Though the focus of this chapter has been on uncovering previously unexplored markets and other economic institutions, my findings also bear on an older, and perhaps more mundane, question in the literature: the problem of capital scarcity and interest rates in pre-modern China. Even while arguing against capital scarcity as a deterrent of Chinese pre-industrial growth, California School scholars such as Ming-te Pan and Kenneth Pomeranz acknowledge significantly higher interest rates in China than in Europe.<sup>496</sup> Similarly, R. Bin Wong and Jean-Laurent Rosenthal, concede

---

<sup>493</sup> Beverly J. Silver and Giovanni Arrighi, “Capitalism and World (Dis)Order,” *Review of International Studies* 27 (December 1, 2001): 257–79, <https://doi.org/10.2307/45299513>.

<sup>494</sup> Giovanni Arrighi, *Adam Smith in Beijing: Lineages of the Twenty-First Century* (London ; New York: Verso, 2007).

<sup>495</sup> Sven Beckert, *Empire of Cotton: A Global History* (New York: Alfred A. Knopf, 2014).

<sup>496</sup> Ming-te Pan, “Rural Credit in Ming-Qing Jiangnan and the Concept of Peasant Petty Commodity Production,” *The Journal of Asian Studies* 55, no. 1 (1996): 94–117, <https://doi.org/10.2307/2943638>; Kenneth Pomeranz, *The Great Divergence: China, Europe, and the Making of the Modern World Economy* (Princeton University Press, 2001), *ProQuest Ebook Central*, <http://ebookcentral.proquest.com/lib/uchicago/detail.action?docID=581640>.

interest rates roughly ten times higher in China than in Europe. However, they caution that these rates are not comparable. Chinese data comes from pawn shops and rural markets with high transaction costs and risky borrowers, while European data comes from liquid mortgage markets. In short, we are comparing loans to poor Chinese with loans to wealthy English. They go on to cite Huang Jianhui's work on *zhangju*, noting relatively low yearly rates, but caution that "Thus the interest- rate data are clearly inconclusive."<sup>497</sup> In short, it was impossible to say what rates in Chinese "high finance" looked like, because we lacked the material evidence. Now, we can finally say with some confidence that Wong and Rosenthal's hypothesis appears valid. The rates observed at the *biaoqi* average about 6% per annum on year-long loans, and are easily rolled over. While the evidence is still too sparse to be dispositive, the weight of evidence has shifted in favor of well-functioning credit markets, with capital at rates resembling those of other advanced, pre-industrial societies.

---

<sup>497</sup> Jean-Laurent Rosenthal and Roy Bin Wong, *Before and beyond Divergence: The Politics of Economic Change in China and Europe* (Cambridge: Harvard University Press, 2011).

## Chapter Five: The investment market: shareholders, accounting, and the market for firms in late imperial Shanxi

In the 24<sup>th</sup> reign year of the Guangxu emperor (1898), a petition was filed at the Taigu magisterial court. The licentiate Hao Liangao demanded compensation for what he claimed was a half share in a series of Taigu county businesses. According to the petition, the trouble started on the first day of the first month of the 18th reign year of the Guangxu Emperor (1892). On that ill-fated day, Guo Chengye, the manager of the Xiangtongyu silver smithy located on Fox Temple Alley in the Taigu County seat, received an alarming set of instructions. He was to liquidate the firm at once. The shop's owner and investor, Zhao Shilian, suddenly required the immediate return of his 1,000 silver taels in equity. This put Guo in an awkward position. Guo had recently taken out two loans of 551.1 and 100.14 silver taels from the Shenyu Hall (慎余堂) lineage trust. But without the equity to continue as a going concern, he would surely default. Guo turned to Hao Langao, a local licentiate and a distant though estranged relative through their respective wives, for assistance. Hao agreed to help, and pressed Zhao Shilian to honor the firm's debt. Eventually, a deal was reached. Zhao Shilian would accept a loss amounting to sixty percent of his equity, leaving enough capital in the firm to repay the loans to Shenyu Hall.

But two days later, Zhao Shilian thought of an even better resolution. He gathered a posse and raided the shop, sending Guo Chengye fleeing for his life. Zhao Shilian attempted to grab the shop's inventories, but appears to have been halted by the timely intercession of Hao Langao's own posse. Several days later, Hao Langao sent his men, a group of burly "young businessmen, cooks, and others," to cart the silver away to a friendly shop. He then decided not to repay the Shenyu Hall loans after all, but instead to re-establish the silversmith as a going concern with each of its shares worth 800 silver taels. In lieu of repayment, the Shenyu Hall would receive 0.9



“silver shares” (银股 *yingu*). A man named Wu Yongxiu would infuse additional capital in return for a quarter of a share. Meanwhile, the manager Guo Chengye would receive one “personal share” (身股 *shengu*), while employee Qu Ziming would receive half a personal share. For his troubles, Hao Langao not only received half a personal share in the silversmith, but was henceforth entitled to half a personal share in all of Guo Chengye’s future endeavors.<sup>498</sup>

The matter might have been thought settled, but poor Hao Langao was soon forgotten by Guo Chengye, who refused to honor Hao’s shares. The licentiate sought redress from Heaven and Earth, and sued Guo in the Taigu magisterial court, begging the magistrate to make a thorough investigation. This, the court did. It found that Hao Langao was a contemptible liar, and that “his claim to a personal share in all of the defendant’s future endeavors is tantamount to sheer thuggery! This is quite consistent with his reputation as discovered through our general inquiries.”<sup>499</sup> To put it bluntly: Hao Langao was running a protection racket. The court denied his petition, and issued a formal reprimand of the licentiate.<sup>500</sup>

Hao Langao’s petition raises a number of questions about the social, legal, commercial, and perhaps even urban history of late imperial Shanxi. But for this chapter, what is most intriguing are the story’s details about the investment market. First, we see evidence of numerous, passive equity investments. Individuals with capital are investing in productive enterprises that they have no role in running: they are merely “shareholders” (财东 *caidong*),

---

<sup>498</sup> Guangxu Year 24, Plaintiff Hao Langao brings suit against Guo Chengye for breach of partnership” (“光绪二十四年郝兰皋诉郭承业背义灭伙案呈词”), LJMPC, Court Case #2. For the entire text and translation of this petition, see Appendix I.

<sup>499</sup> “与伊有生意即有该生身股云云，颇与光棍所为相似，合之所访平日声名甚相吻合。”

<sup>500</sup> “不准，并斥” (*buzhun, bingchi*).

owning “silver shares” (银股). We also see evidence of lineage trusts providing loan capital to an operating enterprise. Moreover, when the enterprise—Xiangtongyu—goes a cropper, the result is neither to simply write off the loan nor to haul the defaulter away to debtors’ prison. Rather, the loan is converted into equity, much as in a contemporary bankruptcy. Finally, we see that there is another class of shares called “personal shares” (身股 *shengu*).<sup>501</sup> The general impression is one of a highly sophisticated investment market, including both equity ownership and debt financing. But how important was this investment market? Who were the investors? And how did they monitor their invested capital and accumulated earnings? Finally, what were these mysterious “personal shares” and how—apart from a little honest racketeering—did one acquire them?

This chapter studies the investment market in late imperial Shanxi. It argues that this was a competitive market, in which investors sought to capitalize firms where return was highest and to withdraw capital from firms where returns were lackluster. This has larger social implications.

---

<sup>501</sup> *Shengu* as a term eludes easy translation into English. I use “personal shares” as this is a neutral, character-for-character translation. It also retains the nuance in the original Chinese terminology, in which the character “股” (*gu*) or “share” is preceded by a character indicating what the shareholder paid in return for that share. Thus, a holder of *shengu* or *renligu* (人力股) has invested their “person” or their “personal efforts,” as distinct from holders of *yingu* (银股) “silver shares” or *qianggu* (钱股) “cash shares,” which are purchased with an investment of silver or copper. I was tempted by several other terms. “Labor shares” would have been a fair translation of *renligu*. But this term might also be misleading, as the bulk of such shares were held by professional managers, rather than by anything remotely resembling an industrial proletariat. I also considered “sweat equity,” as this is probably the single closest functional match. However, I believe this term is freighted with too many contemporary associations. Finally, an original draft of this chapter used “compensation shares,” as I believe that the true social utility of *shengu* resides in their aligning the incentives of the firm with those of its investors by granting incentive compensation. However, I ultimately felt that it was misleading to smuggle my thesis into my own terminology, as this would mean begging the question rather than arguing it. For now, I proceed with “personal shares”; any reader who finds this objectionable may pursue the matter in the Taigu magisterial court.

It indicates that both finance and commerce were competitive, and makes it less likely that social, kinship, or legal structures stymied economic development. Any highly profitable industry would soon find itself competing against new entrants, while investors would shy away from industries where competition was excessive.

This larger thesis rests on a number of empirical arguments. First, I argue that traditional Chinese bookkeeping was capable of accounting for capital, enabling investors to quantify, monitor, and distribute invested capital as well as profits. This bookkeeping system was essential in fostering a shareholding regime that bound investors' interests with those of their managers and employees. Institutions and individuals could purchase equity shares in firms and earn income as passive investors, as the transparent system of accounting allowed them to monitor the firm's performance. Nor was participation exclusive to the very wealthy. Many institutional investors in firm equity were lineage trusts, indicating that even peasants may have indirectly owned a stake—via their family lineage—in commercial enterprises. Meanwhile, managers and employees of a firm also received shares, although generally not for monetary investment. Rather, they were rewarded with personal shares in return for their labor and contribution to the firm. This bound the interests of shareholders with those of the firm's managers, functioning as a kind of incentive compensation.

This investment market, though in many ways quite impressive, was in one critical area limited relative to markets in the west: the secondary market. China had no indigenous stock exchanges, and even private trading of shares in commercial enterprises appears to have been uncommon. Nevertheless, the secondary market—if not at the level of an Amsterdam or London—was, perhaps, more vigorous than has previously been appreciated. Shanxi appears to have had a bustling market in partible shares of coal mines. Even other equity of financial

institutions traded in a kind of secondary market: entire firms could be purchased by a consortium of investors in what today we would call a “buyout.” Moreover, these transactions are done at discounts to accounting value, indicating a “fair value” negotiation between buyers and sellers—i.e., an equity *market*. Finally, though my focus is on Shanxi firms, an analysis of the secondary market would be incomplete without at least some discussion of the Baxian magisterial court records. These records show that Chongqing had a lively trade in *jiaoli* shares—or shares in commercial enterprises awarded to porters. The scope of this market is impossible to gauge without further research. It is also clear that transactions were cumbersome, requiring the approval of numerous lineage members. Notwithstanding these constraints, the discovery of these transactions is extremely important. They constitute a rudimentary stock market, and show that traditional Chinese forms of property holding were evolving to meet the needs of commercial investors.

The rest of this chapter is divided into eight sections, including this introduction. Section two reviews the relevant literature. Section three examines the shareholding structure of merchant firms, and demonstrates the widespread use of incentive compensation in the form of personal shares or, in Chinese, *shengu* (身股) or *renligu* (人力股). Section four analyzes Shanxi merchant bookkeeping with respect to its ability to account for capital and profits.<sup>502</sup> Sections five and six trace the sources of capital in merchant firms and highlight the ways in which the

---

<sup>502</sup> Sections three and four should logically be reversed, as it is the accounting that makes the shareholding practices possible. Unfortunately, the primary sources, which include original, Shanxi merchant capital accounts, are impossible to understand without first understanding the Shanxi merchant shareholding regime.

investment market circulated capital from the countryside, to the commercial economy, and back. Section seven studies secondary markets in firm equity. The final section is a conclusion.

## Literature Review

This chapter addresses a critical question in the scholarship on late imperial Chinese business, namely, the extent to which entrepreneurial behavior was subject to market forces. To wit, how capitalist was Qing China? Earlier generations of historians held that capitalist enterprise was incapable of developing under a Confucian bureaucracy that was implacably hostile to commerce.<sup>503</sup> This view has long been challenged,<sup>504</sup> and it is now consensus that the Qing state granted enormous leeway for merchant activity—intervening usually in times of crisis or to prevent monopoly.<sup>505</sup> Nevertheless, scholars continue to debate the extent to which merchant activity was governed by market imperatives, as opposed to social, political, and cultural forces.<sup>506</sup> In my view, a lack of late-imperial business sources makes this debate

---

<sup>503</sup> Albert Feuerwerker, *China's Early Industrialization: Sheng-Hsuan-Huai (1844-1916) and Mandarin Enterprise* (New York, 1970).

<sup>504</sup> Roy Bin Wong, *China Transformed: Historical Change and the Limits of European Experience* (Ithaca: Cornell University Press, 1997); Kenneth Pomeranz, *The Great Divergence: Europe, China, and the Making of the Modern World Economy*, (Princeton: Princeton University Press, 2000). Also see Andre Gunder Frank, *Reorient: Global Economy in the Asian Age* (Berkeley: University of California Press, 1998) and Giovanni Arrighi, *Adam Smith in Beijing: Lineages of the Twenty-First Century* (New York: Verso, 2007), who place late imperial Chinese markets in global context.

<sup>505</sup> Pomeranz, 2000, 86.

<sup>506</sup> Taisu Zhang's recent monograph argues that Confucian values influenced the legal code, which in turn limited the scope of land markets and thereby prevented concentration of landholdings. Taisu Zhang, *The Laws and Economics of Confucianism: Kinship and Property in Pre-Industrial China and England*, Cambridge Studies in Economics, Choice, and Society (Cambridge, United Kingdom: Cambridge University Press, 2017).

impossible to resolve.<sup>507</sup> But since this debate hinges on the relative extent of markets rather than on a binary distinction, the impossibility of a resolution is only a minor obstacle to advancing the scholarship. There is much to be learned about Chinese society by pursuing the problem of how Chinese firms operated within markets and society, and the relative weight of evidence with respect to any specific question can change with new research.

The specific problem that this chapter engages with is the nature of capital investment in Chinese firms. At a fundamental level, this means understanding how Chinese businesspeople understood capital.<sup>508</sup> In part, this is a question of accounting. A businessperson with no way to account for capital does not know “how much” they have invested in their shop, and thus can only with difficulty compare its profitability with other investments. But if you can account for capital and measure it with a numeraire, then you understand it as an abstraction; a shop is not merely a shop, but also 100 silver taels of equity, which is to some degree fungible with capital invested elsewhere. Businesspeople can then rationalize their investments, enabling an investment market. This explains why scholars as far back as Werner Sombart and Max Weber

---

<sup>507</sup> This lack is all the more painful because bookkeeping conventions tell us that late imperial businesses would have produced voluminous paperwork—but that the paperwork has simply not survived. To give one example, we know that every branch of every Shanxi *piaohao* during the industry’s roughly 90 years of operations produced multiple copies of a monthly summary report containing all its transactions for that month, and distributed these reports to other branches so that each branch had a holistic view of the firm (or in larger firms, a holistic view of its neighboring branches and of headquarters). Yet we do not have anywhere close to the sources needed to recreate even *one month* of firmwide transactions for a single *piaohao*! Moreover, the *piaohao* era is a period of relatively abundant materials. Prior to the Daoguang reign, the source base drops off exponentially.

<sup>508</sup> For a different approach see Andrew Liu’s new monograph Andrew B. Liu, *Tea War: A History of Capitalism in China and India*, Studies of the Weatherhead East Asian Institute, Columbia University (New Haven: Yale University Press, 2020), especially pp. 45-80. Liu finds consciousness of capital not in its abstraction through quantification, but in a conscious effort of managers to discipline labor in the pursuit of higher profits. Liu finds a highly developed understanding of capitalist, market-based profit-seeking amongst Qing merchants.

saw modern accounting—and western double-entry accounting specifically—as a necessary condition for capitalism.<sup>509</sup>

Scholars of Chinese historical bookkeeping remain divided on its ability to account for capital and profits. For some scholars, traditional Chinese bookkeeping provided a highly detailed picture of a firm’s capital and profits, which was legible to outside auditors and professionals rather than merely of use to the firm’s insiders.<sup>510</sup> But for other scholars, capital accounting as it is understood in the west did not exist.<sup>511</sup> A recent study by Ma, Macve, and Yuan—by far the best extant work on traditional Chinese accounting—makes this case forcefully, arguing that because capital accounts were not integrated with other accounts into a

---

<sup>509</sup> Werner Sombart, “Medieval and Modern Commercial Enterprise,” in *Enterprise and Secular Change: Readings in Economic History*, ed. Frederic Chapin Lane (Homewood, Ill, 1953), 25–40; Max Weber, *General Economic History*, trans. Frank H. Knight (Glencoe, Ill: Free Press, 1950). In Warren Buffett’s pithy summation, “Accounting is the language of business.”

<sup>510</sup> Madeleine Zelin, *The Merchants of Zigong: Industrial Entrepreneurship in Early Modern China*, Columbia University (New York: Columbia University Press, 2005). Also see Pak K. Auyeung, Lei Fu, and Zhixiang Liu, “Double-Entry Bookkeeping in Early-Twentieth-Century China,” *Business History Review* 79, no. 1 (2005): 73–96. Gardella’s pathbreaking study on traditional bookkeeping is more ambiguous. Overall, he has a high opinion of on traditional Chinese bookkeeping, but he notes that profits are backed into by a series of balance sheet calculations, and that reserves were deducted directly from assets, rather than recorded separately. However, he quite plausibly suggests that this was because his sources come from Ruifuxiang, during the early Republican period. See Robert Gardella, “Squaring Accounts: Commercial Bookkeeping Methods and Capitalist Rationalism in Late Qing and Republican China,” *The Journal of Asian Studies* 51, no. 2 (1992): 317–39.

<sup>511</sup> David Faure, “The Lineage as Business Company: Patronage versus Law in the Development of Chinese Business,” in *Chinese Business Enterprise: Critical Perspectives on Business and Management*, ed. Rajeswary Ampalavanar Brown, vol. 1 (London: Routledge, 1996), 82–106; David Faure, *China and Capitalism: A History of Business Enterprise in Modern China*, Understanding China (Hong Kong: Hong Kong University Press, 2006); David Faure, *Emperor and Ancestor: State and Lineage in South China* (Stanford: Stanford University Press, 2007), pp. 6.

self-checking “closed system,” they did not enable entrepreneurs to quantify returns on capital.<sup>512</sup> This echoes Gardella’s complaint about profits being calculated as a balance sheet residual rather than directly from income.

The existence of a capital account is of the utmost significance, not only for what it tells us about how Chinese businesses measured investment and profits, but also because of its broader social implications. According to David Faure’s seminal work on lineages’ entrepreneurial activity, the lack of a capital account explains Chinese enterprise’s dependence on kinship ties to manage investments and business networks. Faure’s analysis is worth quoting at length:<sup>513</sup>

It seems quite certain that Chinese businesses did not keep capital accounts... In the absence of capital accounts, rules of thumb dictated methods for fair division of profits without depleting business capitals. Such rules of thumb were not restricted to commercial activities. They were the same sorts of rules that applied in share-cropping, or in the management of the lineage estate.

For Faure, rules of thumb were required not only to distribute profits in a way that would be considered fair, but even to maintain the accuracy of the accounts. This is because there was no provision for depreciation or bad debts, forcing prudent managers to arbitrarily adjust asset values downward.<sup>514</sup> Without a bookkeeping mechanism to track profits and capital, and thus predictably allocate profits, cooperation in business naturally flowed through kinship lines.

---

<sup>512</sup> Weipeng Yuan, Richard Macve, and Debin Ma, “The Development of Chinese Accounting and Bookkeeping before 1850: Insights from the Tǒng Tàì Shēng Business Account Books (1798–1850),” *Accounting and Business Research* 47, no. 4 (2017): 401–39.

<sup>513</sup> David Faure, “The Lineage as Business Company: Patronage versus Law in the Development of Chinese Business,” in *Chinese Business Enterprise: Critical Perspectives on Business and Management*, ed. Rajeswary Ampalavanar Brown, vol. 1 (London: Routledge, 1996), 82–106.

<sup>514</sup> David Faure, *China and Capitalism: A History of Business Enterprise in Modern China*, Understanding China (Hong Kong: Hong Kong University Press, 2006), 37. Note that this dovetails with Gardella’s account of Ruifuxing arbitrarily decreasing asset values.



Members of the same lineage could coordinate together in a moral economy without the accounting legibility provided by modern, western bookkeeping. This does not mean that China did not have profit-seeking capitalism.<sup>515</sup> Rather, it means that the scale of Chinese firms was limited by what kinship networks could support. This put traditional firms at a disadvantage when it came to building modern, industrial enterprises.<sup>516</sup>

This chapter intervenes in this debate on the side of a highly capable system of capital accounting. It is agnostic on the question of double-entry, though I do believe that a strong case can be made for its use in Chinese firms.<sup>517</sup> More importantly, it shows how Chinese firms accounted for capital. The capital account studied by Ma, Macve, and Yuan registered not only initial equity investments, but also capital reserves, retained earnings, and reserves for maintenance. This means that if a firm made a profit one year, the next year's capital account would list that profit as a source of funds independent of the initial equity investment. In other words, it kept clear balances of both invested capital and profits. This empirical conclusion raises questions about the nature of the Chinese firm. Faure was of course quite right in identifying the lineage as an essential organizational form of entrepreneurial activity. But a system of capital accounting indicates that Chinese firms need not have been bound, in either scale or in networks, by kinship ties. Thus, I argue that the Chinese shareholding structure, supported as it was with a

---

<sup>515</sup> Faure, 2006.

<sup>516</sup> It is worth noting that Faure, along with Weber and Sombart, probably overestimate the sophistication of early western accounting and its necessity for developing modern industry. See Basil S. Yamey, "Accounting and the Rise of Capitalism: Further Notes on a Theme by Sombart.," *Journal of Accounting Research (Wiley-Blackwell)* 2, no. 2 (September 1964): 117–36; Basil S. Yamey, "Scientific Bookkeeping and the Rise of Capitalism," *Economic History Review* 1, no. 1 (May 1949): 99–113.

<sup>517</sup> Matthew Lowenstein and Cao Shuji, "Double, Double, Debit and Credit: Double-Entry Bookkeeping in Late Imperial China" (Unpublished).

legible system of bookkeeping, was highly capable at aligning investor, manager, and employee incentives.

In making this argument, I build on a number of earlier scholars. Wellington Chan's seminal study of the Ruifuxiang company was the first to discover discreet classes of shares for investors and employees, though that is not the focus of his research.<sup>518</sup> Zelin identifies a dizzyingly complex, and highly flexible, system of shareholding that allowed landlords, employees, investors, and managers to work together in founding salt wells and coal mines. She identifies the two most important class of shares, including *yingu* (银股) or "silver shares" for capital investors, and *shengu* (身股), or "personal shares" for managers and employees.<sup>519</sup> Zelin also believes that by the Qing, shares were as a rule partible, and that sales of shares were fairly common.<sup>520</sup> Meng Wu's dissertation studies these two classes of shares with respect to Shanxi *piaohao*, though with a rather different emphasis. Drawing mainly on Republican-era secondary sources, she employs econometrics to quantify the sources of *piaohao* worker compensation.<sup>521</sup>

---

<sup>518</sup> Wellington K. K. Chan, "The Organizational Structure of the Traditional Chinese Firm and Its Modern Reform," *The Business History Review* 56, no. 2 (1982): 218–35, <https://doi.org/10.2307/3113977>. Indeed, Chan's later work implies a belief that the traditional shareholding structure was suited to smaller enterprises based around strong personalities or kinship ties, but less well suited than western shareholding structures for more capital intensive firms. See Wellington Chan, Wellington K. K. Chan, "Personal Styles, Cultural Values and Management: The Sincere and Wing On Companies in Shanghai and Hong Kong, 1900-1941," *The Business History Review* 70, no. 2 (1996): 141–66.

<sup>519</sup> Zelin, 2005, 24-49; Madeleine Zelin, "Chinese Business Practice in the Late Imperial Period," *Enterprise and Society* 14, no. 4 (2013): 769–93. Zelin translates these as "investor shares" and "labor shares." I discuss the problem of translating these terms below.

<sup>520</sup> Madeleine Zelin, "A Deep History of Chinese Shareholding," *Law and History Review* 37, no. 2 (2019): 325–51, <https://doi.org/10.1017/S073824801800038X>.

<sup>521</sup> Meng Wu, "Traditions and Innovations: An Exploration of the Governance Structure, Business Strategy and Historical Development of the Chinese Shanxi Piaohao, 1820s to 1930s" (Ph.D. Dissertation, London, The London School of Economics and Political Science (LSE), 2016), <http://etheses.lse.ac.uk/3415/>, pp. 71-81. Randall Morck and Fan Yang, *The Shanxi Banks*, NBER Working Paper Series, no. w15884 (Cambridge, Mass: National Bureau of

In the Chinese-language literature, Zhou Lin and Ma Ran study *jiaoli* shares (personal shares for porters in Chongqing) were supported by officials, and alienable in an open market.<sup>522</sup>

In addition to the literature from business historians, social and environmental historians have discovered complex shareholding patterns in timber. Joseph McDermott's magnum opus on Huizhou society finds a "futures market" in timber. This market was essentially a market in shares granted on the basis of either monetary investment or labor, much as in Zigong or Shanxi firms.<sup>523</sup> Indeed, though McDermott's scholarship is pathbreaking and his analysis indispensable, it must be said that his terminology is highly misleading. The market as he describes it was not a futures market at all, but a primitive *equity* market in timberland.<sup>524</sup> Meng Zhang and Ian Miller find nearly identical shareholding patterns in Guizhou, though Zhang argues persuasively that Guizhou's lineages were weaker and, in consequence, its markets were more liquid.<sup>525</sup>

---

Economic Research, 2010) also take an economics approach, situating the Shanxi piaohao shareholding structure in the context of modern economic theory. It must be said that their source base is quite thin and their contribution is less impressive than Wu's.

<sup>522</sup> Zhou Lin 周琳 and Ma Ran 马冉, "Chanquan de Shanbian: Qianlong Zhi Tongzhi Shiqi Chongqing de 'Jiaoli Shengyi' 产权的嬗变——乾隆至同治时期重庆的'脚力生意' [The Evolution of Property Rights: The Porter Business in Chongqing from the Qianlong to Tongzhi Reigns, 1771 - 1874 ]," *Zhongguo Jingjishi Yanjiu* 中国经济史研究 [Researches in Chinese Economic History], no. 2 (2020): 101–18.

<sup>523</sup> Joseph Peter McDermott, *The Making of a New Rural Order in South China* (Cambridge: Cambridge University Press, 2013), 387–447.

<sup>524</sup> This is because in McDermott's telling, the securities being traded are claims on the future yield of timberland; i.e. a residual claim on actual timber, regardless of what that specific timber might be worth when it was harvested. This is the definition of equity. A futures market would require tradable contracts specifying the right to receive a fixed volume of a given commodity at a fixed price on a fixed date (wherever the seller might have gotten that timber, and whatever the spot market price of timber might turn out to be on that date). Late imperial China did have futures markets, in at least grain and exchange, which I discuss briefly in the previous chapter.

<sup>525</sup> Meng Zhang, "Financing Market-Oriented Reforestation Securitization of Timberlands and Shareholding Practices in Southwest China, 1750–1900," *Late Imperial China* 38, no. 2 (2017): 109–51; Meng Zhang, "Timber Trade along the Yangzi River: Market, Institutions, and

This chapter puts the literature on shareholding in firms in dialogue with literature on timber shares, suggesting a much broader scope for the Chinese shareholding structure as well as older origins. In addition, this chapter makes several empirical contributions. It offers a far more detailed analysis of the relationship between investor shares and personal shares than is found in the previous literature. It also discovers several classes of shares unknown to the English-language scholarship, including “empty shares” (空股 *konggu*) and God of Wealth shares (财神股 *caishenggu*). The former preserved the interests of capital investors by diluting employees’ personal shares, while the latter acted as a reserve account.

Finally, this chapter engages a history on the institutional source of investment in the late Qing. Confirming findings from Zelin, Kenneth Pomeranz, and Luman Wang it conceives of lineages as *investment vehicles*.<sup>526</sup> As Zelin and Faure have shown, lineages could also own considerable property and act as corporate entities in their own right.<sup>527</sup> But in the case of Shanxi merchants, they were usually engaged in finance. This includes both the quasi-banking operations studied in previous chapters, as well as equity investments in operating firms studied

---

Environment, 1750–1911,” *ProQuest Dissertations and Theses* (Ph.D., Ann Arbor, University of California, Los Angeles, 2017), ProQuest Dissertations & Theses Global (1917423354), <https://search.proquest.com/docview/1917423354?accountid=14657>, 134-146. Ian Miller, *Fir and Empire: The Transformation of Forests in Early Modern China*, (Seattle: University of Washington Press, 2020), 77-96.

<sup>526</sup> Zelin, 2005, 38; Kenneth Pomeranz, “‘Traditional’ Chinese Business Forms Revisited: Family, Firm, and Financing in the History of the Yutang Company of Jining, 1779–1956,” *Late Imperial China* 18, no. 1 (1997): 1–38, <https://doi.org/10.1353/late.1997.0008>; Luman Wang, *Chinese Hinterland Capitalism and Shanxi Piaohao: Banking, State, and Family, 1720-1910* (London: Routledge, 2021), 55-56. Wang is ambiguous on the nature of lineage investments. She suggests that certain firms belonged to and lent solely to a given lineage, and compares the arrangement to the “insider lending” studied by Naomi Lamoreaux; see Naomi R. Lamoreaux, *Insider Lending: Banks, Personal Connections, and Economic Development in Industrial New England* (New York: Cambridge University Press, 1994).

<sup>527</sup> Zelin, 2005, 84-94; Faure, 1996.

later in this chapter. In short, I show how lineage trusts served as an institutional investor base that collected surplus from the agrarian and commercial sectors, and deployed this accumulated capital in the investment market.

### Share capital, share compensation, and empty shares

This section will discuss shareholding in late Qing Shanxi merchant firms. Shanxi merchant enterprises were characterized by four classes of shares. Most classes of share were named after the contribution that the shareholder made to the firm. First, there were shares purchased in return for a financial investment, “*yingu*” (银股) or “silver shares” if the investor contributed silver and “*qiangu*” (钱股) or “copper shares” if the investment was made in copper cash. I use the term “money shares” to refer jointly to silver and copper shares. A central argument of this chapter is that money shares should be thought of as equity, in exactly the modern sense: that is, a residual claim on the firm and its profits after all fixed obligations were discharged. The second class of share was a *shengu* (身股) also known as *renligu* (人力股), or “personal share.” These shares were given to managers and employees as a form of compensation, in return for their personal effort. They were often of profit sharing. The third class of shares are *konggu* or “empty shares.” These are shares distributed to investors but that are not paid up in silver or copper nor given in return for work performed for the firm; i.e. they are given in return for an empty contribution. Thus, if the subscription price of a “silver share” was set at 100 taels, each share might come with one tenth of an empty share. I believe this was done when corporate entities renewed their partnership agreement, as a way of diluting personal shares that had already been distributed to employees. In this way, firms could protect financial

investors from dilution as the firm grew in size and issued shares to more employees.<sup>528</sup>

Alternatively, a firm might issue a *konggu* to a partner who had become too ill to work, and thus was unable to receive a *shengu*. Empty shares were much less common than silver shares, copper shares, or personal shares. The fourth, and least common, class of shares were shares belonging to the God of Wealth (财神股 *Caishen gu*). These shares break the naming convention, as they are named for their holder rather than for the holder's contribution. They essentially functioned as retained earnings, or a reserve, that extended beyond the triennial settlement dates at which dividends were customarily distributed. Wealth God shares allowed the firm to reinvest profits in itself indefinitely, as long as the business operated as a going concern. According to the rather limited source base, Wealth God shares appear to have been used primarily by larger-scale and relatively capital intensive firms. Though the mechanics around settlement varied from firm to firm, a typical Shanxi merchant enterprise paid dividends on settlement years—usually held at three year intervals—pro-rated by share count with each class of share weighted equally. In smaller firms, money shares and personal could be weighted differently, with money shares customarily enjoying 60% of profits and personal shares receiving 40%.

This section argues that the shareholding structure of Shanxi-merchant firms were well suited toward commercial enterprises that did not depend exclusively on kinship ties to foster trust.<sup>529</sup> This argument rests on my analysis of personal shares. I contend that personal shares functioned as incentive compensation—in essence no different from the stock options or profit sharing schemes of a modern-day conglomerate. For a manager or employee who held personal

---

<sup>528</sup> Cynically, this could be seen as a way of gaming the system that employees could never capture “too much” of a firm's profit.

<sup>529</sup> Though of course many firms, especially small business, were family held and operated. This also holds true today, all over the world.

shares, their compensation depended on the profitability of the firm. In this way, personal shares aligned the incentives of those who operated the firm with the interests of those who owned it; i.e., the managers and employees (*huoyou* 伙友) and the financial owners (*caidong* 财东) were in the same corporate boat.<sup>530</sup>

The shareholding structure of a Shanxi-merchant firm can be seen in a variety of different sources. First, the JSSLC contains numerous partnership contracts (合约 *heyue*). These are contracts between money investors that establish new firms, and they often specify the allocation of company shares. The earliest contract that distinguishes between money shares and personal shares dates back to the 28<sup>th</sup> reign year of the Qianlong emperor (1763). The contract reads:<sup>531</sup>

立合伙文券人太平县伯皇村 XXX 邑县北相镇杨保吉，切因情意相合，义气相投，两家情愿在北相镇经营华布行生意，同中言明毛入本银一千二百两，入人壹股半，杨入本银一百两，入人叁股，所获利息，银六人四，账目一年一清，毛得银分不使仍做资本，以三年为度。杨得银分任从自便人分金使，不许长支，自合伙已后苦乐均占，若有积私肥己 神灵监察，恐后无凭，故立合伙文券为证，约存毛宅  
乾隆二十八年正月初九日立合伙人毛绪元【signed】、杨保吉【signed】十  
义合铺贰拾两马顺手法比兑  
中人柴中樾、杨宗时、田维芑

Establishing a contract for a partnership between Mao Xuyuan from Bohuang village in Taiping County and Yang Baoji from Beixiang town in Anyi County. Because of mutual friendship and fraternal congeniality, these two families willingly agree to open a business operating a cloth merchant in Beixiang town. It is clearly stated that Mao will invest equity of 1,200 silver taels, and receive 1.5 personal shares. Yang will invest 100 silver taels and receive 3 person shares. All profits will be divided with 60% going to silver shares and 40% going to person shares. The books will be balanced once per year.

---

<sup>530</sup> Indeed, I suspect that in this capacity they often worked better than their present-day counterparts. Today, economists and corporate executives alike favor stock options as a form of executive compensation. Economists like stock-options because, *in theory*, they solve the principal-agent problem posed by separation of ownership and control. CEOs love stock options because, *in practice*, they let management write their own paychecks. But Shanxi personal shares paid out a share of profits only on “settlement years,” and could not issue new personal shares at below-market prices.

<sup>531</sup> LJMPC, Partnership Contracts, 2.

Mao's silver share will not be distributed, but will stay in the business as capital, to be paid out only after a period of three years. Profits due to Yang's silver shares can be drawn down at will up to a value not to exceed their accumulated capital, and shall not be overdrawn. Since becoming partners, all hardships and all joy will be shared equally. If any partner tries to avariciously enrich himself may the gods and spirits hold him to account. Since no further documentation will be drawn up, this partnership contract will serve as proof. The agreement will be stored at the Mao family compound.

On the ninth day of the first month of the 28<sup>th</sup> reign year of the Qianlong emperor [1763], partnership contract originated with Mao Xiyuan [signed], Yang Baoji 十 [signed] The Yihe Shop paid out 20 taels of silver using Ma Shunshou's scale.

Witnessed by Chao Zhongkui, Yang Zongshi, Tian Weipeng

This contract establishes a partnership between Mao Xiyuan and Yang Baoji to establish a cloth trading firm in Beixiang town, Anyi county, in present-day Yuncheng Municipality, Shanxi. It is noteworthy the contract refers to them as two *families*, indicating that the legal persons owning the equity in the firm were lineage trusts. I believe this is also suggested by the fact that the partnership contract will be stored at the Mao family compound. As can be seen, this is quite an early document, and shows that northern firms were employing dual class shareholding models no later than the Qianlong reign and possibly much earlier. This discovery in itself is important, as previous instances of dual class shares found in the secondary literature come from the Guangxu reign or Republican period.<sup>532</sup>

In this contract, we see that the bulk of the equity is coming from Mao Xiyuan, who invested 1,200 taels of silver. Meanwhile, Yang Baoji only invests a token 100 taels. Nevertheless, Yang receives three personal shares to Mao's one and a half. Thus, Yang is clearly being compensated for the work he is putting into the business. In short, Mao is mostly a passive

---

<sup>532</sup> Wellington K. K. Chan, "The Organizational Structure of the Traditional Chinese Firm and Its Modern Reform," *The Business History Review* 56, no. 2 (1982): 218–35, <https://doi.org/10.2307/3113977>.



equity investor. Judging by his one and a half shares, it does appear he is expected to put some time and energy into the firm. But Yang appears to be a full-time manager. Note also that personal shares in this case appear to be granted in lieu of any salary. Profits are not to be distributed to Mao until after a period of three years, the usual interval at which Chinese firms paid dividends. But Yang may retain his profits yearly—though he is not allowed to take out capital in excess of these profits. This indicates Yang was expected to live off of the profits of the firm, and was likely not granted a fixed wage, or perhaps was granted only a small wage.

Finally, we see that in this firm, share classes are not weighted equally in the denominator. Silver shares retain 60% of all profits, while personal shares receive 40%. This means that in distributing dividends, profits to silver shares and profits to personal shares would have to be pro-rated separately. This method of dividing profits 60/40 between financial investors and working partners appears to have been widespread amongst smaller firms. As late as the 1940s, a survey conducted by the Communist Eighth Route Army found the same convention. The survey of Ren village (任村) reported that, “Internal relations in shops: businesses here have three to seven shares held by capitalists and working partners. The internal regime is to divide profits 60/40. Capitalists get 60% and working partners get 40%.”<sup>533</sup> We thus see that this custom was widespread, and extremely long-lasting.

---

<sup>533</sup> “商铺内部关系——此等商号多由三至七股合伙而成。参加资本者，同事参加人力，内部制度多按四六分账，资六人四。” Zou Jiezhi (邹楷之), “Ren Village market survey,” April 16, in Henan Sheng (China) and Henan Sheng dang an guan, eds., *Jin Ji Lu Yu Kang Ri Gen Ju Di Cai Jing Shi Liao Xuan Bian. Henan Bu Fen 晋冀鲁豫抗日根据地财经史料选编: 河南部分 [Selected Historical Materials Relating to the Finances and Economics of the Shanxi, Hebei, and Henan Anti-Japanese Revolutionary Base Areas]*, Di 1 ban (Beijing Shi: Dang an chu ban she : Xin hua shu dian Beijing fa xing suo fa xing, 1985): 596-618.

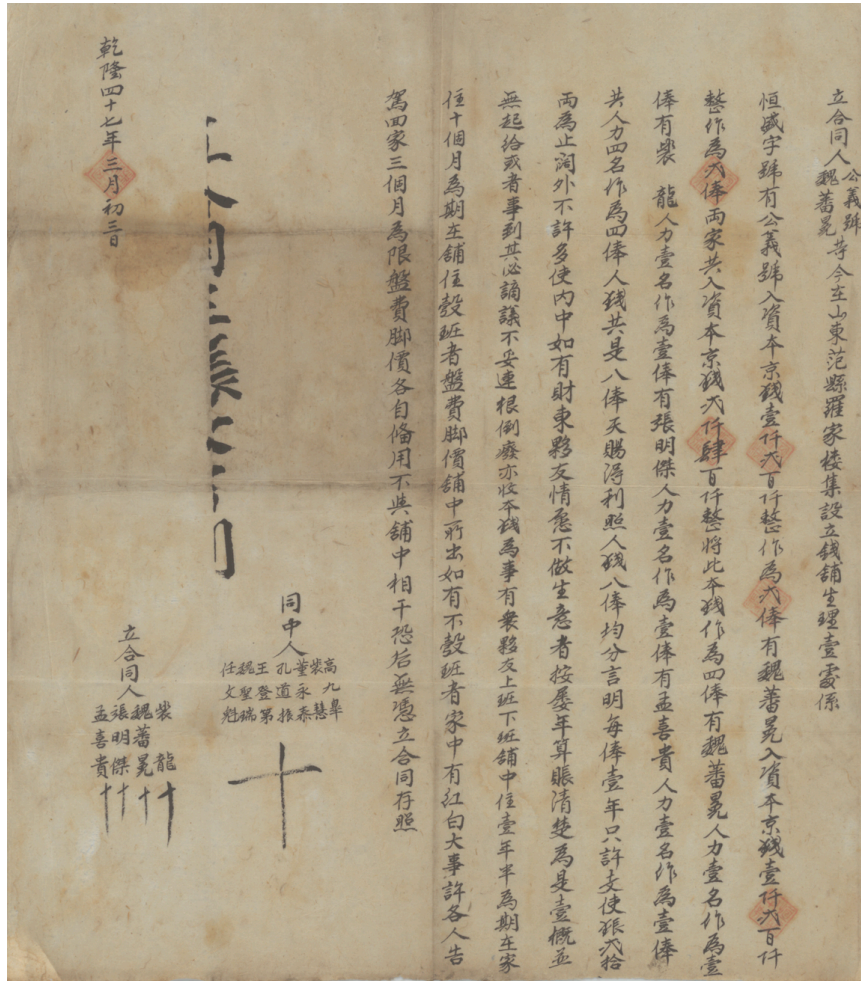
This contract between Mao and Yang has several even more important implications for the investment market. First, it establishes a passive equity investor, content to earn dividends while a professional manager runs the business. Moreover, the two parties—the equity investor Mao Xiyuan and the manager Yang Baoji—are obviously different families. This means that kinship is not the key binding agent that holds the firm together. Trust and cooperation are established not by the bonds of blood or marriage, but by a clearly written contract delineating the rights of shareholders. In addition, the passage reveals much about the geographic scope of the Qianlong-reign investment market. Beixiang town is roughly 120 kilometers from Mao Xiyuan’s home in Bohuang Village of Taiping county.<sup>534</sup> This means that a trading firm in a market-town was able to attract equity capital from quite far away, and is strong evidence for a competitive capital market.

A second contract from later in the Qianlong reign goes into even greater specificity about the shareholding structure of a new money shop. This firm has multiple passive investors and larger share capital. Its founding contract is also written in finer calligraphy and all money amounts are verified with a red seal, as can be seen in Image 36.

---

<sup>534</sup> Bohuang village in Taiping County is located in present-day Linfen Municipality, Shanxi.

Image 36. Partnership contract, Hengsheng money shop, 1782.



Source: LJMPC, Partnership Contracts, 5.

The contract's greater formality, superior calligraphy, and use of official seals are typical of larger businesses such as Hengsheng. The contract reads:<sup>535</sup>

立合同人公义号、魏番冕等今在山东范县罗家楼集设立钱铺生理一处，系恒盛字  
号，有公义号入资本京钱壹仟贰佰仟整作为贰俸，有魏番冕入资本京钱壹仟贰佰仟  
整，作为贰俸，两家共入资本京钱贰千肆百钱整，将此本钱作为四俸。有魏番冕人  
力一名作为壹俸，有裴龍人力壹名作为壹俸，有张明杰人力壹名作为壹俸，有孟喜  
贵人力壹名作为壹俸，共人力四名，作为四俸。人、钱共是八俸。天赐得利，照  
人、钱八俸均分，言明每俸壹年只许支使账式拾两为止，阔外不许多使内中，如有  
财东伙友情愿不做生意者，按屡年算账清楚为是壹概并无起给，或者事到其必商议  
不妥，连根倒废，亦收本钱为事，有众伙友上班下班铺中位一年半为期，在家位十

<sup>535</sup> LJMPC, Partnership Contracts, 5.

个月为期，在铺位壳班者盘费脚价铺中所出如有不壳班者，家中有红白大事，许各人告驾回家三个月为限，盘费脚费各自备用，不与铺中相干，恐后无平，立合同存照。

同中人

高九皋、裴慧、董永泰、孔道报、王登第、魏圣瑞、任文魁

乾隆四十七年三月初三日

立合同人裴龍、魏番冕、张明杰、孟喜贵

Establishing a contract between the Gongyi Company, Wei Fanmian, and others to found as of today a money shop in the Luo lineage's building located in the Fan County seat in Shandong province. The name of the firm is the Hengsheng Company. The Gongyi Company is investing capital of 1,200,000 Beijing copper cash in return for two shares. Wei Fanmian is investing 1,200,000 Beijing copper cash in return for two shares. The two parties are investing a total of 2,400,000 Beijing copper cash in return for a total equity capital of four shares. Wei Fanmian will receive one share in compensation for his labor. Fei Long will receive one share in compensation for his labor. Zhang Mingjie will receive one share in compensation for his labor. Meng Xigui will receive one share in compensation for his labor. This makes a total of four employees receiving four personal shares. There are a total of eight personal and cash shares. Profit granted by heaven will be distributed equally between each personal and cash share. It is clearly stated that each share will receive a yearly maximum of 20 silver taels, with any overdrafts not included therein. When shareholders or managers no longer wish to conduct business, then this will be decided on years when accounts are settled and they will not be entitled to profits. In this situation, as well as in the event of irreconcilable differences or if any party suffers bankruptcy, said party will withdraw their equity. Employees of the firm will work in the shop for periods of one and a half a year, and allowed ten months of home leave. The business will defray traveling expenses. If any managers or employees are unable to assume their shop duties owing to serious red or white family events, they will be allowed three months of home leave but will pay travel expenses out of pocket. To ensure record of this agreement, this contract has been executed and to be retained as proof.

Witnesses Gao Jiugao, Fei Hui, Dong Yongtai, Kong Daobao, Wang Dengdi, Wei Shengrui, Ren Wenkui

On third day of the third month of the 47<sup>th</sup> reign year of the Qianlong Emperor, contract established between Fei Long, Fanmian, Zhang Mingjie, and Meng Xigui

This contract establishes a money shop, the Hengsheng Company, in Shandong Province's Fan County seat. The firm's two initial investors and four "huoyou" (伙友) are all granted equity shares. The term *huoyou* is perfectly straightforward in the original Chinese, but is surprisingly difficult to translate. It means people who operate the firm, either as managers or employees. I translate *huoyou* as "partner," since in this case, to be a *huoyou* is to be granted a share in the

firm, but the translation is inexact. In this firm, all four partners will be stationed in the shop for a one and a half year rotation, followed by ten months of leave. The contract further stipulates that three months of leave will be granted for serious “red or white” family events. This means that leave would be granted for weddings and funerals. Travel costs to and from the shop would be paid for by the firm unless the partner was taking leave owing to family matters, in which case they would pay their own expenses.

The contract provides important insights into the shareholding structure. The share capital of Hengsheng company consists of two classes of shares: cash shares and personal shares. The cash shares are purchased by shareholders with an investment of copper cash. Thus, the Gongyi Company and Wei Fanmian are the two cash shareholders, having each invested 1,200,000 Beijing copper cash in return for two shares apiece. The four partners receive one personal share, or *rengu* (人股) each, for a total of eight shares. The firm thus has a total of eight shares outstanding, and the contract states specifically that profits shall be distributed equally between the shares. In short, the equity investors are entitled to a return on their equity, while the partners are incentivized to maximize profits.

It is also worth discussing the contract’s guidelines regarding dividend distribution. In this firm, dividends are distributed annually up to a 20 tael maximum, with any excess profits retained in the firm. Retained earnings are distributed at settlement dates, probably at three year intervals. Note that investors can withdraw their equity at settlement dates, but in doing so forfeit their claim on residual earnings. This indicates that the firm was meant to operate indefinitely, with the share capital renewed at each settlement date. It is also interesting that if an investor became insolvent, they were forced to withdraw their equity at once and would forfeit dividend rights. Here we see a clear sign of unlimited liability. In a limited liability legal

framework, the insolvency of an investor has no bearing on the firm's integrity. But in an unlimited liability framework, the firm's credit is indelibly linked to that of its investors. Thus, the partnership contract allows the firm to expel investors of unsound business standing.

Finally, a detail in this contract lets us glimpse yet another important facet of the investment market. One of the main investors, the Gongyi Company (公义号) is a corporate entity! The fact that corporate entities, or *zihao* (字号) could invest in other corporate entities is of paramount importance. It controverts David Faure's contention that Chinese firms owned no property, but rather made use of property on behalf of lineages.<sup>536</sup> On the contrary, firms not only were capable of owning property, but even of making portfolio investments as a kind of legal person—much as lineages did. This has wider social and economic significance. It means that there was an avenue for capital to flow wherever returns were highest, rather than being “locked” in a corporate shell. Much as today, when corporations can dispose of excess capital by purchasing shares in other companies, so it was in the Qing dynasty. A *zihao* with more than enough cash on hand could capitalize a new firm and thus earn passive income on its equity investment. In practice, this probably also helped cement business relationships between the two firms. Ultimately, though probably less effective at allocating capital than a western-style stock exchange, intercorporate investment served a similar function. It meant that capital invested in one business could be reallocated to equity in a firm where returns were higher.

The third class of share is an “empty share” (空股 *konggu*). These are shares that are neither paid up with invested capital, nor given to employees as compensation. While hardly rare enough to be exotic, they are nevertheless less common than money shares or personal shares.

---

<sup>536</sup> Faure, 1996.

The earliest example of empty shares that I have found comes from a Jiaqing-reign partnership contract. The contract reads:<sup>537</sup>

全福

立合伙约玉盛吉记、郝明远等，窃以财徒伴发利由义兴欲致，陶朱之富，当效管鲍之情，今志同意合意气相投，在京都设立万盛吉记皮行生理，言明玉盛吉记入本银贰仟肆佰两作成三股，郝明远人力做成玖厘，王玉衡人力作成柒股，魏沧人力作成陆厘，朱成文人力陆厘，葛玉成空股五厘，以上银人陆股叁厘，日后托。

天获利按俸股均分，但愿矢直矢公惟勤惟谨，共图什一之利，同立富有之业，裕后有凭立此为，照愿垂永久。

计开

葛玉成食空股五厘永远，并无人力亦非遗业，因念昔日亦层同伙，不认弃离，东伙情愿与之。又有铺规一则，言定每股应支银陆拾两，嗣后倘有伙计不愿做此生意抑或有伙计作弊，当以应支开除

中人 张自裕、高文铎、姚应奎

嘉庆拾叁年四月廿四日 立

Wealth to all

Originating a partnership contract between the Yushengji Company, Hao Mingyuan, and others. We humble investors and partners desire to make a profit, with righteousness and joy to achieve the wealth of Tao Zhu.<sup>538</sup> Our friendship is as deep as that of Guan Zhong and Bao Shu.<sup>539</sup> Therefore, today we agree willingly and with congenial accord to found the Wanshengji Company in Beijing, to conduct business as a tannery. It is clearly stated that the Yushengji Company will invest equity capital of 2,400 silver taels in return for three shares. Hao Mingyuan will receive 0.9 personal shares. Wang Yuheng will receive 0.7 personal shares. Wei Cang will receive 0.6 personal shares. Zhu Chengwen will receive 0.6 personal shares. Ge Yucheng will receive 0.5 empty shares. In total this makes 6.3 silver and personal shares. Stock certificates will be delivered at a later date. Profit granted by heaven will be prorated equally among shares. It is hoped that everyone will uphold their promise to be true and publicly-minded, and to be diligent and frugal, that we may jointly pursue profit, and together establish a prosperous enterprise. A copy of this contract should be kept permanently as proof.

Recorded that:

Ge Yucheng has received 0.5 empty shares in perpetuity, though he has contributed neither his labor nor his industry. This is because he used to be one of the partners, and

---

<sup>537</sup> LJMPC, Partnership Contracts, 12-1.

<sup>538</sup> “The wealth of Tao Zhu” is an allusion to a wealthy merchant from the Spring and Autumn period mentioned in Sima Qian’s *Records of the Grand Historian* who amassed enormous wealth. Qian Sima, “Records of the Grand Historian of China,” *ACLS Humanities E-Book*, Records of civilization, sources and studies no. 65, 2 (1971), 197.

<sup>539</sup> This is a classical allusion meaning deep friendship. It comes from the Liezi, and alludes to Guanzhong’s friendship with Bao Shu. *Liezi, Liming*, n.d., [http://www.shuzhai.org/gushi/liezi/7195\\_2.html](http://www.shuzhai.org/gushi/liezi/7195_2.html).

we cannot bear to cast him aside. Shareholders and partners are all willing to give him this share. In addition, a copy of the bylaws has been drafted, in which it is clearly agreed that each share will receive a dividend of 60 taels of silver. If any partner is no longer willing to participate in the business, or if any partner commits fraud, their dividend rights will be null and void.

Witnesses Zhang Ziyu, Gao Wenduo, Yao Yingkui

On the 24<sup>th</sup> day of the fourth month of the 13<sup>th</sup> reign year of the Jiaqing emperor, established.

This contract, executed in the thirteenth year of the Jiaqing imperial reign (1808) establishes the Wanshengji Company as a tanner in Beijing. One of the investors is the Yushengji Company, a prominent Beijing *zhangju*. Wanshengji's place of business was itself rented from the Yushengji Company in a building located on the northern side of Beijing's *Dongsi* ceremonial gate.<sup>540</sup>

The details of Wanshengji's shareholding are particularly interesting. The entire equity comes from the Yushengji Company, which receives three silver shares. The partners of the firm each receive personal shares. But for my immediate purposes, what is most interesting are the 0.5 "empty shares" granted to Ge Yucheng. The contract specifically states that these shares have not been granted to Ge in return for his contribution any labor or assets from a previous business. However, Ge had partnered with the Wanshengji partners in a previous business and they "could not bear to cast him aside." I suspect that Ge Yucheng was a partner who had fallen on hard times, perhaps due to illness or injury. His business partners granted him an "empty share" in order to maintain his livelihood. Moreover, we see that the share is "empty" precisely because neither labor nor money has been invested in it.

---

<sup>540</sup> Chen Tianyi (陈添翼) and Liu Qiugen (刘秋根), "A Study on Industrial and Commercial Lending of Beijing Zhangju (Accounting Bureau) in Jia-Dao Period of Qing Dynasty (嘉道时期北京账局的工商业借贷研究)," *Journal of Hebei Normal University (Philosophy and Social Sciences Edition)*, no. 6 (2020): 35–47.



In addition to establishing the existence of empty shares, this contract again reveals important details about the investment market. The new firm's entire financial equity comes from a *zhangju*. This again indicates a remarkably flexible investment market, in which accumulated cash in one firm could be invested directly into new enterprises. There is a trivial sense in which we already know this; *zhangju* make loans to corporate clients, which is itself a form of investment. But here we see that *zhangju* could also invest in the equity of commercial entities. This is strong evidence of an integrated investment market, inasmuch as it shows how capital could flow to wherever entrepreneurs expected the highest return. Moreover, we might note that every single partner listed in this contract has a different surname. Once again, the binding agent tethering the interests of financial shareholder, managers, and employees was the shareholding structure—not kinship. With the advent of personal shares, kinship ties were not necessary for fostering trust and coordination.

A second contract with empty shares dates from the 11<sup>th</sup> year of the Daoguang reign (1831). This contract does not establish a new business, but rather renews the partnership for an operating *zhangju*, while also injecting new share capital. There is not as much detail as in the previous contract, but the fact of empty shares is clear. The contract reads:<sup>541</sup>

立合同人李建栋、赵鸿猷、赵鸿都、聚远堂、张万海、曹尔安，今因庆远号放账生理年深日久，东伙商议重新作立，所入资本人力多寡不齐，且开于后：李建栋入资本钱壹仟伍佰串文，作为壹俸五厘，随栋人力壹俸。赵鸿猷入资本钱八百串文，作为捌厘，随空人俸式厘，赵鸿都入资本钱捌佰串文，作为捌厘。聚远堂入资本钱伍佰串文，作为五厘。张万海人力壹俸。曹尔安人力七厘。共钱、人股陆俸五厘，自立之后务须协力经营，日后天赐福利按钱、人股均分。今欲有凭立合同一样五张，各执壹张永远存照。

第壹号

同中人服助廷、孔广贤、王大文

---

<sup>541</sup> LJMPC, Partnership Contracts, 26.

道光十一年叁月初二日 同立合同人张万海、赵鸿都、李建栋、赵鸿猷、聚远堂、曹尔安

Originating a contract between Li Jiandong, Zhao Hongyou, Zhao Hongdu, Juyuan Hall, Zhang Wanhai, Cao Er'an today, because the Qingyuan Company has been operating as a *zhangju* for a long time and the shareholders and partners have agreed to renew it.

Invested equity and labor shares are unequal, and are heretofore enumerated: Li Jiandong invests equity of 1,500 strings of copper cash in return for 1.5 shares, and also receives 1 personal share. Zhao Hongyou invests equity of 800 strings of copper cash in return for 0.8 shares, and also receives 0.2 empty personal shares. Zhao Hongdu invests equity of 800 strings of copper cash in return for 0.8 shares. Juyuan Hall invests equity of 500 strings of copper cash in return for 0.5 shares. Zhang Wanhai receives 1 personal share. Cao Er'an receives 0.7 personal shares. There are a combined total of 6.5 equity and personal shares. After this contract is executed, it is necessary to join together to run this shop. In the future:

Wealth and profits granted by Heaven are to be pro-rated equally between cash and personal shares. Today five copies of this contract are being drafted, with each party to retain one copy in perpetuity as proof.

Copy 1

Witnesses: Fu Zhuting, Kong Guaangxian, Wang Dawen

On the second day of the third month, of the eleventh reign year of the Daoguang Emperor Contracted established jointly between Zhang Wanhai, Zhao Hongdu, Li Jiandong, Zhao Hongyou, Juyuan Hall, Cao Er'an.

In this contract, we see that the firm has six shareholders, one of which is a lineage trust.

Because only five copies of the contract are being created for safekeeping, the lineage trust was probably an investment vehicle belonging to one of the five cash shareholders. Among these parties, four invest equity in the form of copper cash, while two receive shares as compensation.

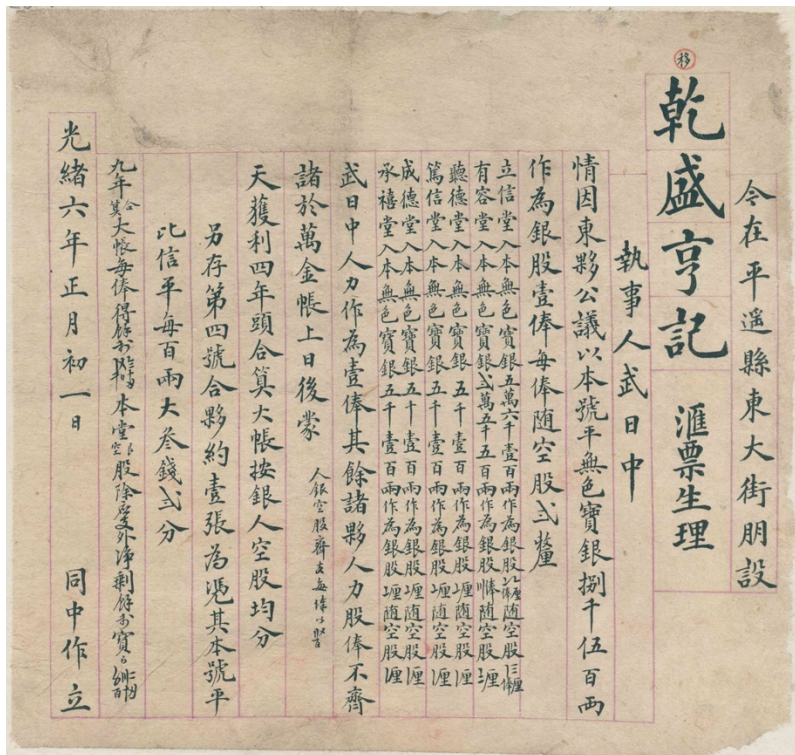
Most interesting for our purposes, are the two shareholders who receive both cash and personal shares. The contract tells us that, "Li Jiandong invests equity of 1,500 strings of copper cash in return for 1.5 shares, and also receives 1 personal share. Zhao Hongyou invests equity of 800 strings of copper cash in return for 0.8 shares, and also receives 0.2 empty personal shares."

This indicates that Li Jiandong is both a financial investor, as well as a co-manager of the firm (since along with Zhang Wanhai, he receives the most personal shares). But Zhao Hongyou

receives 0.2 “empty” personal shares; in Chinese, “空人俸式厘.” This indicates he is not really a manager or employee, but is receiving an extra two tenths of a share without investing anything. Unfortunately, the contract does not tell us why Zhao Hongyou receives the empty shares. Possibly, the empty shares compensate him for a transaction in the previous iteration of the firm, or perhaps his reputation will be useful to the business. What is clear, is the fact of empty shares used to entice or reward Zhao Hongyou’s financial investment.

A final example of empty shares can be seen in a different kind of popular source, visible in Image 37.

Image 37. Capital Certificate, Qianshengxiang, 1880



Source: Qianshengheng Piao Hao Capital, 1880 (光緒六年正月初一日乾盛亨票号股份制情况), LJMP, Miscellaneous.

Image 37 shows what I call a “capital certificate” owned by a Ji Family lineage trust, the Duxin Hall (冀家篤信堂) owned in the Qianshengxiang (乾盛亨) company. The document appears to

be certificate of ownership, something like a contemporary stock certificate, as well as a statement of the total shares outstanding of the firm along with total invested equity capital. The firm in question, Qianshengxiang, was a *piaohao* headquartered on Main East Street (东大街) in the heart of the Pingyao financial district. Qianshengxiang had multiple branches throughout the country, including in Hankou and the southwest.<sup>542</sup>

I have summarized and translated the information in the capital certificate in Table 13.

We can now see the shareholding structure, investor base, and total invested equity of the firm.

Table 13. *Qianshengxiang Initial Shareholders, 1880*

投资者	Investor	Invested capital (taels)	Shares	Empty shares
立信堂	Lixin Hall	56,100	6.6	1.3
有容堂	Yourong Hall	25,500	3	0.7
听德堂	Tingde Hall	5,100	0.6	0.1
笃信堂	Duxin Hall	5,100	0.6	0.1
成德堂	Chengde Hall	5,100	0.6	0.1
永禧堂	Yongxi Hall	5,100	0.6	0.1

Source: Qianshengxiang Piaohao Capital, 1880 (光绪六年正月初一日乾盛亨票号股份制情况), LJMPC, Miscellaneous.

Several facts about Qianshengxiang's equity stand out. First, each shareholder has been awarded "empty shares" (空股) in addition to their silver shares. These empty shares are pro-rated by silver share, at a ratio of 0.2 empty shares per each purchase of every silver share. This pro-rata distribution is clear in the text of the share certificate, visible in Image 37, which reads "每俸随空股式厘", or "each share will be granted an additional 0.2 empty shares." This is somewhat

<sup>542</sup> Ji Jinfu (冀锦富), "Ji Family Piaohao 'Qianshengxiang,' Remittances across the Empire (冀氏票号'乾盛亨'汇通天下)," February 27, 2019, <http://jishiwenhua.com/html/xungensuyuan/20190227/1741.html>.

confusing, as in theory the same effect could be achieved by simply lowering the price of silver shares by 16.7%. I believe the shareholders awarded themselves empty shares at a settlement period after the firm had been operating for some years in order to counter dilution from manager- and employee-held personal shares, perhaps as the number of employees grew.

The Qianshengheng capital certificate bears on the investment markets in other ways as well. First, we see that it was a massive undertaking, capitalized with 102,000 silver taels in equity. This makes sense, as *piaohao* required numerous branches throughout the country, as well as equity with which to extend credit to customers and create liabilities that customers could use as media of exchange. Second, we see that all of these shareholders were lineage trusts, albeit not typical lineages. These lineages belonged to some of Shanxi's most illustrious merchant families. This means that profits from commerce could be redeployed into the productive economy in the form of new firms. In this case, it is not agrarian surplus, but commercial surplus which merchant families have routed back into finance through their investment in a *piaohao*. This again shows a competitive market dynamic, in which profitable industries entice new entrants, who may fund their new businesses through accumulated profits. This means that finance was competitive, as new entrants would increase supply of financing. What we do not yet know, is *how* competitive finance was. Unfortunately, the ease of entry is difficult to judge from the surviving records. Second, this capital certificate highlights the nature of the lineage trust as a general-purpose holding company. Indeed, the lineage trust should be understood as a class of legal entity, not of economic activity. This argument is pursued in more depth later in the chapter.

The fourth and final main class of share were Wealth God shares (财神股 *caishenggu*). These are difficult to find in the popular sources.<sup>543</sup> Nevertheless, we have a record of them in Chen Qitian's Republican-era survey of Shanxi. Writes Chen, "Wealth God shares are like retained earnings, but are only credited into the accounts once. For example, if this year there is 10,000 taels in of Wealth God shares, then when the accounts are settled, these will be divided amongst the other shareholders, and new Wealth God shares will replace the old ones."<sup>544</sup> Chen goes on to contradict himself, and says that dividends can be paid out of Wealth God shares at a rate agreed to by shareholders and management. In any event, it is clear that they functioned as something like retained earnings, or perhaps as a reserve.

Wealth God shares are rare in the popular sources, but one helpful instance can be found in the published accounts of the great Rongbaozhai Company (荣宝斋记 *Rongbaozhai ji*).<sup>545</sup> Rongbaozhai was a stationery company in Beijing dating back to the Kangxi reign, and continues to operate today as a *laozihao* (老字号). The preamble to the Rongbaozhai comprehensive funds account (万金账 *wanjinzhang*) dating from twenty-fourth year of the Guangxu imperial reign (1896) reads, in part:<sup>546</sup>

---

<sup>543</sup> This does not preclude the existence of other classes of shares. In principle, a partnership contract could create any kind of share that the founders thought useful. But only these four classes of shares appear repeatedly in the Shanxi merchant popular sources.

<sup>544</sup> “财神股类似公积金，只存帐一次。如今年有财神股一万两，到下届红帐结算时，就把这一万两分了，另外有新的财神股代替旧的。” Chen Qitian 陈其田, *Shanxi Piao Zhuang Kao Lue* 山西票庄考略 [*Investigation of Shanxi Piaohao*], Shi Di Xiao Cong Shu (Shanghai: Shang wu yin shu guan, 1937), 85.

<sup>545</sup> Zheng Maoda 郑茂达, *Bai Nian Rong Bao Zhai Ji Yi* 百年荣宝斋记忆 [*Remember One Hundred Years of Rongbaozhai*] (Beijing: Rong bao zhai chu ban she, 2019), 32.

<sup>546</sup> Similar verbiage appears in the contract between Manager Zhuang Huchen and the Rongbaozhai shareholders. Zheng Maoda, 32-34.

东家以五百本银顶立生意一股，应分拾股余利。财神应得福利贰股，以备护本之资。执事人庄虎臣身力应顶立生意叁股。其余五股，以备伙友中才力出众，名实相符者，归执事人量予开分，以奖有功而固事业。

The owners set the price of each share at 500 silver taels, and receive a total of ten shares entitled to profits. The profits of two shares are reserved for the God of Wealth as a capital reserve. The manager Zhuang Huchen receives three personal shares. The other five shares are reserved to compensate partners and employees of outstanding ability. Those worthy of this name will receive share distributions at the discretion of the manager as a reward for them and to shore up our enterprise.

This passage is rich in information. It tells us that Rongbaozhai used both Wealth God shares and also personal shares. Wealth God shares are explicitly designated as a capital reserve. The characters “以备护本之资” translate literally to “as a reserve to protect the equity capital of the firm,” and the character *bei* (备) still means “reserve” in contemporary accounting.

The passage also explains the rationale behind issuing personal shares. It explains that five personal shares may be distributed by the manager to employees of outstanding ability. Moreover, the ultimate purpose of this incentive compensation is to “shore up the enterprise by rewarding” those employees. In other words, by aligning the incentives of the firm’s top talent with those of the investors, the firm is made stronger. There may also be an insinuation here about talent retention; that is, by doling out shares to the best employees, it made them harder to poach and perhaps less likely to venture off and start their own firms.

We get further detail on the accounting function of Wealth God shares from a later Rongbaozhai document. This document is a contract from 1926, during the Republican period, between the Rongbaozhai shareholders and Wang Renshan (王仁山). The shareholders are hiring Wang Renshan as the manager of their southern branch. The contract enumerates the bylaws of the shop, which state, “Earnings retained by the shares of the God of Wealth are essentially for building maintenance and purchases of fixtures. Employees are forbidden to use

them. If they remain unused for two years, they shall be deposited in the till to protect the firm's capital."<sup>547</sup> For the Rongbaozhai company, Wealth God shares were used explicitly to “protect the firm's capital,” that is, they were a capital reserve. Moreover, they were primarily used for building maintenance and for purchasing furniture and fixture. As far as I can tell, expansion was more likely to be financed directly out of retained earnings or from new capital subscriptions. In other words, Wealth God shares are akin to a modern-day “accumulated depreciation” account.

### Accounting for capital

For an investment market to function, investors require a way to reliably, consistently, and transparently measure the residual capital in a firm net of liabilities and expenditures. Even this is not enough; both investors and managers must distinguish between profits and invested capital, a distinction as essential to equity markets as the distinction between principal and interest is to debt markets. Without the ability to quantify invested capital and profits, investors have no way of comparing different investments. Nor would managers be able to act as prudent stewards of capital without the capacity to recognize areas of highest return or to differentiate returns *of* capital (liquidation) from returns *on* capital (profits). The measurement of these abstractions—capital, profits, residual claims, etc.—is always subjective and artificial. A functioning investment market does not require perfect metrics. Rather, investment markets merely require conventions that allow investors, managers, and employees to reliably predict their own returns across a universe of potential outcomes. In other words, the accounting has to

---

<sup>547</sup> “财神福股所得余利，原为碎修房屋添置家具之需（束），伙不许分用。如值二年无用，即存在柜上以作护本之资。” In Wang Ziqi 王子琪, *Kai Zhang 开账 [Keeping Accounts]* (Rong bao zhai chu ban she, 2018), 183.



show that a booming *piaohao* has more capital and higher profits than a bankrupt *piaohao*; even if their exact capital and profits are subject to discretion. Similarly, a manager must be constrained from making a highly profitable business seem like a lemon (and vice versa), and thus prevented from bilking the investors—even if its exact profitability is a matter of art.<sup>548</sup>

It is a key contention in the historiography that Chinese traditional accounting failed to meet these standards. This, in turn, meant that Chinese firms were unable to raise funds on capital markets, since would-be investors and would-be investees had no way of agreeing on the return on investments. Without a system of accounting capable of constraining the behavior of partners in a firm, cooperation could only be organized along kinship lines. Investors felt that they would all be treated “fairly”; not because of any way to measure their claims on a firm, but because they were dealing with their own family.

This section revises this understanding. It shows that Shanxi firms prepared financial statements that tracked capital, profits, and distributed earnings in a way that was both sufficiently transparent and predictable enough to support an active investment market. In Shanxi merchant firms, a number of different accounts enabled managers to measure, monitor, and allocate invested capital. Moreover, the claims of individual shareholders on the profits and capital of the firm were clearly established by the shareholding structure and the partnership

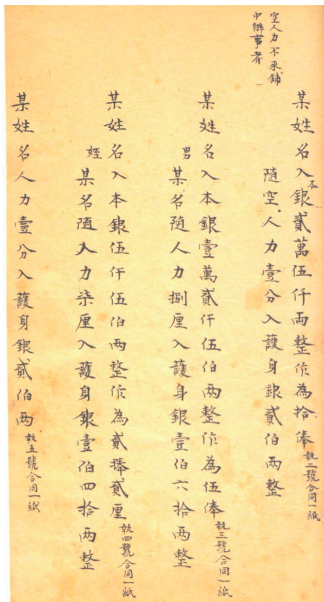
---

<sup>548</sup> As Graham and Dodd wrote in their foundational text on investing, “To use a homely simile, it is quite possible to decide by inspection that a woman is old enough to vote without knowing her age, or that a man is heavier than he should be without knowing his exact weight.” Benjamin Graham and David L. Dodd, *Security Analysis* (New York: McGraw-Hill, 1934), 19. See also Theodore Porter’s excellent description of “mechanical objectivity.” Porter’s thesis is primarily concerned with the historical insufficiency of mechanical objectivity to instill public trust without expert judgement. Implicit in this argument is that mechanical objectivity is a necessary—albeit insufficient—condition for trust. Theodore M. Porter, *Trust in Numbers: The Pursuit of Objectivity in Science and Public Life* (Princeton, N.J: Princeton University Press, 1995).

contracts; there was no illegibility or confusion as to how much of the firm’s capital went to each investor and/or partner.

One of the most important capital accounts was the *rubenzhang* (入本账), which translates literally to “invested equity account.” The mechanics of this account are explained in detail in the *Jiaoyixuzhi* (交易须知), or “*Necessary Knowledge for Trade*” (“*Necessary Knowledge*”), a business primer written in the 20<sup>th</sup> reign year of the Guangxu Emperor (1894). *Necessary Knowledge* contains a model of the *rubenzhang* for businesspeople to follow. According to the primer, the first line in the *rubenzhang* should specify the number of copies of the partnership contract. After this, the *rubenzhang* records the equity investment, as well as the shares received, by each investor in the firm. *Necessary Knowledge*’s model of these accounting entries is visible in Image 38.

Image 38. *Necessary Knowledge for Trade, Model Rubenzhang, 1894.*



Source: *Necessary Knowledge*, 24.

Transcribed, the text reads:<sup>549</sup>

某姓名入本银贰万伍仟两正，作为拾俸（执二号合同一纸），随空人力壹分，入护身银式百两整。

某姓名入本银壹万贰仟伍佰两整，作为伍俸（执三号合同一纸），男某名随人力捌厘入护身银壹百六拾两整

某姓名入本银伍仟伍佰两整，作为贰俸贰厘（执四号合同一纸），侄某名随人力柒厘入护身银壹百四拾两整

某姓名人力壹分，入护身银贰佰两，（执五号合同一纸）

So-and-so invested equity of 25,000 taels of silver for 10 shares (and retained the second copy of the contract), received 1 empty share and invested security of 200 taels of silver. So-and-so invested 12,500 taels of silver for 5 shares (and retained the third copy of the contract), their son received 0.8 personal shares and invested security of 160 taels of silver.

So-and-so invested 5,500 taels of silver in return for 2.2 shares (and retained the fourth copy of the contract). Their nephew received 0.7 personal shares, and invested 140 taels of silver as security.

So-and-so received 1 personal share, and invested 200 taels as security (and retained the fifth copy of the contract).

Much of this is familiar from the partnership contracts reviewed in the previous section. We see three classes of shares: equity shares, personal shares, and empty shares. As in the 1831 contract above, the empty shares are referred to as “empty personal shares.” A side note in the primer explains “empty personal shares are for those who do not work in the shop.”<sup>550</sup> In this example, personal shares (including empty shares) require a smaller investment, as a kind of security deposit or reserve. The Chinese wording *huben shen yin* (护本身银) means something like “silver for the protection of the personal equity.” This was a security deposit that an employee or partner would forfeit if they committed any kind of malfeasance or lost money through incompetence. But what is most important, is that this proves Shanxi merchants had a specific account book for aggregating invested equity, and keeping track of all shares outstanding.

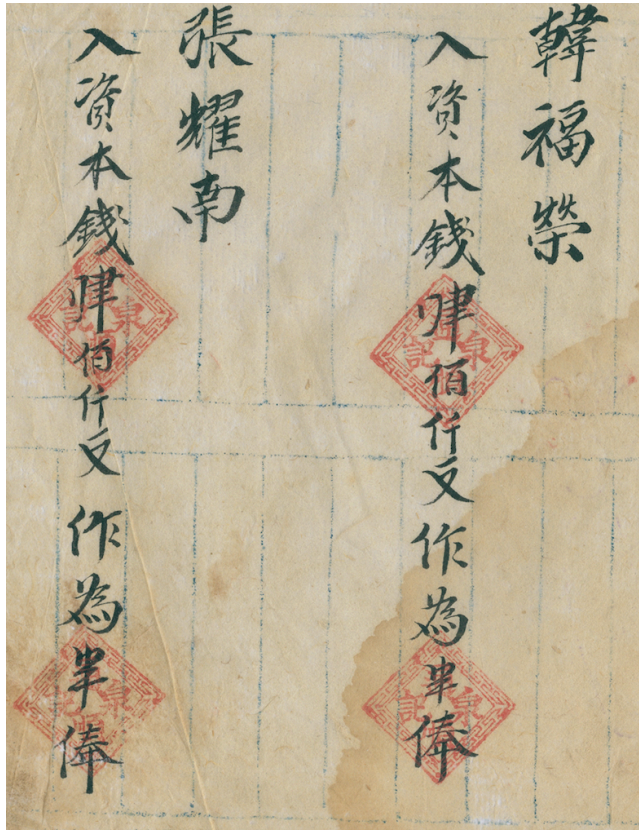
---

<sup>549</sup> Shanxi Sheng Jin shang wen hua ji jin hui, *Necessary Knowledge for Trade* (交易须知) (Taiyuan: San Jin chu ban she, 2013), 24

<sup>550</sup> “空人力不来铺中办事者。”

The LJMPC contains copies of actual *rubenzhang* used by Shanxi merchant firms, all of which follow the essential structure outlined in *Necessary Knowledge*. One *rubenzhang* dates from the first year of the Tongzhi imperial reign, and was compiled by the Tongshunquan Company (通顺泉记). A copy of its first page can be seen in Image 39.<sup>551</sup>

Image 39. Tongshunquan Company, *Rubenzhang*, 1862



Source: Tongshunquan Company Equity Account, 1862, LJMPC, Comprehensive Accounts.

The account book records cash investments of four different investors, as well as the personal shares of two partners. These are listed in Table 14.

---

<sup>551</sup> Tongshunquan Company Equity Account, 1862 (同治元年通顺泉记入股账), LJMPC, Comprehensive Accounts.

Table 14. Tongshunquan Company, Rubenzhang, 1862

	入资本钱	作为俸
韩福荣	400,000	0.5
张耀南	400,000	0.5
立业堂	240,000	0.30
务本堂	160,000	0.20
王锦花	身力	1
王本坚	身力	1
共入银		3.5
天赐获利，按股均分		

Source: Tongshunquan Company Equity Account, 1862, LJMP, Comprehensive Accounts.

Table 14 makes clear that the share price was 800,000 copper cash. The firm has raised equity of 1.2 million copper cash, and has also distributed two personal shares to its managers, making for a total of 3.5 shares outstanding. We also see that the account states, “Profits granted by Heaven shall be pro-rated equally by share.”<sup>552</sup> This language is familiar from the contracts reviewed in the previous section, and shows that Shanxi merchant firms were capable of quantifying claims of different partners and employees on the profits of a business. None of the alleged confusion about who owned what obtained, and certainly no “rule of thumb” would be required to allocate profits. On the contrary, shareholder claims on the firm—as well as how they acquired those claims—were extremely clear, quantified, and monitored in the accounts.

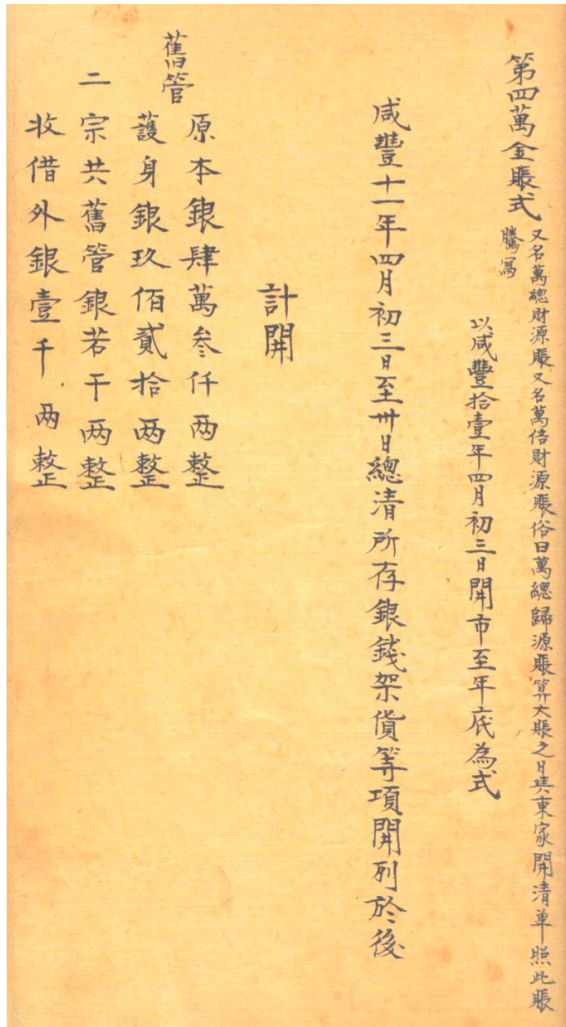
Still, the question remains of how Shanxi merchants measured the total profits and capital of the firm. Here, the key account was the *wanjinzhang* (万金账). This translates literally to

---

<sup>552</sup> “天赐获利，按股均分”; Tongshunquan Company Equity Account, 1862, LJMP, Comprehensive Accounts.

“comprehensive funds account.” As its name suggests, the *wanjinzhang* was nothing less than a capital account, comparable to a contemporary Statement of Changes in Shareholder Equity. It measured invested equity in the firm, profits, and the distribution of profits. *Necessary Knowledge* contains a detailed model of a *wanjinzhang*. The first page is visible in Image 40.

Image 40. *Necessary Knowledge*, *Wanjinzhang*, 1894



Source: *Necessary Knowledge*, 40.

The sample of a *wanjinzhang* presented by in *Necessary Knowledge* covers a period of one year, beginning on the third day of the fourth month of the 11<sup>th</sup> reign year of the Xianfeng Emperor.

*Necessary Knowledge*'s model *wanjinzhang* is too large to reproduce in images, but is

nevertheless worth communicating in full. I have thus entered it into Table 15. Note that the original reads left to right while the table reads top to bottom, in keeping with present-day bookkeeping conventions.

Table 15. *Necessary Knowledge, Wanjinzhang, 1894*

中文	English
咸丰十一年四月初三日至卅日总清，所存银钱、架货等项开列于后	From the third to thirtieth day of the fourth month of the 11th year of the Xianfeng reign
计开	Recorded
<b>旧管</b>	<b>Beginning capital</b>
原本银肆万叁仟 两整	Original equity of 43,000 taels
护身银玖佰贰拾两整	<u>Security deposits of 920 taels</u>
二宗共旧管银若干两整	Total beginning capital: However many taels
收借外银壹仟两整	Silver loans received 1000 taels
收借外京钱二千吊整，每两以 2500 作银捌佰两整	Jing cash loans received 2,000 strings, at a price of 2500 cash per tael, 800 taels
<b>新收</b>	<b>New receipts:</b>
一宗得借贷利钱若干吊	Item: Interest income received, however much cash
一宗得棉花利银若干两	Item: Profits on cotton, however much silver
一宗得架利钱肆仟伍佰肆拾叁仟捌佰六拾贰文，按 2500 作银若干	Item: Profits on pawn, 543862, at 2500 cash per tael, however much silver
一宗得粮利银若干两	Item: Profits on grain, however much silver
一宗借贷利钱若干吊	Item: Interest income received, however much cash
一宗得兑换银钱利银若干	<u>Item: Profits on exchange, however much silver</u>
六宗共新收过利银若干	<u>Six items in total, received profits of however much silver</u>
以上十宗共合银若干两	Ten items in total, however much silver

一宗某货缺银若干	Item: Insufficient inventories, however much silver
一宗辛金银若干	Item: Salaries
一宗房伙银若干	Item: Room and board
一宗出借利银若干	Item: Interest paid
一宗公费伙食钱若干以 2500 作银若干	Item: Public fees and catering expenses, however much cash, at 2500 cash per tael, however much silver
一宗抛去外欠钱若干, 以 2500 作银若干	Item: Uncollectable debts, however much cash, at 2500 cash per tael, however much silver
一宗官费银若干	<u>Item: Fees and duties</u>
七宗共开出过银若干	Seven items in total, however much silver
<b>实在</b>	<b>Current assets</b>
一宗外该借贷银若干	Item: loans outstanding, however much silver
一宗某货若干, 以某价, 作银若干	Item: inventories, at whatever price, however much silver
一宗现存钱若干, 以某价, 作银若干	Item: Cash in the till, at whatever price, however much silver
一宗架货本钱若干, 以某价, 作银若干	Item: Inventories in cash, at whatever price, however much silver
一宗现存钱、银若干	Item: Silver in the till, however much silver
一宗某粮若干石, 以某价, 作银若干	Item: Grain, however many dan, at whatever price, however much silver
一宗一应家居作银若干	Item: Furniture, however much silver
一宗众支若干	<u>Item: Advances to employees</u>
八宗共实在银若干	Eight items in total however much current silver
以上前后一并投来将原本该外借贷除清, 净得利银若干	Above, net of invested capital, loans owed, and expenses, profits are however much silver
以人银廿一分八厘每分按银一百两开分, 共开分过利银若干	With a total of 21 equity and compensation shares, and at dividends of 100 taels per share, total dividends of however much silver



开除过净存余利银若干	Retained earnings net of dividends, however much silver
咸丰某年月日吉立 清单	In whichever year, month, day, of the Xianfeng reign Accounts Cleared

Source: *Necessary Knowledge*, 40-44.

Table 15 shows a sample of a classic “four pillar” (四柱算法 *sizhusuanfa*) accounting statement. The fact that this is a sample *wanjinzhang* brings in some confusion. The textbook writer Hou Xianglin (侯香邻) appears to have begun compiling this sample *wanjinzhang* intending to use sample quantities of silver for each line item. He then seems to have given this up as too complicated, and switched to entering amounts as *ruogan* (若干), meaning “however many.” In a real *wanjinzhang* using real amounts, the four pillar financial statement would balance according to the accounting equation  $jiuguan + xinshou = shizai + kaichu$ . Obviously, that does not apply here, with amounts entered as “however much.”

Nevertheless, this sample *wanjinzhang* contains important information. First, we see that the *jiuguan* is not really “beginning” or “previous balance,” as it has generally been interpreted. Rather, it is measuring something more like “total invested equity.”<sup>553</sup> The first two line items that make up the *jiuguan* proper are invested equity, and security deposits of those with personal shares. Another line item, “Silver loans received 1000 taels,” is wedged in between the *jiuguan* proper and the *xinshou*. It is an orphaned line item that is technically not part of the *jiuguan* or *xinshou*. This orphaned line item represents the debt financing used by the company. We thus see that the line items above *xinshou*—that is, *jiuguan* plus “silver loans received” constitute precisely the total invested capital in the firm.

---

<sup>553</sup> Ma, Macve, and Yuan make the same point, and go even further to say that *Jiuguan* is something like total liabilities. I agree that this is sensible interpretation.

The next line item of significance for my purposes comes after the four pillars, toward the end of the table. It reads “以上前后一并投来将原本该外借贷除清，净得利银若干”；in English, “Above, net of invested capital, loans owed, and expenses; profits are however much silver.” This means that the *wanjinzhang* has a precise way of measuring profits. Profits are *shizai – yuanben – gaiwai*; in other words, profits are total assets less starting equity less debt. This is an accounting identity the substance of which applies equally to modern financial statements, though today such an identity would be expressed as “Net income = total assets – total liabilities – beginning period equity” and simplified to “equity = assets + liabilities.”

The textbook goes on to make clear that this accounting profit—precisely measured as it was—is exactly what is being distributed amongst shareholders. The next line item reads, “以人银廿一分八厘每分按银一百两开分，共开分过利银若干”，or “With a total of 21 equity and personal shares, and at dividends of 100 taels per share, total dividends of however much silver.” This is confusing, because the textbook writer has suddenly decided to switch to precise amounts for the per share dividend payments, and then reverts to expressing total dividends as “however much silver.” But what is important is that the line item after profits is dividends, *exactly* as it would be in a contemporary financial statement. Moreover, dividends are pro-rated based on shares outstanding. There is no confusion over claims on profitability, nor any allocation based on “moral” commitments or rules of thumb; profit distribution is a mechanical process based on the accounting profits divided by total shares outstanding.

Note that in the sample *wanjinzhang*, dividends do not necessarily equal total profits. Fortunately, the final line in the account explains how residual profits were handled and why this might be the case. The line item reads, “开除过净存余利银若干”，or, “Residual earnings net of

dividends, however much silver.” This refers to undistributed profits for the year. Even more important is the explanatory note written in the margins of the final line item. This note reads, “下年将此余利银开写前边，旧管处与原本开在一排写积年余利利银若干。如将赚下利银开尽，自然无此一笔。”<sup>554</sup> In English this translates to, “Next year, take this amount and write it at the beginning of the yearly account. In a column in the *jiuguan* section along with starting capital, write ‘retained earnings, however much silver.’ If all profits are distributed as dividends, naturally you will not have this item.” This means that the *wanjinzhang* had a line item for what today we call “retained earnings.” Undistributed profits of the firm could continue to finance business activities, and were accounted for in the *jiuguan* section of the *wanjinzhang*. In this way, the *wanjinzhang* precisely monitored starting equity and accumulated profits.

To summarize, the *wanjinzhang* tracked capital in four ways. First, there was the *yuanben* or initial equity of the firm. Second, there were loans outstanding, the firm’s debt financing. Third, there were distributed profits, which were pro-rated by share. And fourth, there were retained earnings, or profits re-invested in the firm and accounted for in a separate line item in the *jiuguan*. Though the calculation of these line items would have involved some discretion and judgment, the accounting treatment of profits was mechanical. Moreover, the process was transparent; any shareholder could look at the *wanjinzhang* and see where their capital was deployed and how profitable it was. Not only were no moral economy or kinship ties necessary, but there was really no room in the accounting for such considerations. This does not mean that moral sentiments had no place in the business; rather, that such sentiments had to be expressed in the language of accounting, as in the above example of a firm issuing an “empty share” to an

---

<sup>554</sup> *Necessary Knowledge*, 44.

erstwhile partner no longer able to work.<sup>555</sup> This enabled someone with access to the books to know how much was being spent on living up to the demands of moral sentiments.

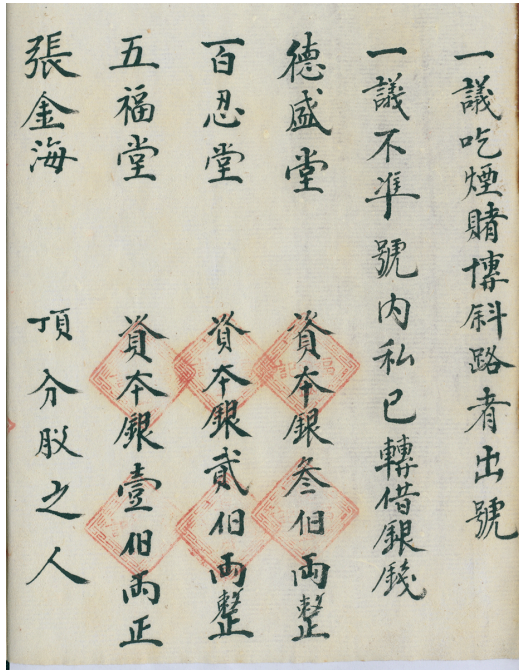
To see how this worked in practice, we can turn again to the popular sources. One helpful document is a *wanjinzhang* from the Changshengfu Company (长盛福号), a general store and cloth merchant in Lanzhou, the provincial seat of Gansu. Its shop was located on Lanzhou's Great West Street (西大街), and there is some evidence to suggest it was still in operation as late as the 1940s.<sup>556</sup> Changshengfu was founded in 1904, with four initial shareholders holding one share each. Three of these were silver shares granted to lineage trusts, and the fourth was a personal share granted to the manager, Zhang Jinhai. An image of the initial investments—along with a ban on smoking opium or gambling on pain of expulsion—can be seen in Image 41.

---

<sup>555</sup> A modern corollary might be keeping an employee on the payroll who is no longer needed by the firm, but would be unable to find work otherwise. The decision to keep such an employee would be a moral one, but the financial statements would still treat their salary exactly as it would any other expense.

<sup>556</sup> An entity named Changshengfu invested in a modern tile factory in Gansu's Huating county as late as 1943. There is no way to know if this is the same Changshengfu, but it is at least a possibility. Peng Jinshan (彭金山), *Early Zhou Culture in the Jingshui Plateau* (高原泾水间的先周文化) (Gansu Jiaoyu Chubanshe, 2014), 50.

Image 41. Changshengfu shareholding structure, 1904



Source: Changshengfu partnership accounts, 1904 (光緒三十四年蘭州長盛福號德勝堂合同底賬) LJ MPC, Comprehensive Accounts, 4 Changshengfu partnership accounts, 1904 (光緒三十四年蘭州長盛福號德勝堂合同底賬) LJ MPC, Comprehensive Accounts, 4.

Table 16 shows a transcription, in English, of Changshengfu’s shareholding structure by year.

Table 16. Changshengfu shareholding structure, 1904 (silver taels)

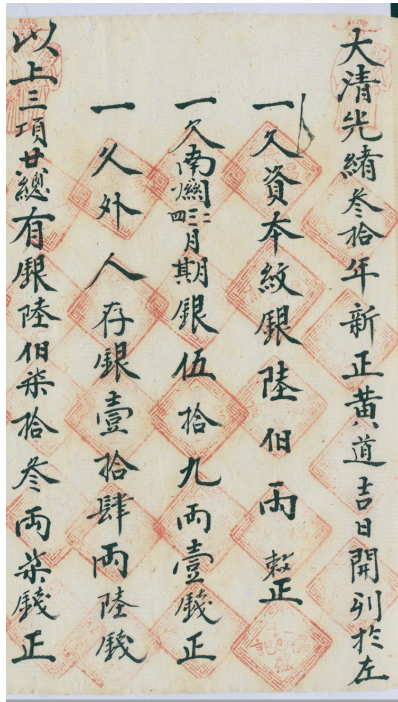
Shareholder	Investment (taels)
Desheng Hall	300
Bai'ren Hall	200
Wufu Hall	100
Zhang Jinhai	personal share

Source: Changshengfu partnership accounts, 1904 (光緒三十四年蘭州長盛福號德勝堂合同底賬) LJ MPC, Comprehensive Accounts, 4

This shows us that there is an initial silver investment totaling 600 taels, made by the Rensheng Hall, Bairen Hall, and Wufu Hall in the amounts of 300, 200, and 100 silver taels, respectively.

This investment is exactly equal to the total beginning equity in the company’s financial statements, shown in Image 42 and translated into English in Table 17.

Image 42. Changshengfu's starting capital, 1904



Source: Changshengfu partnership accounts, 1904 (光緒三十四年兰州长盛福号德胜堂合同底账) LJMPC, Comprehensive Accounts, 5.

Table 17. Changshengfu's starting capital, 1904

Accounts as of 1/1 in 30th Reign Year of the Great Qing Emperor Guangxu	Silver taels
Liability: Equity	600
Liability: Nanguan 3rd, 4th, 5th month silver	59.1
Liability: Deposits from third parties	14.6
Total	673.7

Source: Changshengfu partnership accounts, 1904 (光緒三十四年兰州长盛福号德胜堂合同底账) LJMPC, Comprehensive Accounts, 5.

This statement is identical to the *jiuguan* seen in the textbook, although it is not labeled. We see that it tracks the equity investment—at 600 silver taels—as well as other invested capital. The non-equity capital includes debt and deposits received, as well as “Nanguan third, fourth, and fifth month silver.” I do not know what this refers to, but Nanguan is a street in central Lanzhou. It was the heart of pre-war Lanzhou commerce, abuzz with Shanxi and Shaanxi merchants, and

the site of one its three major money markets.<sup>557</sup> I believe the line item refers to silver payable at something like the Nanguan *biaoqi* or similar fair. In any event, what is important here is that all the invested capital in the firm is accounted for, with equity and debt registered separately.

This *wanjinzhang* does not contain a complete four-pillar financial statement, but is more like a balance sheet. After the invested capital, the account book presents us with a list of the firm's assets. These total 684.27 silver taels, most of which are tied up in inventories. Finally, the account book states the net income of the firm for 1904, which totals 10.57 silver taels. Note that, as with a modern balance sheet, invested capital (liabilities) and uses of capital (assets) match exactly once net income is added back to invested capital.

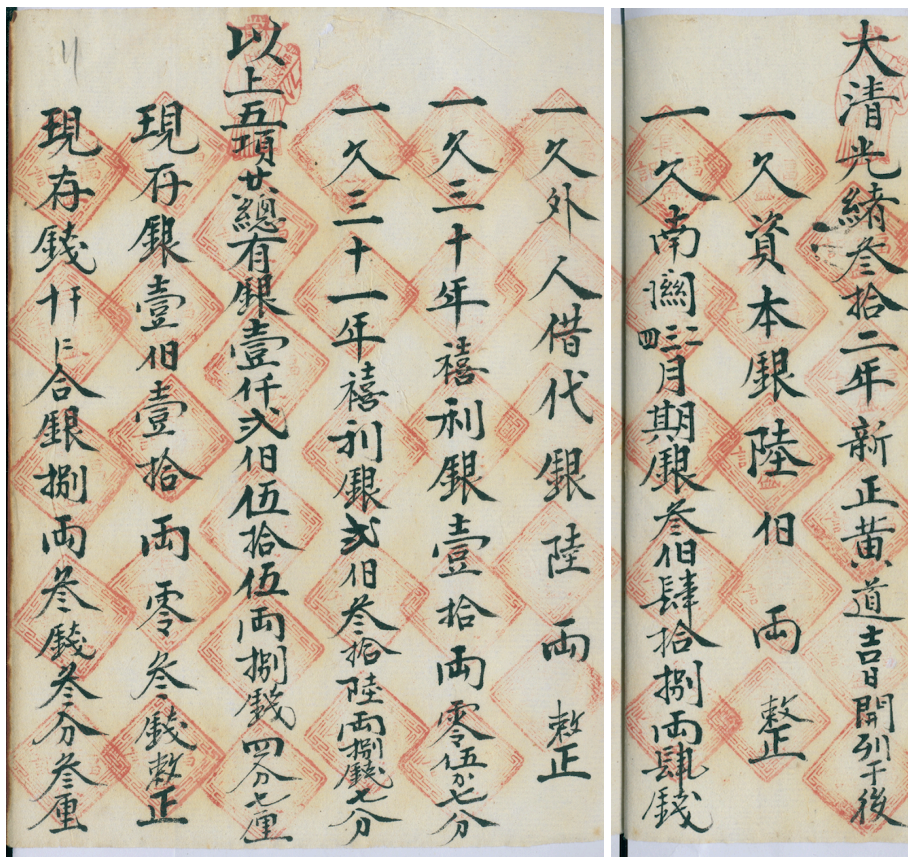
According to the textbook, one year's net income should be added into the following year's invested capital as a separate line item. This is precisely what we see with Changfusheng. The invested capital for 1905 contains a line item reading “一、欠叁拾年禧利银”, or “Liability: Guangxu 31 Annual Profits”. It is worth pausing here to note how similar the traditional Chinese accountant's understanding of capital was to that of a contemporary accountant's. The character *qian* (欠), meaning “owings” or “to owe” is noteworthy. It reflects the understanding that capital is a kind of *liability*, and that even equity is merely a contingent liability. This conceptualization of capital is highly counterintuitive, but essential to a prudent businessperson or accountant. Indeed, the *qian* character has the same connotation as the modern practice of referring to liabilities as “sources of funds.”

---

<sup>557</sup>Zhao Jingheng 赵景亨 and Ji Maolin 吉茂林, “Yuan Lanzhou Siying Shangye Jiankuang 原兰州私营商业简况 [A Brief Overview of Lanzhou's Former Private Commerce],” in *Lanzhou Wen Shi Zi Liao Xuan Ji 兰州文史资料选集*, ed. Zhongguo ren min zheng zhi xie shang hui yi 中国人民政治协商会议, vol. 3 (Lanzhou: Gansu Renmin Chubanshe, 1985), 157–63.

More importantly, the *wanjinzhang* is able to track retained earnings precisely. The silver amount in this line item—10.57 silver taels—is identical to the previous year’s income. Clearly, the firm is reinvesting profits in the business, and accounting for it as retained earnings. We also see this for 1905 profits. In 1905, profits totaled 236.87 silver taels. These are not distributed as dividends, but are again reinvested in the firm, and accounted for as retained earnings. This is presented visually in Image 43, which shows the accounting by which profit in one year flowing into next year’s invested capital. Those with an accounting background may prefer to see each line item as translated into Table 18.

Image 43. *Changshengfu Profit and Retained Earnings, 1905-1906*



Source: Changshengfu partnership accounts, 1904 (光緒三十四年兰州长盛福号德胜堂合同底账) LJMPCC, Comprehensive Accounts, 10-11.



Table 18. Changshengfu Profit and Retained Earnings, 1905-1906

Accounts as of 1/1 in 32nd Reign Year of the Great Qing Emperor Guangxu	Silver taels
Liability: Equity	600
Liability: Nanguan 2nd, 3rd, 4th month silver	348.4
Liability: Loans from third parties	6
Liability: Guangxu 30 retained earnings	10.57
Liability: Guangxu 31 retained earnings	236.87
Total	1255.847

Source: Changshengfu partnership accounts, 1904 (光绪三十四年兰州长盛福号德胜堂合同底账) LJMPC, Comprehensive Accounts, 10-11.

What is clear from the Changshengfu accounts, is that profits in one year are being rolled into invested capital in the next year as retained earnings. Moreover, they are tracked as distinct line items, with retained earnings in different years given their own entries. I should note that the total in the table does not add up—I believe this is due to a clerical error, and that “6 taels” should be “60 taels.” I can think of no other explanation for this discrepancy.

The precision of this accounting system allowed the measurement over time of profits and capital. Distribution of profits and capital was made both transparent and predictable through the shareholding process. In 1907, the firm decided not to retain any of its earnings, but distributed the entirety of that year’s profit as dividends. The firm shareholding structure had changed somewhat since 1904, with the three original equity investors injecting more money, and several partners receiving personal shares.

Table 19. Changshengfu, Shareholding structure and dividend distribution, 1907

	Shares	Silver taels
Total profits		417.034
Desheng Hall, dividends from Guangxu 33	2.5	104.2585
Bai'ren Hall, dividends from Guangxu 33	2.5	104.2585
Wufu Hall, dividends from Guangxu 33	1	41.7034
Zhang Changchun	0.5	20.8517
Zhang Jinhai	2.1	87.5771
Han Bingyan	1.4	58.3847

Source: Changshengfu partnership accounts, 1904 (光绪三十四年兰州长盛福号德胜堂合同底账) LJMPC, Comprehensive Accounts, 17-18.

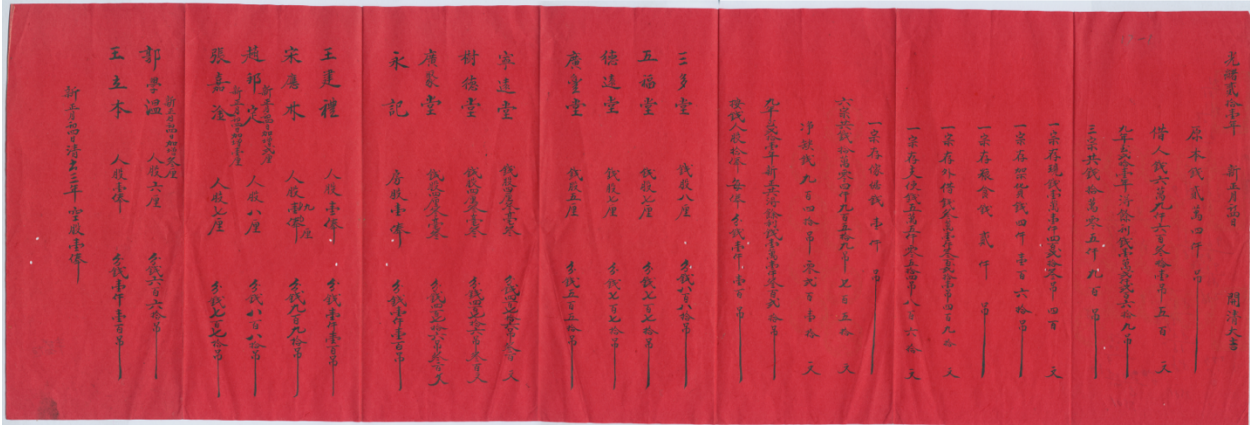
Table 19 shows both the changes in shareholding structure, as well as the dividend distribution. It is clear that dividends equal profits, which are distributed pro-rata by number of shares. This is also consistent with the instructions in the *Necessary Knowledge* textbook.

The Changshengfu *wanjinzhang* has the advantage of multiple years of history, but is also from a major city and dates from the 20<sup>th</sup> century. For this reason, its representativeness is questionable. Fortunately, other examples of Shanxi Merchant capital accounting abound. Though *wanjinzhang* of similar completeness are hard to come by, grassroots collectors have found numerous *qingdan* (清单), or “settlement slips.” These accounts—also known as *juesuandan* (决算单) or *juesuan qingdan* (决算清单) are almost synonymous with *wanjinzhang*, but imply a more abbreviated financial statement specifically dedicated toward distributing dividends, returning capital, or otherwise winding up an enterprise.

One revealing document is a *qingdan* from the Fengshengheng company (丰盛恒), located in Zeng Village. The document is part of a collection at Hebei University, which I have not been able to review in full. Indeed, I am not even sure where Zeng Village is, though it is somewhere in Shanxi or in a part of Hebei Province heavily influenced by Shanxi merchants.

Nevertheless, the *qingdan*, from the 21<sup>st</sup> reign year of the Guangxu emperor—visible in Image 44—offers an excellent snapshot of how firms accounted for capital and distributed earnings.

Image 44. Fengshengheng *qingdan*, 1895



Source: Fengshengheng *Qingdan*, 1895, Hebei University.

The settlement slip should be read from right to left. Unlike in the previous example, its unit of account is copper cash, rather than silver taels. As in the previous example, this account closely tracks invested capital and profits. To make the logic of the account more easy to follow, I have transcribed it in its entirety as Table 20 and Table 21. Table 20 shows the capital employed, profits, and uses of funds—essentially a balance sheet—while Table 21 presents the shareholding structure and distribution of profits. The two tables correspond to the right and left half of the *qingdan* shown in Image 44, respectively.

Table 20. Fengshengheng qingdan, capital and profit, 1895. Monetary units in strings of copper cash (吊文)

项目	Item	Cash strings (吊文)
原本钱	Initial equity	24,000.00
借人钱	Loans received	69,631.50
九年至贰拾壹年得 余利钱	<u>Guangxu 19-21,</u> <u>retained earnings</u>	<u>12,269.00</u>
三宗共钱	Three items, total	105,900.00
一宗存现钱	Item: Cash	11,423.40
一宗存架货钱	Item: Inventories	4,160.00
一宗存粮食钱	Item: Grain	2,000.00
一宗存外借钱	Item: Loans outstanding	31,321.49
一宗存支使钱	Item: Advances to related parties	55,054.86
一宗存傢俱钱	<u>Item: Furniture and</u> <u>fixtures</u>	<u>1,000.00</u>
六宗共钱	Six items, total	104,959.75
净缺钱	Net deficit	(940.21)
九年至拾壹年新正 共得利钱	Guangxu 19-21, total profit	11,320.00
按钱、人股拾俸， 每俸分钱	Distributions per share	1,100.00

Source: Fengshengheng Qingdan, 1895, Hebei University.

The first three line items in Table 20 are the *jiuguan* as specified in the *Necessary Knowledge* textbook. The first item, or “yuanben” is the initial equity investment. The second line item consists of the firm’s outstanding debt. The third line item is the three years of retained earnings, from the 19<sup>th</sup> to 21<sup>st</sup> reign years of the Guangxu Emperor (1893-1895). The total is rounded to the nearest copper cash string, and sums to 105,900. Note that the rounding is inconsistent, with some line items rounded to the nearest string, and others to the nearest tenth or hundredth of a string. In any event, the *jiuguan* is tracking total invested capital, with different line items for equity, debt, and accumulated profits.

The next section is what the textbook refers to as the *shizai*, and is a statement of the firm’s assets. These consist mainly of cash in the till, loans outstanding, and advances to related parties. Advances to related parties would mean loans to employees, partners, and shareholders, and would have been extended at a lower rate than other loans. From the composition of the balance sheet, we see that Fengshengheng was likely a rural financial institution. Its capital base is mainly raised from debt and is mostly deployed into the lending market. In other words, it appears to be earning a spread. The small amounts of grain make sense in this context, as it would not be unusual for a village lender to make loans or to accept repayments in grain. But note that the unit of account, even for grain, is still copper cash—there is no mixing of accounting units or dual units of measurement, as is sometimes alleged in the literature.<sup>558</sup> Total assets, or *shizai*, sum to 104,959.75 strings of copper cash. It has hard to know how much this is in real terms without knowing the silver value of cash in Zeng village, but it would probably not be less than 15,000 silver taels—a respectable size for a village financial institution.

---

<sup>558</sup> Faure, 1996.

The line item that follows is the net income for the year. The line item enters this as a “deficit” (缺 *que*) rather than a “loss” (赔 *pei*) because there was a taboo against the character for loss when compiling accounts. Note that this loss is only for the year 1875. It is the exact difference between invested capital and assets (*jiuguan = shizai – net loss*), modulo a rounding difference in the hundredths place. This is consistent with the accounting identity in the previous *wanjinzhang*. Finally, we get a total profit over the three year period. This is equal to the retained earnings in the *jiuguan* less the most recent year’s net loss, and sums to 11,320.00.<sup>559</sup> These profits are distributed to shareholders, pro-rated across ten shares. The shareholding structure and distribution is then made clear in the next series of columns, transcribed as Table 21.

Table 21. *Fengshengheng qingdan, distribution of profits, 1895*. Monetary units in strings (吊文).

东伙	Shareholders and partners	Share class	Shares (股分)	Distribution (分钱)
三多堂	Sanduo Hall	Cash (钱股)	0.8	880.00
五福堂	Wufu Hall	Cash (钱股)	0.7	770.00
德远堂	Deyuan Hall	Cash (钱股)	0.7	770.00
广丰堂	Guangfeng Hall	Cash (钱股)	0.5	550.00
宁远堂	Ningyuan Hall	Cash (钱股)	0.433	476.30
树德堂	Shude Hall	Cash (钱股)	0.433	476.30
广聚堂	GuangjuHall	Cash (钱股)	0.433	476.30
永记	Yong Co.	Property (房股)	1	1,100.00

<sup>559</sup> There is 8.79 strings of copper cash missing in this balance; the rounding here is to the tens place, probably to have a nice round total profitability number that is neatly divided by ten, the total number of shares.

王建礼	Wang Jianli	Compensation (人股)	1	1,100.00
宋应林	Song Yinglin	Compensation (人股)	0.9	990.00
赵邦定	Zhao Bangding	Compensation (人股)	0.8	880.00
张嘉淦	Zhang Jiagan	Compensation (人股)	0.7	770.00
郭学温	Guo Xuewen	Compensation (人股)	0.6	660.00
王立本	Wang Liben	Compensation (人股)	<u>1</u>	<u>1,100.00</u>
总结			9.999	10,998.90

Source: Fengshengheng Qingdan, 1895, Hebei University.

Table 21 showing the distribution of profits is interesting for several reasons. Most important, we see again how the Shanxi merchant shareholding structure allowed the firm to distribute profits in a way that was transparent, predictable and, from the shareholders' perspective, fair. There are a total of ten shares, of which half are personal shares. Four of the shares "cash shares," granted in return for an investment of copper cash. But one of the shares is a highly idiosyncratic *fanggu* (房股), or "property share." This means that the shareholder, the Yong Company (永记), is the owner of the property where the firm is located. Rather than pay rent to the landlord, they have given the landlord a share in the business. All of these share classes were equal, each receiving the same per share allocation of profits.

Second, it is worth reflecting on the Fengshengheng company's investor profile. Literally all seven of its investors who contributed cash equity are lineage trusts. This reinforces one of the key arguments of this chapter. Namely, the lineage trust *qua* class of institution should not be

thought of as operating any specific kind of business, but rather as a general purpose corporate structure, especially useful for making equity and debt portfolio investments. Thus, equity in Shanxi commercial enterprises—whether in massive, empire-wide branch banking or a humble, village financial institution—often came from lineage trusts.

To conclude, we have seen that Chinese accounting was perfectly capable of tracking capital, profits, and residual claims; and of distributing these amongst investors and employees in a way that was predictable and transparent. Even undistributed earnings were accounted for as retained earnings, a line item in the *jiuguan* of the four pillar accounts. This meant that profits—both distributed and undistributed—could be measured and tracked. Moreover, distribution held no special challenge or confusion. The traditional Chinese shareholding structure made it a simple to distribute profits by shares, much as in a contemporary corporation. In sum, the *wanjinzhang* was not merely a ledger of transactions with investors; it was a capital account that made legible the invested capital and profits of a firm.

### The investment market

In the previous sections, I demonstrated that Shanxi merchant shareholding arrangements and accounting methods were well suited to investment markets. But this still leaves open the question of who was investing in corporate entities. If a young, Qing-era merchant wanted capital to start his own firm—where did he go to find investors? In today’s business jargon, who were the “players” in the Shanxi merchant investment market?

In this section, I examine the investors in Shanxi merchant firms. To do so, I rely especially on *heyue* (合约), or “partnership contracts,” contained in the LJMP. When appropriate, I will also draw attention to shareholding structures articulated in this contract, thus



emphasizing the point made in previous sections. But the main focus will be on the nature of the investors and on their relationship with the managers.

One of the earliest partnership contracts that I have reviewed establishes a grain shop. The contract was executed in the 25<sup>th</sup> reign year of the Qianlong Emperor (1760). Though it is not difficult to read, the document is unfortunately damaged, whence the two illegible characters in my transcription. The contract reads:<sup>560</sup>

立合同合伙人李湧、柴正儒今在永滄店集开设六陈行生理，李泳入本钱贰百玖拾仟柒，柴正儒入本钱肆佰仟整。本金不齐，同众议定生意不许 XX，如有支使者按月壹分伍厘往生意中行悉，人情得其平和生意，自然实积务要同心协力，日后托人获利按本均分，唯恐无凭，故立此合同合伙文字为证  
乾隆贰拾伍年十一月初二 日立合同文字李泳十、债正儒【signed】  
同 韩有余、柴秀儒、崔虞廷

Establishing a contract between partners Li Yong and Chai Zhengru, who have gathered today at the Yongyan Shop to establish a grain shop. Li Yong is investing 290,700 copper cash in equity. Chai Zhengru is investing 400,000 copper cash in equity. In the event that capital is insufficient, it is jointly agreed that the business shall not XX. If the partners take an advance from the enterprise, they will be charged a monthly interest of 1.5%, which will accrue to the firm's business. This business is engaged in willingly by all parties, to conduct business collegially. Naturally, if the business is to accumulate profit, it is imperative to unite our joint efforts. Afterward, profits shall be distributed by equity investment. Other testimony will not be relied upon, so we are originating this signed contract as proof.

On the second day of the eleventh month of the 25<sup>th</sup> reign year of the Qianlong Emperor, contract is originated by  
Li Yong [signed] 十  
Chai Zhengru [signed]

This is a small amount of capital, and was likely not a large shop. The location of the shop is not specified. For our purposes, what is most interesting is the investment capital and the nature of the partnership. Two partners are investing money to the tune of 290,700 and 400,000 copper cash, respectively. They agree to distribute the profits pro-rata by investment. Both partners

---

<sup>560</sup> LJMPC, Partnership Contracts, 1

appear are individual people rather than institutions. Moreover, both appear to be operating partners of the firm. That is, they are not passive investors. Thus, the contract exhorts both Li Yong and Chai Zhengru to do their utmost for the shop. It is also notable that the partners are not from the same family—though we cannot rule out the possibility of an affinal relationship.

The parties in the previous contract were both individual investors, as well as partners active in the business of the grain shop. But numerous Shanxi merchant partnership contracts contain institutional investors. These institutions are either commercial firms (字号 *zihao*) or lineage trusts (堂号 *tanghao*). After the Jiaqing reign, the greater majority of contracts establishing new firms include at least one institutional investor. One example, visible in Image 45 can be found in a contract dating from the 19<sup>th</sup> year of the Jiaqing imperial reign (1814).



Table 22. Shareholders in Qingfeng Money Shop and Wanfeng Grain Shop, 1814

股东	Shareholder	入本大钱 (千文)	作为 (股)	人力 (股)
		Invested copper cash (000s)	Shares received	Person shares
益泰昌	Yitaichang	2400	3	
王让	Wang Rang	800	1	
王汉金	Wang Hanjin	560	0.7	
籍映西	Ji Yingxi	240	0.3	
籍服远	Ji Fuyuan	320	0.4	
籍化成	Ji Huacheng	240	0.3	
宋廷珂	Song Tingke	400	0.5	
			0	
李希白	Li Xibai	400	0.5	
敦伦堂	Dunlun Hall	160	0.2	
白益齐	Bai Yiqi	240	0.3	
松鹤堂	Songhe Hall	400	0.5	
广庆堂	Guanqing Hall	240	0.3	
克复堂	Kefu Hall	320	0.4	
王以圣	Wang Yisheng	240	0.3	
王让	Wang Rang			1
宋廷珂	Song Tingke			1
杨如桐	Yang Rutong			1
常天汴	Chang Tianbian			1
白彬	Bai Bin			1
王以赞	Wang Yizan			1
王以圣	Wang Yisheng			1
王以安	Wang Yi'an			1
	Total	6960	8.7	8

Source: LJMPC, Partnership Contracts, 15.

First, it is interesting that we have such a large number of investors. We also see again the dual classes of shareholding, including both personal and cash shares.

Importantly, only three of the copper cash investors receive “person shares,” indicating that fully 12 of the investors are passive investors. More intriguing still are the large number of

institutional entities among these investors. The single largest shareholder is Yitaichang (益泰昌), a corporate entity of some kind. In addition, four lineage trusts have invested in copper cash shares. This shows that capital was highly fungible, and that lineage trusts with more cash than they could deploy into lending or land markets could make equity investments in commercial and financial firms. Similarly, firms with more capital than could profitably be deployed in their own operations could fund new firms and thus earn passive income. The implications for the real economy are enormous. If capital could flow through lineage trusts and corporate entities into new firms, then businesses with high profits would attract new entrants.

Another contract reinforces this argument. This contract, executed in the 16<sup>th</sup> reign year of the Daoguang Emperor (1836) shows the founder of a firm receiving all of his start-up capital from a lineage trust's equity investment. The contract reads:<sup>561</sup>

立领资本文字人卫高今领到  
光德堂泾布平足色纹银式百两整，同中言明在岐山县设立三盛公号生理，每银式百  
两作分股一分，每账所得利息照分股均分，倘有疏虞，领本人一面承当与众东无  
干，恐口难凭，立约为证  
道光十六年八月二十六日

卫高 立

三盛公号台 翟有辉、滋德堂  
中人 王福祥

Originated a contract to acquire capital. The signatory Wei Gao will today acquire capital from Guangde Hall in the amount of 200 taels of pure silver measured with the Jingbu scale. It is clearly stated that the capital will be used to establish the Sanshenggong Company and will do business in the Qishan County seat. 200 silver taels will be the value of one share, and all profits will be distributed proportionally among shareholders. In the case of negligence, the manager of the capital will be liable, while the shareholders will not. Oral testimony will not be relied upon, so this agreement will serve as proof.

---

<sup>561</sup> LJMPC, Partnership Contracts, 29.

On the 26th day of the 8th month of the 16th reign year of the Daoguang emperor Wei Gao establishes  
The honorable Sanshenggong Company. Di Youhui, Zide Hall.  
Witness Wang Fuxiang

This is a contract to found a firm in the Qishan County seat, near present-day Baoji in Shaanxi Province. The “Jingbu” scale being used to measure the silver was common in much of Shaanxi, as well as in southern Shanxi. The start-up capital is small, only 200 taels, while the nature of the firm’s business is not even specified. This indicates that it was a smaller operation. Nevertheless, it is interesting that the founder, Wei Gao, did not need to rely on any of his own funds, but received the entire start-up capital from a lineage trust, the Guangde Hall. While it is possible that Guangde Hall was a Wei family lineage trust, the fact that the weights and measures as well as the location of the firm must be specified stand out. These details imply that at least one of Wang Gao and the Guangde Hall were not natives of Qishan. It is also relevant that there were other lineage trusts and someone surnamed Wang as witnesses. Though none of this is dispositive, it leads me to believe that in all likelihood the Guangde Hall was not a Wei family trust lineage. Nevertheless, it is clear that the Guangde Hall is a kind of portfolio investor, able to earn passive income on the profits of Wei Gao’s Sanshenggong company.

The timing of the above contract may be significant. In the contracts I have reviewed, lineage trust investments appear with increasing frequency after the Daoguang reign. It is impossible to know if this is representative of any real trend given the small sample size. One example is contract from the 23<sup>rd</sup> year of the Daoguang reign (1843), for recapitalizing a pawnshop in the Pinggu County seat, just northeast of Beijing (and, today, a district of Beijing).

The contract is long, but is a remarkable testament to the sophistication and flexibility of late Qing equity markets, and is therefore worth quoting in full.<sup>562</sup>

立合同韩泰先堂、韩报本堂、韩养素堂、韩敬和堂、韩守义堂、胡敦厚堂，窃韩宅在平谷县城内开设裕盛当生理三百余年，兹因各门生齿殷繁众口不调，只知抽取资本，并不整顿铺事，以致近年来生意疲乏，东伙俱受其累，目今各东伙不忍坐视，公同意立章程重新整立言定 财东每东钱捌千吊作为壹俸，每壹俸名下存东钱柒千吊作为护本，伙友人力身股每食壹厘者，存东钱壹百伍拾吊，以作护身，今立合同六张，各执一张存照，财东韩太先堂、韩报本堂入本东钱捌千吊，入护本东钱柒千吊，作为壹俸 财东韩养素堂入本东钱七万贰千吊，入护本东钱陆万叁千吊，作为玖俸。 财东韩敬和堂入本东钱贰千肆百吊，入护本东钱贰千壹百吊，作为叁厘。 财东韩守义堂入本东钱肆千吊，入护本东钱叁千伍百吊，作为伍厘。

财东胡敦厚堂入本东钱壹万陆千吊，入护本东钱壹万肆千吊，作为贰俸。

伙友敦锡五食壹身股存乎身东钱壹仟伍佰吊，侯聘三食壹身股，存护身东钱一千五百吊，其余伙友人力身股每年加减不齐，难以备，载以铺中股俸账为凭，日后天赐鸿利按股均分，欲后有凭立此为据。

道光二十三年新正月初八日

立合同人韩泰先堂、韩报本堂、韩养素堂、韩敬和堂、韩守义堂、胡敦厚堂

伙友敦锡五【signed】

侯聘三【signed】

Establishing a contract between the Han Taixian Hall, the Han Baoben Hall, the Han Yangsu Hall, the Han Dunhe Hall, the Han Shouyi Hall, and the Hu Dunhou Hall. Our humble Han lineage has in the county seat of Pingu operated the Yusheng Pawnshop for over 300 years. Because all the branches of our house have grown ever more numerous, and yet our progeny only know how to take capital and have not set aright the affairs of the shop, so it has come to pass that recently business has become lackluster. The shareholders and partners have all felt this burden. Today, all the shareholders and partners can no longer sit passively. The jointly agree to establish regulations that may renew the basis for the firm. It is clearly agreed that, as for the portfolio Shareholders, each share shall be worth invested capital of 8,000 strings of copper cash. Each share will also require a shareholder deposit of 7,000 strings of copper cash to serve as a reserve. Partners with 0.1 person shares will deposit 150 strings of cash as a reserve. Today, we will issue six copies of the contract, with everyone taking one copy. Shareholder Han Taixian Hall and Han Baoben Hall invest 8,000 strings of copper cash in equity and 7,000 strings of copper cash as reserves, in return for one share. Shareholder Han Yangsu Hall invests 72,000 strings of copper cash in equity and 63,000 strings of copper cash as reserves in return for 9 shares. Shareholder Han Jinghe Hall invests 2,400 strings

---

<sup>562</sup> LJMPC, Partnership Contracts, 39.

of copper cash in equity and 2,100 copper cash as reserves in return for 0.3 shares.

Shareholder Han Shouyi Hall invests 4,000 strings of copper cash in equity and 3,400 strings of copper cash in reserves in return for 0.5 shares. Shareholder Hu Dunhou Hall invests 16,000 strings of copper cash in equity and 14,000 copper cash strings as reserves in return for 2 shares. Partner Dun Xiwu has one person share, and deposits there in 1,500 strings of copper cash. Hou Pinsan has one person share, and deposits therein 1,500 strings of copper cash. The other partners with person shares as compensation for their work fluctuate year by year, and so are difficult to reserve for. Their obligations will be determined according to the shareholder accounts of the firm. In the future, all profits will be distributed equally amongst shareholders. Please keep this contract as proof.

On the eighth day of the first month of the 23<sup>rd</sup> reign year of the Daoguang Emperor  
Contract Established with: the Han Taixian Hall, the Han Baoben Hall, the Han Yangsu  
Hall, the Han Dunhe Hall, the Han Shouyi Hall, and the Hu Dunhou Hall.

Partners Dun Xiwu [signed]

Hou Pinsan [signed]

This contract pertains to a pawnshop located in the Pinggu county seat, in the northeast outskirts of Beijing. The pawnshop had been owned by the Pinggu Han family for three hundred years—indicating a potentially much, much longer history of lineage trust funded commercial activity.

In keeping with Shanxi merchant practices, there is also a significant investment from a non-Han lineage trust, namely, the Hu family's Dunhou Hall. Indeed, Shanxi merchants almost never financed major firms entirely out of one lineage's capital, lest the firm become prey to family politics or nepotism.<sup>563</sup> The contract is also noteworthy in that it is not establishing a new firm. Rather, the shareholders are recapitalizing a 300-year old pawnshop. The agreement explains that through the generations, the family has been taking capital out of the firm but neglecting its affairs. As long as dividends were forthcoming, no one looked too closely at the books.

Under the new shareholding structure, the firm has five cash shareholders. Four of these are Han family lineage trusts, while the fifth is a Hu family lineage trust. To reinvigorate the

---

<sup>563</sup> Luman Wang, 2021.



business, the cash shareholders have agreed to reissue shares in return for a new infusion of equity. The reason for this equity injection is also made clear. The capital base has shrunk so much owing to neglect of its core business that the firm requires a recapitalization. As such, the shareholders invested a total of 102,400 strings of copper cash in return for 12.8 shares. Assuming that Pinggu county used “east cash”—which I cannot confirm, but which should be the case given its location relative to Beijing—this should be about the equivalent of 11,377 taels of silver; an impressive sum.<sup>564</sup>

The firm has also issued a number of personal shares given to the managers and employees of the firm. Partners Dun Xiwu and Hou Pinsan are mentioned by name, and given a full share each. Recall that these shares are worth 8,000 strings of copper cash apiece. To be granted this much in personal shares, Dun Xiwu and Hou Pinsan must be the managers of the firm. This proves that the lineage trusts are passive investors, as neither Dun Xiwu nor Hou Pinsan share a surname with the investors. The contract says that other personal shareholders will change year in and year out, and will be entered into the *wanjinzhang*. This indicates that the managers Dun Xiwu and Hou Pinsan are empowered to bestow personal shares on employees in order to incentivize them and to retain talent.

The contract further states that each shareholder must invest in a reserve account. Cash shareholders are required to invest 7,000 strings of copper cash per share while person

---

<sup>564</sup> On market conversion rates between East cash (东钱 *dongqian*) and silver, see Li Zhenzhen 李真真 and Pan Sheng 潘晟, “Wanqing Huabei Xiangcun Shangye Jingying Ji Xiangguan Wenti: Yi Dong’anxiaan Xiaohuizhuang Sanchenghao Caipu Pancundan Wei Li 晚清华北乡村商业经营及相关问题——以东安县小惠庄三成号材铺盘存单为例 [Commerce and Society in Rural North China in the Late Qing Dynasty: Based on the Sancheng Hao’s Inventory Lists in the Xiaohuizhuang, Dongan County],” *Zhongguo Jingjishi Yanjiu* 中国经济史研究 [Researches in Chinese Economic History] 3 (2019): 58–70.

shareholders invest 150 strings of copper cash per tenth of a share. The language here is intriguing; the Chinese reads, “入护本东钱” for cash shareholders and “存护身东钱” for person shareholders. Translated word for word, this means “invested equity-owner protecting cash” and “deposited person-owner protecting cash.” It would be fascinating to learn exactly how these deposits were accounted for, or how they were used. Almost certainly they had their own line items in the *jiuguan* section of the *wanjinzhang*. At the very least, the wording indicates a kind of reserve. That is, in the case of losses or cash flow difficulties, the firm would use the “equity owner” reserve as a buffer to meet its obligations. The personal share reserves served as a security deposit to protect the firm from employee incompetence or malfeasance.

At a more general level, the contract tells us a number of things. First, it demonstrates the importance of lineage trusts as a source of equity financing—particularly in financial institutions such as this pawn shop. The fact that different lineages were able to pool funds to finance financial and commercial enterprises indicates a far more flexible investment market than has been established, and one that was capable of deploying social surplus into commercial concerns. Here it is worth reemphasizing that the managers were not members of any of the investor lineages, thus proving the critical importance of the shareholding structure and proper incentives in holding the firm together. Second, the contract shows us how shareholders could deal with insolvency. Rather than fold up the firm, they raised a new round of equity and recapitalized the pawn shop. This is also a hallmark of an efficient capital market; insolvency of a firm with value as an ongoing concern should not lead to liquidation, but merely to a change in capital structure. Finally, the use of a reserve is surprising; there is not enough information to draw strong conclusions about what the reserve was for, but it suggests an appreciation of risk amongst investors and perhaps also amongst the pawnshop’s clientele.

There are numerous other examples of financial firms established with equity either mostly or entirely provided by lineage trusts. To continue listing contracts would be repetitive, but we can turn to another genre of popular sources both to emphasize the importance of lineage trusts, as well to understand why they were investing in commercial or financial firms. One interesting set of sources are capital statements given to shareholders upon the distribution of dividends. I have only seen these beginning in the Guangxu reign, so they may have been a relatively late invention, perhaps influenced by western practices.

The earliest of these capital statements was printed in the fifth reign year of the Guangxu emperor (1879), and was issued by the Yishengwei Pawnshop Company (益盛蔚当记). A copy of the statement is visible in Image 46.

Image 46. Yishengwei Pawnshop Capital Statement, 1879



Source: Yishengwei Pawnshop Capital Statement, 1879 (光緒五年五月初十日益盛蔚当铺股份情况)), LJMP, Other materials.

According to the capital statement, the pawnshop was located in Dazhigu (大直沽) in Tianjin county in municipal Tianjin on the edge of the international concession. For our purposes, what is interesting here is that the overwhelming majority of the equity capital appears to come from a single lineage trust. Moreover, the family behind this lineage trust is the “Ji” family, and is different from the manager, who is surnamed Wu. This again proves an investment market motivated by something other than kinship ties—in short, by returns on equity.

In conclusion, this section has made several contributions. It has demonstrated more forcefully the argument put forward at the beginning of the chapter, namely, that firms were not bound by kinship ties. In literally all of the firms reviewed—and I believe this is representative of the JSSLC at large—at least two surnames were involved in the founding of each firm; the shareholder base is generally of mixed surnames, while the managers come from other lineages still. The case of the Yusheng pawnshop is instructive. Clearly the pawnshop is dependent on the Han family, who own almost all the equity. But even they have brought in a Hu family investor—perhaps even with the express purpose of not having the entire firm within their own lineage. Moreover, the Yusheng managers are from two separate families, for a minimum of four families involved in the founding of the firm. Ultimately, investors and managers had confidence in their business ventures not because of any moral economy. Rather, the shareholding structure and accounting allowed entrepreneurs of good faith to enter into agreements that were legible, and that could therefore be honored by all sides.

More importantly, this section has probed the identity of investors in Shanxi merchant firms. It has found not only a prevalence of individuals shareholders, but corporate investors as

well. Specifically, both commercial entities (*zihao*) and lineage trusts (*tanghao*) were frequent investors in Shanxi merchant enterprises. In some larger Shanxi merchant firms, we have even seen examples in which virtually all of the equity capital came from lineage trusts. This discovery is critical. The fact that firms and lineage trusts could capitalize new firms indicates a far more competitive, commercialized economy than has sometimes been acknowledged. Even at the countryside level, it means that if a village's grain merchants or a pawnshops were squeezing the peasants, an entrepreneur could—in theory—raise equity capital from a lineage trust in another village and start a competitor.

The prevalence of lineage trusts in the shareholder rolls of Shanxi merchant firms mean that these findings also bear on the nature of the lineage trust itself. Specifically, this section shows that the lineage trust was just as vital an economic actor in the north as it was in the south. Furthermore, the nature of the Shanxi lineage trust is remarkably similar to that theorized by Joseph McDermott in his investigation of Huizhou lineage trusts. Namely, it was a corporate umbrella useful for any number of economic activities, including allocating investments. But there is of course an important difference. Where the southern lineage trusts invested mainly in farmland and timberland, the Shanxi lineages invested in for-profit enterprise.

#### From Commerce to Countryside

This section shows how money moved from lineage trusts, into the financial sector, and back into the peasant economy. Lineage trusts invested money into pawn shops, which in turn allocated their capital into rural loans or back into the hands of its shareholders, depending on where demand was highest. The importance of this argument cannot be overstated; it means that

rural lending was competitive and was integrated with commercial capital markets. In other words, peasants and merchants were—to a certain extent—competing for the same pool of capital. At the same time, lineage trust and financial institutions competed to supply loans both to agriculture as well as to business. This means that over time, credit and capital in imperial China would flow toward areas of the economy with the highest returns. The fact that lineage trusts were raising deposits from peasants, lending to firms and to peasants, and investing in the equity of operating firms, already provides formidable evidence in favor of this argument.

But more direct evidence still can be seen in the popular sources, especially in the Hengyu Pawnshop (恒裕典) correspondence book, compiled in the 12<sup>th</sup> reign year of the Tongzhi Emperor (1873). This correspondence book (抄本 *chaoben*) was reviewed briefly in Chapter 1. To recapitulate, Hengyu Pawnshop was located in Daming prefecture, Zhili Province, a major commercial hub.<sup>565</sup> The correspondence book consists of a collection of letters sent from the manager of the pawnshop to the firm's shareholders. These shareholders were fourteen different lineage trusts from Jiexiu County, Shanxi Province, itself an important source of Shanxi merchants.<sup>566</sup> The letters apprise the lineage trusts of business conditions as well as of related-party transactions. In other words, if one shareholder took out a loan from the pawnshop, the other shareholders wanted to know about it. The letters present a firsthand view of the

---

<sup>565</sup> Wang Zhongliang 王中良 and Yang Xiaomin 杨小敏, "Xin Faxian de Jinshang Hengyudian Wanglai Xingao de Zhengli Ji Yanjiu Jiazhi 新发现的晋商恒裕典往来信稿的整理及研究价值 [Collation and Research Value of the Newly Discovered Hengyu Pawnshops' Letters of Jin-Merchants]," *Shanxi Dang'an* 山西档案, no. 4 (2016).

<sup>566</sup> Shanxisheng jinshang wenhua jijinhui 山西省晋商文化基金会, ed., *Jinzhong Shangye Jiazu* 晋中商业家族 [Merchant Families of Jinzhong] (Taiyuan, Shanxi: Sanjin chubanshe, 2019), 368-413.

information that shareholders were interested in, as well as of the considerations that lineage trusts took when considering investments.

The letters show that the lineage trusts who invested in the pawnshop, also borrowed money from it. The very first letter reads, “众东借贷银四宗，仍照每月 8 厘行息原转，至于旧票，定于郭二兄，咱无捎去，” in English, “The four outstanding loans of the shareholders are rolled over at the original rate of 0.8% per month. As for the old notes, Guo Erxiong will take care of this. We have not mailed them back.”<sup>567</sup> This shows that the pawnshop was essentially buying interest-yielding paper from its shareholders. The lineage trusts borrowed money from the pawnshops buy giving it notes yielding 0.8%. When these fell due, rather than repay the loans, they rolled them over at the same rate. It is fascinating to see that the Lineage Trusts wanted the original notes back, and so the manager tells them that a Guo Erxiong will return them rather than the pawnshop sending them by mail.

The following letter is even more expansive, and is worth quoting at length for what it reveals about the relationship between the pawnshop and its investors:<sup>568</sup>

典务如常均叨平顺遥贺贺耶，捎算册二本去腊综合一摺，众东付利清单八张、恒聚堂花单一张，提存银钱摺、一个公费银二十两、付众东利银八件、俱已照信收清，各为交付又 永和通纸银一宗亦经郭二兄手付内云。述芝东十年用过熏鸡银 6.3 钱，至今尚未收到。伊言已交兄手不如待兄回来再为提说可也。裹来银棉被一张像二益堂留用，兹因郭二兄定于是月十九日驾行随即带去天锡堂旧文券回张，尊五堂调换宝银 50 两，于年景大势，想郭二兄出去未有不该说者，是不絮赘，即此顺候， 春祺

The business of the pawnshop is proceeding regularly, and not worth blabbing on about. We have sent two copies of the yearly reports and one copy of the 11<sup>th</sup> month report, eight settlement slips of investor interest payments, a schedule of Hengju Hall's expenses, a report of deposit withdrawals, a report of duties and fees amounting to 20

---

<sup>567</sup> Hengyu Pawnshop Correspondence between manager and shareholders, 1863 (同治十二年正月恒裕典东伙往来书信), 1, LJMPC, Pawnshop correspondence.

<sup>568</sup> Hengyu Pawnshop Correspondence between manager and shareholders, 1863 (同治十二年正月恒裕典东伙往来书信), 2, LJMPC, Pawnshop correspondence.

taels, and eight parcels with profit payments for the shareholders. Please receive these in accordance with this letter and may each shareholder pay what is necessary. In addition, a sum of Yonghetong paper silver has been paid by Guo Erxiong. In the tenth reign year of the Tongzhi Emperor, Shareholder Shuzhi took an advance of 0.63 silver taels to purchase a smoked chicken. This has yet to be repaid. He says that rather than pay himself, he should wait until I return to Jiexiu and discuss this. That is fine. A package of silver and a cotton blanket have arrived for the use of the Eryi Hall. Also notifying that Guo Erxiong is scheduled for the 19<sup>th</sup> day of this month to return by carriage and will bring with him the four old Tianxi Hall notes. Zunwu Hall has exchanged 50 taels of silver. As for the outlook for this year, Guo Erxiong will have more to tell and I will not expand on this now. Hope all is well, and wishing you good fortune in the Spring.

This passage tells us a number of things. First, we see how shareholder communications were integrated into the detailed system of bookkeeping touched on earlier in the chapter. Investors received both monthly and annual reports updating them on the business of the pawnshop. In addition, the passage contains another reference to the frequent related-party lending. Each investor has received a settlement slip, detailing the interest that they owe on their outstanding loans to the pawnshop. We also see a follow-up to the four rolled-over loans cited in the previous letter. This letter makes clear that the loans were to Tianxi Hall, one of the lineage trust shareholders. It confirms that Guo Erxiong is heading back to Jiexiu, and will return the old notes to Tianxi Hall, since these have been rolled over. Presumably, Tianxi Hall has issued new paper to replace them, with the same principal and at the same 0.8% monthly rate. The other financial transaction noted in this later is from Zunwu Hall, which has gone through the pawnshop to purchase 50 silver taels worth of copper cash.

We also see evidence of more mundane interactions between the pawnshop and its shareholders. The pawnshop has received a package for Eryi Hall containing some silver and a cotton blanket. It is likely that a member of the lineage behind Eryi Hall had these items sent ahead in preparation for a trip to Daming prefecture. We also see the manager gently scold one



of its shareholders by name. The letter states that shareholder Shuzhi still owes the pawnshop a trifling 0.63 silver taels for a smoked chicken that the pawnshop purchased on his behalf two years ago. Bringing up this matter in a letter sent to all the shareholders may be likened to reminding someone of a small personal debt in a mass email, and is likely a way to apply social pressure to Shuzhi to pay for his own chicken.

The previous two letters show capital going between the pawnshop and its shareholders, but give little indication of what is driving financial markets. Fortunately, in the following letter, the pawnshop gives a more detailed report on business conditions. The letter reads:<sup>569</sup>

兹报晋豫两属之地并大名一代皆是好景，麦苗甚普，刻下阅提头是干旱，早晚落雨皆望丰收，咱典开市后至今当头不是甚湧，每天 300 余 400 号，除回净出钱 160-170 吊，今岁应出估不己，照通年按 7.5 分售与南乐，廉冉钱铺。

Reporting: The Shanxi and Henan and the region around Daming prefecture were prosperous, with wheat seedlings in abundance. At the moment, the specter of drought is raising its head. Soon or later, it will rain, and then we can look forward to bumper harvests. Since its opening, our pawnshop's business has not been bustling. We do business numbering about 300 to 400 strings daily, and with loans net of redemptions around 160 to 170 strings of copper cash. This year our loans should probably not very significant, and we will sell to the Jianran money shop in Nanle county at a rate of about 7.5% throughout the year.

This means that the pawnshop has not been doing much business. But the manager explains that this is on account of drought, which has hurt the regional economy. He explains to the partners that at some point, it is bound to rain, at which point there will be a bumper harvest and renewed demand for loans. He also states they are selling some of their business to a money shop in a neighboring county at 7.5%, but I do not know exactly what this means. I believe it means that unclaimed pawned items will be sold to Jianran at 7.5% of their face value, but we would need much more information to really understanding the nature of these transactions. What is most

---

<sup>569</sup> Hengyu Pawnshop Correspondence between manager and shareholders, 1863 (同治十二年正月恒裕典东伙往来书信), 3-4, LJMP, Pawnshop correspondence.

salient, is rain as a driver of lending *demand*! According to the traditional view of pawnshops as exploiting starving peasants, drought should be a boon to pawnshop loan demand. But on the contrary, the manager expects loan volumes to go up after rains return and bring bumper harvests. This means that pawn shops served the *productive* needs of the peasant economy.

The following letter shows the impact of weather on demand, but also of competition on lending supply. It reads:<sup>570</sup>

兹报：大名属处，并邻邦夏景皆可于三四月间降落，特雨数次秋苗普安，只要后日变动如何，至于今春及夏当号未见湧积，只算平平，每天均有 400 余 500 号除回出钱 200 余吊，夏麦指日收割即或有当添架本不过一千余、2 千之数耳，闻广平府城有高店，郝姓在彼新设当铺三月开门，又府西南门黄姓属亦有开当铺，并质押当号二、三家，照此于近新设异日不免咱与诚格当期有减

Reporting: Rainfall in the area of Daming prefecture, as well as the neighboring regions, comes in the third and fourth months. With a few heavy rains, the autumn wheat can be abundant and secure, it depends on how things develop. Regarding spring and summer these year, we have yet to see business pick up. It is only middling. Every day we do about 400 to 500 strings of business, making loans net of redemptions of over 200 strings of cash. When the summer wheat is harvested, we expect this to increase to only about 1,000 to 2,000 strings. I have heard that the Guangping prefectural seat has a Gao shop, that the Hao family has opened a new pawnshop in the third month, and that at the southwest gate the Huang family has also opened a new pawnshop. There are also two or three other pawnshops. Given this, we can put off opening a new pawnshop to another date, and we along with the Chengge pawnshop cannot but decrease the pawn time.

This letter first contains information about the credit cycle. Nevertheless, the effect of the generally poor economy is evident; the wording “*tianjiaben buguo*” (添架本不过) indicates pawn volume increases are lackluster. Furthermore, we begin to see the impact of competition. The opening of several new pawnshops in nearby Guangping prefecture means that a possible expansion will have to be put off to another date. This is extremely important. For the pawnshop lending to be true exploitation, pawnshops must have local monopolies on credit. The fact that

---

<sup>570</sup> Hengyu Pawnshop Correspondence between manager and shareholders, 1863 (同治十二年正月恒裕典东伙往来书信), 4, LJMP, Pawnshop correspondence.

they are in competition with one another—and that moreover *new entrants* can come into the market and take competitive pressures into account when doing so—means that pawnshops are operating in a competitive market.

We see how competition continues to inform investment decisions later on in the correspondence book. A letter sent on the 29<sup>th</sup> day of the seventh month of the 12<sup>th</sup> reign year of the Tongzhi Emperor reads:<sup>571</sup>

敬启者于六月初六日脚户抵典来公函，内云详悉，兹报大名夏、秋雨水不缺甚为足，黄漳卫三河出岸，被淹之地较去岁有甚，府属四面皆受水害，加以阴雨绵长以阻乡民来城，不易而致架，看夏衣回取是稀，惟麦收成均看七、八分彼价每斗大钱 240-250，现涨 270-280，闻其往北天津行消芝麻、豆、谷割后约价定，然不能高大及之种麦雨水不缺，阅此情形夏秋只算丰收，惟钱铺近年来甚不平稳，属有出票阅门塌，众之家以致闭，市银、钱滞塞，有银换钱难，而买银不易似以钱价出入，悬隔开无定，在城除闭门之外，虽系三家而不时谣传拥挤，究其原本皆系京钱 1、2、3 千吊本，微票多必然受挤，再则人心不吉，诬众欠短视为常情，遇有不察亏众肥衙，以此思揣交手轻重，尚可量夺于上回耶，陆续收票之忧难以更免。

Respectfully, received your letters by courier on the sixth day of the sixth month, and have read the contents thoroughly. Reporting to you that summer and autumn rainfall in Daming prefecture is not insufficient, and is rather abundant. The Yellow, Zhang, and Wei Rivers have all overflowed their banks. Flooding is worse than in prior years, and all parts of the prefectural have been damaged by it. The unending spell of bad weather also prevents peasants from coming to the city, and so it is not easy to make pawn loans. It seems that redemptions of summer clothing are rare. The wheat harvest is only about 70-80% of normal. It was selling at 240-250 big cash per *dou*, and has now risen to 270-280. I have heard some have gone to Tianjin to sell sesame, beans, and millet. The price will be determined after reaping. This being the case, it won't be too high. Wheat planters have plenty of water, and in such conditions the summer and autumn harvests can only be bumper crops. However, money shops have been extremely unstable this year. Those that have issued notes have gone bust, the majority of these firms have gone bankrupt. The market's silver and copper cash are obstructed. If you have silver it is hard to exchange for cash, while purchasing silver is not easy at the rates offered. The prices hover apart without settling. In the city, apart from the money shops that have gone under, there are still three firms. But these are beset by rumors and bank runs. Especially as they have initial invested equity notes of 1, 2, or 3 thousand cash strings. Smaller bills must suffer bank runs, and so morale is not optimistic. Deceiving the public and shortchanging them are now seen as commonplace, and you meet those with no scruples about fattening

---

<sup>571</sup> Hengyu Pawnshop Correspondence between manager and shareholders, 1863 (同治十二年正月恒裕典东伙往来书信), 2, LJMPC, Pawnshop correspondence.

themselves off the public. You can surmise the severity of our adversity, and can still consider taking it back. The worries about gradually redeeming notes is difficult to dismiss.

This passage is phenomenal. In good times, financial capital is harder to track; credit seems to be an ether that is everywhere and available to anyone. But in bad times—it becomes clear who owes how much to whom, and painfully evident who cannot afford to pay. (Warren Buffett put it best: “You only find out who is swimming naked when the tide goes out.”<sup>572</sup>)

Now that the tide has gone out, we see two things. First, circulation between high finance and countryside becomes visible. Lineage trusts in the Jiexiu county seat aggregate money to invest in a pawn shop. These lineage trusts, hailing as they do from a Shanxi merchant stronghold such as Jiexiu county—probably represent wealth acquired more in commerce than agriculture, though of course there would be a mix of both. Indeed, as we have seen in Chapter 2, it would not be at all unusual for these lineage trusts to accept deposits both from peasants as well as from commercial entities. These Jiexiu lineages have invested equity into a pawnshop over 400 miles away in Daming prefecture. From the pawnshop, this financial capital aggregated in Jiexiu now goes to fund the rural economy in Daming. It is clear from the letters that the overwhelming majority of the pawnshop’s lending is going to peasants, both for the purposes of production and consumption. Nevertheless, production seems to be the key driver of demand, since bad weather has a negative impact on loan demand. In this way, surplus from commerce and agriculture is aggregated by Jiexiu lineage trusts, goes into a pawn shop, and then flows into the rural economy as loans.

---

<sup>572</sup> Warren Buffett, “To the Shareholders of Berkshire Hathaway Inc.,” Annual Letter, 2001, <https://www.berkshirehathaway.com/2001ar/2001letter.html>.

Equally important, we see that the supply of credit is not fixed—but responds to real demand in the agricultural sector! In this case, the response is a painful one. The drought from earlier in the year has ended, and all too abruptly. The Yellow River, Zhang River, and Wei River have all flooded, and the entire prefectural area has become inundated. As a result, the passage tells us that there has been general financial panic. Notably, this means a run on *banknotes*, much as in a western financial panic. That is, paper issued by pawnshops and money shops redeemable for copper cash and silver has come pouring back to the issuers for redemptions; most have been unable to meet their obligations, and have folded. We also see that the money markets have seized up. Holders of copper and holders of silver both want higher exchange prices than the other will accept, and so there is no market. (In contemporary financial jargon, the “bid and ask spread” is so high that trading has ceased.)

Even the three remaining financial institutions in the prefecture are on precarious footing, as they are thinly capitalized and have issued a large number of small denomination notes. What is important here, is the evident appreciation of risk. This is clearly a financial world in which a real economy shock—such as drought and flooding—can decimate a region’s financial industry. It is also a world in which new entrants can increase supply in better times. This brings us back to the earlier letter, in which the firm carefully weighed the risk and reward of opening a new branch. Hengyi ultimately decided that while the region was prosperous enough to support more financial firms, the timing was still not advantageous. Given the poor weather, competition was still too high to make expansion prudent. This caution proved well founded, as the continuing bad weather was disastrous to Daming’s financial industry.

Finally, we see the paradoxical results of flooding. Even though times are terrible and weather has reduced the most recent harvest by 20-30%, prices of agricultural products remain

low. This is because, with plenty of water, buyers know that wheat in upcoming harvests will be abundant. Thus, the letter states, “I have heard some have gone to Tianjin to sell sesame, beans, and millet. The price will be determined after reaping. This being the case, it won’t be too high. Wheat planters have plenty of water, and in such conditions the summer and autumn harvests can only be bumper crops.” The fact that prices will be determined after reaping is key; it means farmers are unable to lock in prices now, when food is scarce. Rather, Tianjin buyers are only willing to negotiate a price after agricultural products are cheap. In short, even though food is scarce at the moment, Daming sellers cannot command high prices in Tianjin and perhaps even local markets owing to expectations about the future. Note that low agricultural prices and financial panic are two sides of the same deflationary coin.

## Secondary markets

This chapter has thus far focused on the primary market for investment in Shanxi-merchant commercial and financial firms; that is, on the market for founding new firms. It has discovered a highly sophisticated shareholding structure, a system of bookkeeping that could account for capital and profits, and a community of institutional investors competing to fund promising ventures. But the picture would be incomplete if I did not explore the secondary market. That is, once a firm was already founded, was the capital invested in it still fungible? If so, how was it fungible and to what extent?

My conclusions in this section are ambiguous. I find no evidence at all that trading of shares in Shanxi commercial entities took place. Shares of Shanxi merchant companies are therefore highly illiquid relative to debt, land, or ROSCA shares. This, it bears emphasizing, is a significant caveat to my larger argument that Chinese economic institutions were sufficiently

advanced to accommodate a modern capitalist or industrial economy. However, Shanxi merchants did have less liquid secondary markets in equity, consisting of a market for shares in natural resources and another market for ownership of entire firms. In addition, there is some evidence for a market in corporate shares outside of Shanxi. The Baxian Archives contain voluminous evidence of trading in *jiaoli* shares (脚力股), or personal shares granted to porters by commercial entities in Chongqing. Thus, I argue that while late imperial China had nothing like a fully liquid stock market, it did have a secondary market in fractional ownership of commercial firms—something like a market in shares, or perhaps a primitive stock market.

The market in shares of natural resources are remarkably similar to markets in timberland studied by Joseph McDermott, Ian Miller, and Meng Zhang.<sup>573</sup> McDermott categorizes markets in shares of timberland (and sometimes of standing timber or of usufruct rights) as “futures markets.” This, however, is inaccurate. A futures market requires that the future price and volume of a commodity be fixed. In other words, futures are tradable contracts, or a levered bet on a commodity that implies a short-seller for every trade. Zhang’s terminology, “securitization,” is more apt. Shares in Chinese timberland represented ownership; they were a residual claim on the profits from future sales of timber—in short, equity. This means that these were secondary markets for equity shares in timberland, not futures markets.

As in the Huizhou and Guizhou sales contracts studied by these scholars, Shanxi traded in a secondary market for shares in timberland. Even the language in the Shanxi contracts is

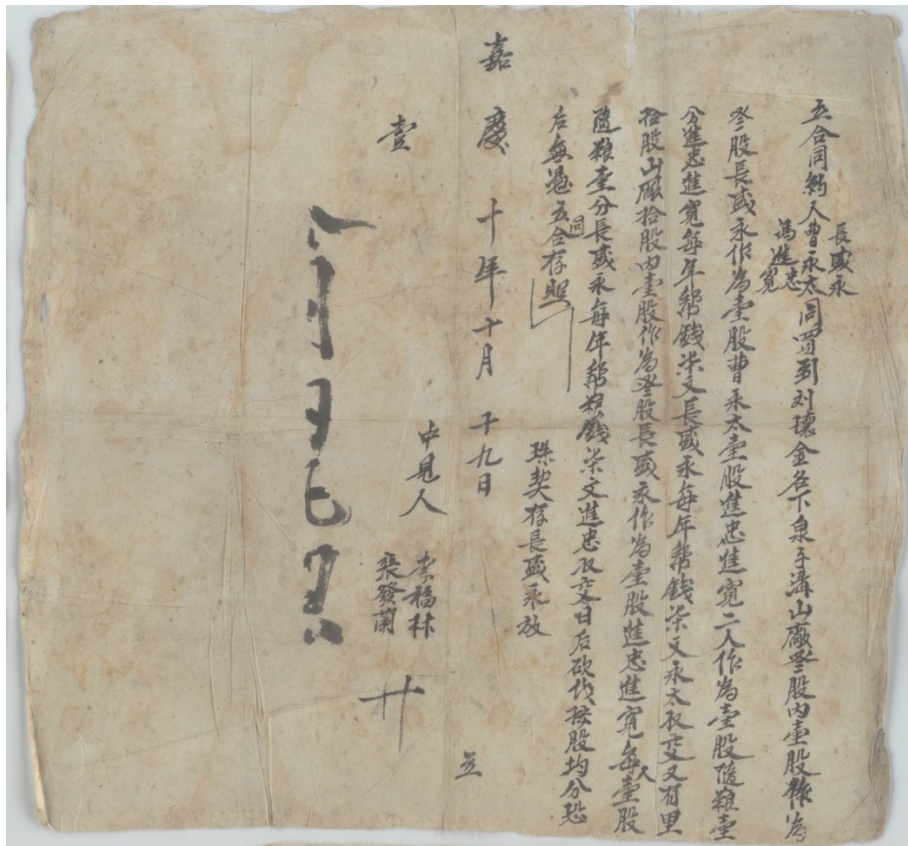
---

<sup>573</sup> Joseph Peter McDermott, *The Making of a New Rural Order in South China* (Cambridge: Cambridge University Press, 2013); Meng Zhang, “Financing Market-Oriented Reforestation Securitization of Timberlands and Shareholding Practices in Southwest China, 1750–1900,” *Late Imperial China* 38, no. 2 (2017): 109–51, <https://doi.org/10.1353/late.2017.0006>; Ian Matthew Miller, *Fir and Empire: The Transformation of Forests in Early Modern China*, (Seattle: University of Washington Press, 2020).

consistent with that found in Huizhou and Guizhou materials. This similarity between north and south suggests that the practice of trading partible shares in timberland was far more widespread, and perhaps older, than previously imagined. Where the Shanxi markets differed was in its secondary market for *coalmine* shares. As with timberland shares, they were freely alienable and could be sold to third parties. This indicates that the inchoate stock market in natural resources was highly adaptable to varied environments and underlying assets. Indeed, with a secondary market for coalmine shares, we can at least entertain the notion that a similar market might have arisen for trading in industrial concerns.

The earliest contract I have found for a sale of timberland shares dates from the Jiaqing rein. It can be seen in Image 47.

Image 47. Sale of Timberland Shares, 1806



Source: Partnership Contracts, 10



The contract shows three parties purchasing three shares of timberland in the 10<sup>th</sup> reign year of the Jiaqing Emperor (1806). It reads:<sup>574</sup>

立合同约长盛永、曹永太、冯进忠、宽，同买到刘怀金名下泉子沟山厂叁股，内壹股作为叁股，长盛永作为壹股，曹永太壹股，进忠、进宽二人作为壹股。随粮壹分进忠、进宽每年帮钱柒文、长盛永每年帮钱柒文，永太收交。又有里拾股，山厂拾股内壹股作为叁股，长盛永作为壹股，进忠、进宽每人壹股。随粮壹分长盛永每年帮钱柒文，进忠收交。日后砍伐按股均分，恐后无凭，五同合存照 朱契存长盛永放。

嘉庆十年十月十九日立  
中见人李福林、张发闽

Originating a contract between Changshengyong, Cao Yongtai, Feng Jinzhong and Feng Jinkuang, to collectively purchase Liu Huajin's three shares of Quanzigou timberland, and to subdivide each share into three shares with each aforementioned party to receive one share for a total of three shares. Changshengyong shall hold one share. Cao Yongtai shall hold one share. Jinzhong and Jinkuan together shall hold one share. The ownership entails a share of garrison tax, of which Jinzhong and Jinkuan will pay 7 copper cash annually and Changshengyong will pay 7 copper cash annually, to be collected paid by Yongtai. There are still another ten shares in the timberland, each of which will also be subdivided into three shares. Changshengyong will take one of this shares, Jinzhong and Jinkui will take one of these shares each. The share of the military garrison tax on these shares will be paid by Changshengyong to the amount of seven copper annually, to be received and paid by Jinzhong. Upon felling of the timber, the profits will be pro-rated equally by share. No other proof will be drawn up, with these five contracts serving as documentation. The vermilion sealed contract will be stored with Changshengyong. On the 19<sup>th</sup> day of the 10<sup>th</sup> month of the 10<sup>th</sup> reign year of the Jiaqing Emperor originated. Witnesses Li Fulin, Zhang Famin

This shows a number of things. First, we see that in order to sell off shares in the timberland, the shareholders begin to subdivide their shares. In this case, each original share in the timberland is now subdivided into three new shares, equivalent to a contemporary three-for-one stock split.

We also see that the original parcel of timberland had eleven shares outstanding, which is now increased to 33.

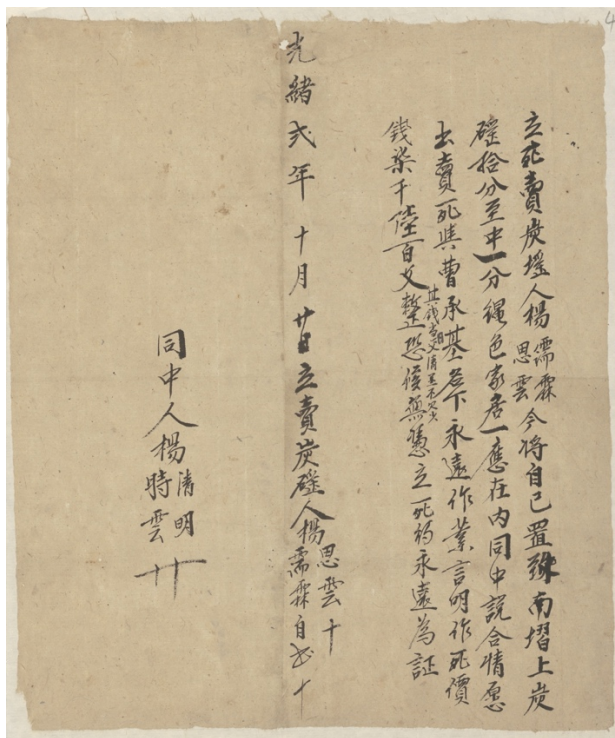
---

<sup>574</sup> Partnership Contracts, 10, LJMP.C.

The sale of the shares is from Liu Huaijin, who is selling three original shares to a consortium of three investors. The investors, Changshengyong, Cao Yongtai, and two brothers surnamed Feng, purchase Liu Huaijin's shares. After this, each buyer will own one original share, equal to three new shares. Note that in purchasing the shares, the buyers undertake the obligations to pay a garrison tax owed by the owner of the timberland. Once the wood is felled, the profits will be distributed evenly. It is also interesting that a corporate entity can also participate in this market, owning shares in the timberland. This suggests that institutional investors could park excess capital in timberland shares, much as in the south.

In addition to the contract for a sale of timberland shares, the LJMPC contains two contracts for sales of coalmine shares. The earliest dates from the second reign year of the Guangxu Emperor (1876), and can be seen in Image 48.

Image 48. Contract for Sale of Coalmine Shares, 1876



Source: Related Contracts, LJMPC, 56.

The contract reads:<sup>575</sup>

立死卖炭窑人杨濡霖、杨思云，今将自己置 X 南摺上炭窑拾分至[之]中一分，绳色家居一应在内，同中说合情愿出卖死与曹承基名下永远作业，言明作死价钱柒千陸百文整，恐后无平，立死约永远为证

光绪式年十月廿日立卖炭窑人杨思云十、杨濡林自 X 十  
同中人杨清明十、杨时云十

Originating a dead sale contract between Yang Rulin and Yang Siyun, who today are selling one out of ten of their own shares in a coal mine located on XXX south slope. The share includes equipment in the mine. It is willingly agreed that this is a dead sale to Cao Chengji, who will hold these shares in perpetuity. It is clearly stated that the dead price is 7,600 copper cash. In the event that proof is needed, this dead sale agreement shall serve as documentation in perpetuity.

On the 20<sup>th</sup> day of the 10<sup>th</sup> month of the second reign year of the Guangxu Emperor, contracted executed by Yang Rulin and Yang Siyun [signed]

Witnesses Yang Qinging, Yang Shiyun [signed]

This transaction shows a sale of shares in a coal mine. Two brothers surnamed Yang jointly hold ten shares in the mine, and sell two of them to Cao Chengji. This is evidence of a secondary market in equity shares. Moreover, the fact that the contract specifies a “dead sale” (死卖 *simai*) indicates that this type of transaction is not uncommon. A dead sale in traditional Chinese property transactions referred to a final sale, in which the ownership rights of an asset were transferred in perpetuity. This is also the meaning behind the clause “永远作业” or “to own in perpetuity.” A dead sale stood in contrast to a “live sale” (活卖 *huomai*), also known as a *dian* (典), in which the buyer could redeem the asset subject to certain restrictions.<sup>576</sup> The fact that the contract specifies a “dead sale” implies that shares in coal mines could also be sold in “live sales,” in which a *dian* on the share rather than permanent ownership would be transferred to the

---

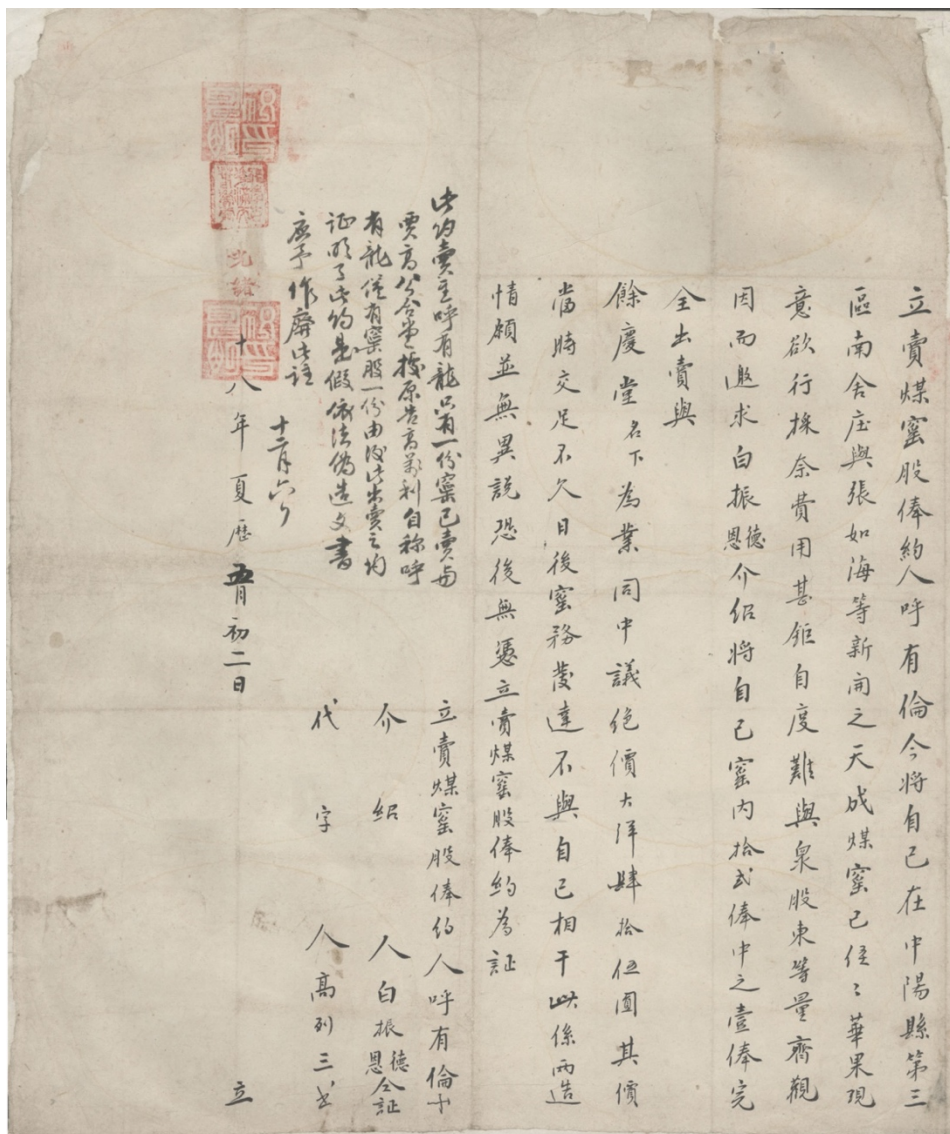
<sup>575</sup> Related Contracts, LJMPC, 56.

<sup>576</sup> On the *Dian*, see Philip C. Huang, *Chinese Civil Justice, Past and Present* (Lanham, Md.: Rowman & Littlefield, 2010), pp. 236-238 as well as Taisu Zhang, *The Laws and Economics of Confucianism: Kinship and Property in Pre-Industrial China and England* (Cambridge, United Kingdom: Cambridge University Press, 2017), pp. 36-37.

buyer. That the parties in this contract are aware of such sales, means that this sale could not have been unique. In short, the contract suggests that Shanxi coalmine equity traded in a secondary market, though the scale of this market is difficult to gauge.

A second contract gives us more color into how transactions of coal shares took place, and a clue as to why this market may not have been as liquid as timberland share markets in the Qingshui valley. It is reproduced in Image 49.

Image 49. Sale of Coalmine Shares, 1892



Source: Related Contracts, LJMPC, 74.

This contract dates from the 18<sup>th</sup> reign year of the Guangxu emperor (1892). It is similar to the previous contract shown in Image 48, but contains much more detail. The contract reads:<sup>577</sup>

立卖煤窑股俸约人呼有伦，今将自己在中阳县第三区南舍庄与张如海等新开之天成煤窑已经经华果[国]现意欲行采奈费用甚巨，自度难，与众股东等量齐观，因而邀求白振德、白振恩介绍将自己窑内拾式俸中之壹俸完全出卖与余庆堂名下为业，同中议绝价大洋肆拾伍元，其价当时交定足不欠，日后窑务发达不与自己相干，此系两造情愿，并无异说，恐后无凭，立卖窑股俸约为证

立卖窑股俸约人呼有伦十  
介绍人白振德、白振恩同证  
代字人高列三书  
光绪十八年夏历五月初二日

Originating a contract for the sale of coalmine shares with Hu Youlun. Today, on account of his inability to meet the considerable expenses involved with the new Tiancheng Coalmine Company operated by Zhang Ruhai and others with approval from the Chinese government, he has difficulty proceeding. After discussing the matter with the other shareholders and getting their opinion, he has therefore invited Bai Zhende and Bai Zhen'en to introduce a buyer for his one share out of the coalmine's twelve shares. He will sell this to

Yuqing Hall which will be the owner. It is agreed that the final price is 45 yuan, paid in full with nothing in arrears. All subsequent mine affairs and development will have nothing to do with him. This is agreed on willingly by both parties with no disagreement. In the event that proof is needed, this contract for a sale of a coalmine share will serve as documentation.

Contract for sale of coalmine Hu Youlun 十  
Introduced by Ba Zhende and Bai Zhen'en, witness  
Signed on behalf of Gao Liesan [signed]

On the Second Day of the Fifth Lunar Month of the Eighteenth Year of the Guangxu Emperor

Here again is a sale for a share in a coalmine. Specifically, Hu Youlun was a previous shareholder in the Tiancheng Coalmine, owning one out of twelve shares. As in the previous contract, the fact that this is a final sale rather than a live sale is made explicit. We see this in the verbiage “绝价” or “final price,” as well as in the clause stating that Hu Youlun's interest in the coalmine is permanently void. The reason for the sale of the share is also interesting. Hu Youlun

---

<sup>577</sup> Related Contracts, LJMP, 74.

was unable to meet the expenses entailed in founding the coalmine, and so sold his share. In other words, shareholders were expected to meet certain subscriptions in order to finance the construction of the mine. The buyer's identity is also interesting. The fact that it is a lineage trust reflects the participation of institutional investors in the secondary market for shares.

The document provides useful detail on the process for conducting a secondary sale of stock in a firm. Namely, the contract states that Hu Youlun has discussed the matter with the other shareholders. This makes sense, given that Chinese firms were unlimited liability.<sup>578</sup> It also explains why secondary markets in stock were less developed than markets in debt. The fact that a shareholder in a firm needed permission from all other owners before selling a share must have been a serious drag on market liquidity. Of course, in a capital intensive undertaking in which shareholders had to meet regular subscriptions, it makes perfect sense to restrict sales of stock unless approved by all other shareholders. Such an arrangement can be found today in certain private equity firms, which require contingent "commitments" of passive investors, since the timing of active investment is uncertain. In private equity, the managing partner wants to be sure that when they do have an opportunity, they can move quickly. In the Qing, the shareholders want to make sure that the new owner—the lineage trust—will be able to meet the necessary payments to capitalize the mine. Nevertheless, this would have been a significant drag on the coal share's liquidity (and, for similar reasons, private equity is relative illiquid today).<sup>579</sup>

---

<sup>578</sup> William C. Kirby, "China, Unincorporated: Company Law and Business Enterprise in Twentieth Century China," *Journal of Asian Studies* 54, no. 1 (1995): 43–63.

<sup>579</sup> More cynically, the use of contingent liabilities allows private equity firms to inflate returns without breaking the letter of the law. But these less savory incentives were not at play in Qing equity markets.

Apart from the main text of the contract, there is also an intriguing passage in the marginalia. It reads:<sup>580</sup>

此约卖窑呼有伦只有一份窑，已卖与贾高公合堂，按原告高万利自称呼有伦经有窑股一份，由后此出卖之均证明了此约是假，依法伪造文书应予作废此证 十月六日

This coalmine contract with Hu Youlun is for selling a share in a coalmine. He already sold it to the Jia family Gaogonghe Hall. This is according to a plaintiff Gao Wanli, who claimed to already have Hu Youlun's one share in the mine. Because it comes after those documents of sale, this agreement is fraudulent. By law, falsified documents are null and void. 10/6

In other words, Hu Youlun had sold the same share in a coalmine twice—to two different lineage trusts! His malfeasance was discovered, and following a lawsuit the contract has been voided.

But the fact that Hu Youlun found two different institutional buyers means, again, that secondary sales of coalmine shares must have been at least a semi-regular occurrence.

It is also worth noting that this document provides a link between traditional Chinese investment markets and modern industrial development. The Tiancheng company was founded in 1876 using traditional Chinese forms of business organization. It continued to operate throughout the Republican period, though it changed managers several times. In 1951, it became a joint public-private enterprise operated by the New Democracy Youth League. In 1952, it was transferred to the Public Security Bureau for use in “reform through labor”—i.e., forced prison labor. In 1956, the coalmine was moved to the light industry bureau, before finally being incorporated into a local government coal company in 1958.<sup>581</sup>

In addition to the market in shares of natural resources, the other important secondary market in late imperial Shanxi was a market for entire firms. In other words, while there are no

---

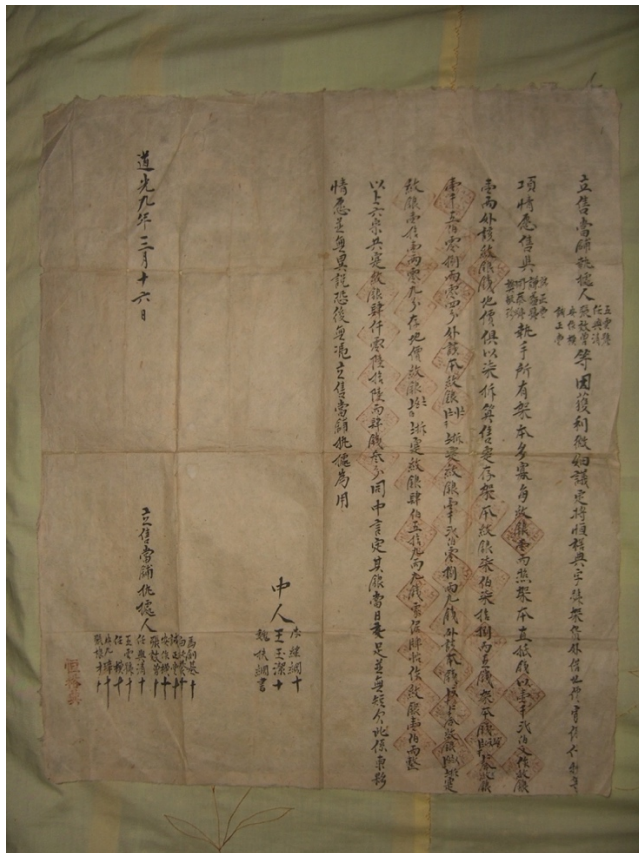
<sup>580</sup> Related Contracts, LJMPC, 74.

<sup>581</sup> Xiaoyixian difang bianzuan weiyuanhui 孝义县地方编纂委员会, ed., *Xiaoyi Xianzhi 孝义县志* [*Xiaoyi County Gazetteer*] (Haichao Press, 1992), 266.

extant contracts to sell individual shares in a commercial or financial firms, we do find two contracts to transfer ownership of an entire firm. These two contracts are both for pawn shops. The sellers are disappointed in the business's profitability. The buyers, presumably, were entrepreneurs who believed they could do a better job. It is curious that both of these contracts are for pawnshops. I suspect that this is simply because pawnshop materials are more abundant, and that in fact there was a market for entire firms in other industries. Nevertheless, it is possible that there is something about pawnshops that made them uniquely well suited to such transactions, in which case the scope of the market in firms might have been quite limited.

The earliest such contract I can find is for the sale of a pawnshop in the ninth reign year of the Daoguang Emperor (1829). A picture of it is produced as Image 50.

Image 50. Contract for Sale of Pawnshop, 1829



Source: Related Contracts, LJMP, 14



The contract reads:<sup>582</sup>

立售当铺执处人五云号、任兴清、张效曾、安作模、诚正堂等因获利微细，议定将恒裕典字号架货外借地价傢俱货物等项情愿售与诚正堂、谦益号、同泰号、樊敏珍执手，所有架本多寡每纹银一两照架本直抵钱以壹千式百文作纹银一两，外该纹银钱地价俱以柒折算，售定存架本纹银柒佰柒拾捌两五钱，架本钱 1809.65、1200 合纹银一千五百零八两零四分，外该本纹银 1727，7 拆实纹银一千二百零八两久钱，外该本钱 19000，1200 合纹银 15.84，7 拆实纹银一十一两零九分，存地价纹银 657，7 拆实纹银四百五十九两久钱，家居牌帖作纹银一百两整。以上六宗共实纹银四千零六十六两四钱三分，同中言定其银当日交足，并无短欠。此系东伙情愿并无异说，恐后无凭，立售当铺执处为用  
中人李继纲十、王玉洁十、魏秩纲书

道光九年三月十六日 立售当铺执处人马创基十、白 X 十，诚正堂十、安作模十、任兴清十、五云号十、任模十、安九璋十、张根才十

Originating a sales contract for a pawnshop with the owners the Wuyun Company, Ren Xingqing, Zhang Xiaozeng, An Zuomo, Chengzheng Hall, and others. Because the profits have been small, they willingly agree to sell the Hengyu Pawnshop including its pawns outstanding, loans outstanding, property, furniture and fixtures, and other inventories to Chengzheng Hall, Qianyi Company, Tongtai Company, and Fan Minzhen. All assets no matter their value will be valued at an exchange rate of one tael of pure silver per 1,200 copper cash. Cash and pure silver loans outstanding as well as property and furniture will be assessed at 70% of face value. The sale is fixed at assets of pawns outstanding of 778.5 silver taels and pawns outstanding of 1,809.65 copper cash converted at a rate of 1200 cash per tael, for a total of 1,584; assessed at 70% of face value this amounts to 1508.04. Silver loans outstanding are 1,727 taels, assessed at 70% of face value this amounts to 1208.9. Copper loans outstanding are 19,000 cash, converted at 1200 cash per tael to 15.84 silver taels, assessed at 70% of face value this amounts to 11.09 silver taels. Property value is 657 silver taels, assessed at 70% of face value this amounts to 459.9. Furniture, fixtures, and signs are 100 silver taels. The above six items total pure silver of 4,066.43. It is agreed that this silver will be paid in full on the day of the purchase, with nothing left in arrears. This is fully agreed to by all the shareholders and partners without any disagreement.

There will be no other proof in the future, this contract for the sale of a pawnshop shall serve as documentation.

Witnesses Li Xugang, Wang Yujie, Wei Zhigang

In the sixteenth day of the 3<sup>rd</sup> month of the 9<sup>th</sup> reign year of the Daoguang emperor, contract for sale of pawnshop originated with Ma Chuangji, Bai XXX, Chengzheng Hall, An Zuomo, Ren Xingqing, Wuyun Company, Ren Mo, An Jiuzhang, Zhang Gencai

---

<sup>582</sup> Related Contracts, LJMP, 14

This is an extremely rich document. It shows that a group of investors and managing partners in a pawnshop—including both individuals and institutional investors—were not earning sufficient profit on their pawn business. Rather than fold up the business, they decided to sell the entire company to a consortium of investors.

But what is truly fascinating about this contract is the detail it gives on the valuation of the pawnshop. We see that with the exception of the pawnshop's furniture and fixtures, its assets are not valued at face. Rather, they are valued at a 30% discount (七折 *qizhe*). Most likely, the valuation was arrived after the purchasing consortium inspected the company's books and assessed the recovery amount of the pawnshop's assets as well as future profits that the company could generate as an ongoing concern. The significance of this valuation lies in the fact that the firm's "fair value" traded at a price distinct from the accounting, or face value. In short, it means we are dealing with a true capital market.

A later contract from the 25<sup>th</sup> reign year of the Daoguang emperor (1845) also shows the sale of an entire pawnshop. The contract is visible in Image 51. As in the previous contract, the sale is structured legally as a transfer of assets. In this contract, we are told specifically that outstanding liabilities had already been discharged by the old owners—which I believe is also likely the case for the previous sale.

Image 51. Contract for Sale of Pawnshop, 1845

立出售官當架貨文契人 周和盛 孫世法 因法 等 原開源茂當歇業不做今將曲內現在架貨以及  
 官當架存銀錢諸中議定每銀一兩每錢一兩俱按七三折作銀其曲內家俱架櫥一應大小  
 器什物俱隨入架貨之內不另作價至二月二十日將架貨照賬點法除新陳短歸外淨定在  
 架存銀陸佰六拾六兩五分存錢叁萬三千貳百貳拾四兩八分文官當存銀五拾九兩貳分存錢  
 一兩貳佰五拾文以上共計存銀錢叁萬三千九佰九拾九兩肆分俱照七三折作定銀貳萬四千八百  
 一拾九兩貳分又分債願出售其  
 田凝遠名下永遠作業其銀當日同中如數收法分文不欠其典內原領生息銀錢奉利  
 及架貨官當家俱什物等項俱同中點交法楚並無短少至曲內原債時列二姓房屋 感 等  
 至二月底退法 田凝遠自三月初一日與房東另立賃約自售之後任憑 田凝遠領帖  
 重開毫無異言日交曲內一切與 感 等 毫無干涉欲汝有憑立售約存照

道光廿五年三月初一日

同中人 梁奇桂 張東岩 張名鼎 高廷樞 周和盛 孫世德 二人俱書過押

立售約人 周和盛 孫世德

同夥 呂文齊 實迺柄 俱有押

此張係伊西東士售當鋪文契 福

Source: Related Contracts, LJMPC, 29

The contract reads:<sup>583</sup>

立出售官当架货文契人周和盛、孙世法情因盛、法等原开源茂当歇业不做，将典内现在架货以及官当架本银钱注中，一定每银一两每钱一串俱按七三折作银，其典内傢俱架搁一应大小器具什物俱随入架货之内，不另作价。至二月二十日将架货照账点清。除新陈短号外净实在架本银陸佰六十六两捌钱五分，本钱叁万三千式百七拾一千四百八十文，官当本银五十九两四钱二分，本钱一串式百五十文，以上共计本银钱叁万三千九佰九串整，俱照七三折作实纹银二万四千八百一十九两二钱七分，情领出售与

田凝远名下永远作业，其银当日同中如数收清分文不欠，其典内原领生息银钱本利及架货、官当、傢俱、什物等项，俱同中点交清楚，并无短少，至典内原赁二姓房屋盛等至二月底退清。田凝远自三月初一日与房东另立赁约，自售之后任凭

田凝远领帖重开，毫无异言，日后典内一切与盛等毫无干涉，欲后有凭，立售约存照

同中人高廷枢、梁奇桂、张东岩、张明升

道光廿五年三月初一日 立售约人周和盛、孙世德二人俱尽过押

同伙吕文齐、贾乃柄俱有押

此张系伊两东出售当铺文契 X 福

Originating a sales contract for the capital invested in an official pawnshop with Zhou Hesheng and Sun Shifa. This is because the Yuanmao Pawnshop started by Sheng, Fa, and others will close, and they will sell the pawnshop's capital. The capital's value including pawns and loans outstanding will be reduced to 73% per silver tael and string of cash of par. Furniture and fixtures, equipment, and all shelf inventories are included in this capital and not assessed independently. On the twentieth day of the second month, the books were balanced completely and net of Xincheng's obligations outside the firm, the capital balance was at 666.85 of silver taels and 33,271,480 strings of copper cash. Official equity was 59.42 silver taels and 1,250 copper cash. This is a total of 33,999 strings of copper cash. These amounts are subject to a 27% discount, bringing them to a value of 24819.27 silver taels, at which price the pawnshop is sold to

Tian Ningyuan, who will be owner in perpetuity. The silver is paid in full on the day of the transaction, with not a cent in arrears. The principal and interest-bearing loans outstanding, official pawns outstanding, furniture and fixtures, inventories and other items have all been accounted for and transferred completely without anything missing. Regarding the pawnshop's lease on a space owned by two landlords with different surnames, Sheng will continue the lease until the end of the second month at which point he will end his lease. Tian Ningyuan will himself take over the lease beginning on the first day of the third month, and shall originate a separate lease contract with the landlord. After the sale,

---

<sup>583</sup> Related Contracts, LJMP, 29.

Tian Ningyuan may take possession of the license to restart the company. There is absolutely no disagreement about this. Henceforth, all pawnshop affairs will have absolutely nothing to do with Sheng and his associates. Should proof be desired in the future, this sales contract will be kept as documentation.

Witness Gao Tingshu, Liang Qigui, Zhang Dongyan, Zhang Mingsheng

On the first day of the third month of the 25<sup>th</sup> year of the Daoguang Emperor, originated contract with the two people Zhou Hesheng and Sun Shide, who have all signed their mark.

Managers Lu Wenqi and Jia Naibing have all signed their mark.

This contract is extremely similar to the previous contract. Zhou Hesheng and Sun Shifa wish to sell a an “official pawnshop” (官当 *guandang*), meaning a pawnshop owned or invested in by a ranking official, and which usually required a license.<sup>584</sup> Zhou Hesheng and Sun Shifa appear to be passive investors, since the active partners, Lu Wenqi and Jia Naibing, sign separately. The buyer of the pawnshop is one Tian Ningyuan.

The details of the contract are fascinating. We see first that the valuation is based on the *jiaben* (架本), which roughly means the net assets in the pawn shop include loans and pawns outstanding. Other line items including inventories (i.e. pawned objects that are forfeit) as well as equipment, furniture, and fixtures are included in these assets. *Jiaohuo* (架货) and *guandang* (官当) assets are calculated separately; I believe the latter simply refers to pawns outstanding to other officials, but I am not sure. In addition, there is one intriguing comment that the capital is “net of Xincheng obligations outside the firm.” I do not know what this is, but I believe it means something like net of recent—and therefore non-discharged—liabilities. In other words, the invested capital is being calculated based on net assets, much as in a modern sale of a firm.

---

<sup>584</sup> Xu Qian 徐潜, Yu Shushan 喻淑珊, and Huang Erli 黄二丽, eds., *Zhongguo Gudai Jinrong Yu Shangye 中国古代金融与商业 [Ancient Chinese Finance and Commerce]* (Changchun: Jilin wenshi chubanshe, 2018), 116.

After the accounting value of the capital is calculated, a 23% discount is applied. This represents the difference between accounting value and fair value of the firm's capital, and may include allowances for unrecoverable principal and interest. Critically, it shows that this is a true market in which buyer and seller negotiated a price. In addition, we see that the price of the firm is based not on its liquidation value, but on its value as a going concern. This is evident as the contract states that Tian Ningyuan will take over the license, "restart" the firm, and even take over the lease on the pawnshop's property. Finally, the contract states that the former owners will have "absolutely nothing" to do with the firm. This clause emphasizes that they no longer enjoy claims on the firm's profits, as well as absolves them of the unlimited liability shouldered by shareholders in traditional Chinese firms.<sup>585</sup>

The situation that obtained in the south appears to have been significantly different. Records from the Baxian county archives show that shares in commercial entities were not only

---

<sup>585</sup> The extent of shareholder liability in traditional Chinese firms remains an open question, albeit one beyond the scope of this chapter. Lou Min 娄敏, "'Youxian' Yu 'Wuxian' Zhijian: Tanhuan Guize de Changzhai Luoji: Yi Jiangjinxian Zhaiwulei Sifa Dang'an Wei Zhongxin '有限'与'无限'之间: 摊还规则的偿债逻辑\* ——以江津县债务类司法档案为中心 [Between 'limited' and 'Unlimited': The Rules and Logic of Repaying in Installments. A Case Study Using Legal Cases of Jiangjin County Debt]," *Zhongguo Jingjishi Yanjiu* 中国经济史研究 [Researches in Chinese Economic History], no. 2 (March 2018): 66–81.

tradable, but traded frequently.<sup>586</sup> Though Chongqing had no securities exchange until the 1930s,<sup>587</sup> its market in fractional shares of commercial equity began in the Qianlong reign.

One telling case comes from the 22<sup>nd</sup> reign year of the Daoguang Emperor (1842), and covers events as far back as the 23<sup>rd</sup> year of the Jiaqing reign (1818).<sup>588</sup> In that year, Liu Yutang (刘玉堂) returned home to Chongqing—from where, we do not know—and found himself without employment or means to support himself. To raise funds, he and his uncle Liu Fengzhang (刘凤章) sold a share in Yufanghang (裕丰行), a cloth shop in Chongqing's Chaotianmen business district. It was one of six *jiaoli* (脚力) shares, or shares given to Chongqing porters, inherited from Liu Yutang's deceased father. Fortunately, the magisterial court made a hand copy of the sales contract, which reads as follows:

计抄

立卖生意文约人刘凤章同姪玉堂另同叔母韦氏叔姪三人情因已姪归家无从出条愿将玉堂父手所接朝天门裕丰行脚力生意股内有一股出卖于人，彼时尽问家门，亲戚八等无人承管，俱称不能，今请凭中彭元清照到谭光春、谭光业弟兄二人名下承接仅管为业，当日三面得受时价三十六千文正，彼日随契交足明白并不短少分 XXX 又无 X 写准，执价项、等情，当日言定仍 X 买主承做十六年为额，卖主不得另生

---

<sup>586</sup> Zhou Lin and Ma Ran discovered trading in shares in their research into the nature of property rights. Zhou Lin 周琳, “Chan He Yi Cun? Qingdao ‘Baixian Dang’an’ Zhong de Hangbang Gongchan Jiufen 产何以存?——清代《巴县档案》中的行帮公产纠纷 [How to Settle the Public Property Disputes: A Case Study on Chongqing Hangbang in the Qing Dynasty],” *Wen Shi Zhe* 文史哲 [*Journal of Chinese Humanities*], no. 6 (2016): 116–35; Zhou Lin 周琳 and Ma Ran 马冉, “Chanquan de Shanbian: Qianlong Zhi Tongzhi Shiqi Chongqing de ‘Jiaoli Shengyi’ 产权的嬗变——乾隆至同治时期重庆的‘脚力生意’ [The Evolution of Property Rights: The Porter Business in Chongqing from the Qianlong to Tongzhi Reigns, 1771 - 1874 ],” *Zhongguo Jingjishi Yanjiu* 中国经济史研究 [*Researches in Chinese Economic History*], no. 2 (2020): 101–18.

<sup>587</sup> Huang Shili 黄世礼 and Gu Kunshan 谷昆山, *Chongqing Jinrong* 重庆金融 [*Chongqing Finance*] (Chongqing: Chongqing chubanshe, 1991).

<sup>588</sup> “Wang Xirong and others case against the greed of Liu Xingyi in trying to steal Chao Tianmen Yufeng Cotton and Oil Business *jiaoli* shares” (王锡荣等为具禀刘星一覬覦妄争朝天门裕丰花正油行脚力生意股权案), 1842 (道光二十二年), Baxian Magisterial Archives, Qing Dynasty 06-07-00837.

即 X 如额之外，仍凭卖主照纸收赎，两无异词，倘有外人生情异论干买主之事所买所卖二人情愿。

恐口无凭，立卖生意约为据。。。

嘉庆戊寅二十三年八月十八日，立卖生意人刘凤章、弟刘明章均有押，同姪代笔刘玉堂、同叔母刘韦氏

Copy

Originating a contract for the sale of a business with Liu Fengzhang, along with his nephew Yutang and his brother's wife Madam Wei. These three uncles and nephews, on account of the fact that the nephew has returned home and has no means, agree to sell one of six *jiaoli* shares in the Chaotianmen Yufenghang inherited from Yutang's father. At that time, all relatives have been consulted to see if they wanted the share and all have refused. Today, going through Peng Yuanqing, the brothers Tan Guangchun and Tan Guangye have agreed to take possession of the shares. On that day the three selling parties received the going price of 36,000 copper cash. On that day according to the contract this was clearly transferred without a penny in arrears... On this day it is clearly stated that the buyer will have a term of 16 years in which the seller cannot redeem the share. After this term, if the seller wishes to redeem the share at the price, there can be no disagreement from either party about this. If someone else has anything to see about the seller, know that both buyer and seller entered into this contract willingly.

Should proof of this sale be needed, this contract will serve as documentation.

On the 18<sup>th</sup> day of the eighth month of the 23<sup>rd</sup> reign year of the Jiaqing Emperor, contract originated.

The contract is signed by a host of family members, the middle man Peng Yuanqing, and others.

This contract is nothing less than a live sale for a share of stock. Liu Yutang, his uncle, and his mother sell one of their six shares in the Yufenghang shop to two brothers surnamed Tan. Evidently, Liu Yutang's relatives have a right of first refusal. This is quite similar to Huizhou timberland shares, in which lineages often had right of first refusal on timberland shares that their members wished to sell. But as with timberland shares, in the absence of a willing buyer in his own family, Liu Yutang is at liberty to sell his share to a third party. It could well be the case that Peng Yuanqing was a kind of broker, which raises the possibility that there was an active market in shares. This is also implied in the wording “时价” (*shijia*), which means “current price” and is generally used in reference to tradable items with a going market rate.



It is also interesting to see that this is a live sale. As in the case of a *dian* on land, the buyer has a specified term during which the seller cannot redeem the share. In other words, the brothers Tan are guaranteed at least sixteen years of dividends. But after sixteen years elapse, the sellers may redeem the share at the sales price. Furthermore, just as a *dian* sale of land allowed the seller to *zhaojia*, or ask the buyer for more money either to compensate for change in value or else to forestall redemption, so it is in the case of this share. Indeed, the court case records a second, *jiabu* (加补) contract! The *jiabu* contract can be found in Zhou Lin and Ma Ran's study of property rights.<sup>589</sup> For our purposes, what is significant is that after 15 years—just as the term on the original live sale came due—Liu Yutang asked for more money. The brothers Tan put up another 8,000 copper cash, bringing the total live sale price to 44,000 copper cash. The *jiabu* contract extended the brothers Tan term of ownership for another ten years, after which Liu Yutang once again enjoyed redemption rights over the share.

A second court case records a similar sale. Although the quality of copy available to me is poor, and parts of the case are illegible, the essential details are easy enough to make out. The case is between two family members, Peng Dehuang (彭德行) and Peng Longyun (彭龙云), with the former two generations senior to the latter. In the 50<sup>th</sup> reign year of the Qianlong emperor, Peng Dehuang pawned his six *jiaoli* shares in a set of warehouses to Peng Longyun. Peng Longyun then attempted to commit fraud in order to inflate the value of the shares in order to sell them to a third party. The court, along with the lineage, interceded to prevent this and to

---

<sup>589</sup> Zhou Lin 周琳 and Ma Ran 马冉, "Chanquan de Shanbian: Qianlong Zhi Tongzhi Shiqi Chongqing de 'Jiaoli Shengyi' 产权的嬗变——乾隆至同治时期重庆的'脚力生意' [The Evolution of Property Rights: The Porter Business in Chongqing from the Qianlong to Tongzhi Reigns, 1771 - 1874 ]," *Zhongguo Jingjishi Yanjiu* 中国经济史研究 [Researches in Chinese Economic History], no. 2 (2020): 101–18.

force Peng Longyun to return the shares to the original owner.<sup>590</sup> Note that this “pawn” is identical to a live sale, since the holder of the share enjoyed rights to its dividends.<sup>591</sup>

Many such court cases abound. For now, what is important is to note the definite existence of trading in shares of firms in the warehousing, cotton, and sugar trades at the very least.<sup>592</sup> This marks a serious empirical contribution. It indicates that there was a rudimentary market for business shares as far back as late imperial China that consisted of fractional shares in the equity of corporate entities. I do not wish to exaggerate the extent of this market. As the above cases show, lineages constrained market liquidity, with intra-lineage sales more easy to do and more common than sales to third parties. In addition, I have yet to find sales of money shares. Though I believe they exist in the Baxian magisterial court archives, more research is needed to confirm or disprove this. Nevertheless, these findings are considerable. They show a market in business equity, albeit in embryo.

---

<sup>590</sup> “Chongqing Qiansifang Peng Guangxian’s case against Longyun trying to inflate the value of Qianshun jiaoli shares in redeeming and selling them” (本城千厮坊彭光贤具告彭龙云将谦顺脚力股权抬高价格赎卖一案), 1842 (道光二十二年), Baxian Magisterial Archives, Qing Dynasty 06-07-06-07093.

<sup>591</sup> Even in land transactions, the distinction between a 当 (*dang*) or “pawn” and 典 (*dian*) or “live sale” was blurry, with tenancy, pawns, live sales, and final sales existing on a spectrum of transactions rather than constituting discrete categories of land transaction. Cao Shuji 曹树基, “Diandi Yu Dianzu: Qingdai Minnan Diqu de Tudi Shichang Yu Jinrong Shichang 典地与典租: 清代闽南地区的土地市场与金融市场 [Live Sales and Rents: Land Markets and Financial Markets in Qing-Era Southern Fujian],” *Qingshi Yanjiu 清史研究 [The Qing History Journal]*, no. 4 (2019).

<sup>592</sup> Zhou Lin 周琳 and Ma Ran 马冉, “Chanquan de Shanbian: Qianlong Zhi Tongzhi Shiqi Chongqing de ‘Jiaoli Shengyi’ 产权的嬗变——乾隆至同治时期重庆的‘脚力生意’ [The Evolution of Property Rights: The Porter Business in Chongqing from the Qianlong to Tongzhi Reigns, 1771 - 1874 ],” *Zhongguo Jingjishi Yanjiu 中国经济史研究 [Researches in Chinese Economic History]*, no. 2 (2020): 101–18.

This section has put forward two arguments that, while not a logical contradiction, sit somewhat uneasily next to one another. The first is that Shanxi merchants do not appear to have had any stock market at all. Shares in operating companies did not trade between third parties, and there is not even any evidence of loans using shares of firms as collateral. The second argument is that in spite of this, Shanxi merchants seem to have more rudimentary secondary markets in equity. Shanxi traded in markets for shares of timberland and coalmines, as well as in equity of entire firms. It is impossible to know for certain how widespread, deep, or active these markets were. But the resemblance in trading of shares in natural resources between Shanxi and other parts of China suggests they were common indeed. Moreover, southern China or at least Chongqing, did have a market in corporate equity! The scope of this market for is unclear and calls for further research. But it supports the argument that at least some kind of secondary market in firm equity was developing the late imperial period.

## Conclusion

This chapter has surveyed the available Shanxi merchant popular documents as well as several Baxian court cases to demonstrate the existence of an investment market in late imperial China. In this market, investors funded commercial enterprises, opened coal mines, and established financial institutions. Though lineage trusts were important sources of capital—and lineages themselves seem to have constrained sales of investments outside of the lineage—the critical factor in economic organization was not necessarily family. Rather, a legible system of accounting enabled a shareholding regime that united the interests of passive investors, managers, and employees. Finally, though it was limited in scope and perhaps in volume, late

imperial China already evinced signs of a secondary market in investments. Investor consortiums could purchase and recapitalize entire firms, and at times shares in firms were even tradable to third parties. If not quite the NASDAQ, the market in shares was essentially an early stock market.

It is also important to read this chapter in the context of previous chapters in this dissertation. The fact that corporate entities and lineage trusts were institutional investors in other firms is essential. It means that capital was not “locked” in one sector of the economy, either through involuntory or semi-feudal pressures. Lineages that accumulated capital in commerce or agriculture could deploy their surplus either in the lending market or in the investment market. In this way, credit markets from high finance’s *biaoqi* to a humble peasant’s grain loans, were, in some measure, integrated with the investment market in firms. It is for precisely this reason that late imperial China can justly be said to have had a capital market.

## Conclusion

### From remittance markets to domestic exchange

On February 8, 1914, the manager of a *piaohao* bank branch, probably in Tianjin, wrote an excited letter to the Shanghai office. An unprecedented arbitrage opportunity had arisen in Jiangxi. In the manager's words, "We have received word from Jiujiang that note prices have risen making remittance fees attractive. Exhorting Shanghai to prepare 10-20,000 taels of silver to help [Jiujiang] earn these attractive profits."<sup>593</sup> In other words the price of "Shanghai notes"—or banknotes circulating in Jiujiang but redeemable in Shanghai—had risen above par, meaning Shanghai silver was priced at a premium to silver in Jiujiang. Assuming an eventual return to parity, this made it highly profitable to remit funds from Jiujiang to Shanghai. But to do this, the *piaohao* had to make sure the Shanghai branch had enough cash on hand to honor such remittances. A second letter sent ten days later repeated these instructions, urging Jiujiang and Shanghai to work together to take advantage of the unusual prices in Jiujiang's Shanghai notes. The manager wrote, "We have received word that Shanghai notes in Jiujiang have fallen to just over 1,220 taels. Looking at the fall in prices, the opportunity is really fantastic. Please have Jiujiang rapidly devise a strategy with Shanghai to deliver silver."<sup>594</sup> The fall in prices seemingly confirmed the aberrational nature of the spike in Shanghai note prices. It was thus important to act with due haste to take advantage of the arbitrage opportunity.

---

<sup>593</sup> “再来信所商以江省现时票价增长，汇费可观，嘱申设法筹备一、二万金以便江收得此美利等情聆悉”；Unknown *piaohao*, correspondence to Shanghai book, 1913-1915 (民国二年某票号申号收信稿), LJMPC, 6.

<sup>594</sup> “闻说江地申票已吊至 1220 余两也，照此吊钱机会实好极矣，请江速为设法与申顶交，为要为祝。” Unknown *piaohao*, correspondence to Shanghai book, 1913-1915 (民国二年某票号申号收信稿), LJMPC, 8.

Evidently, the piaohao did indeed succeed in selling Jiujiang remittances to Shanghai, taking advantage of the high prices in Shanghai notes. But unfortunately for the *piaohao*, Europe was headed for war. With the assassination of Archduke Franz Ferdinand, the “July Crises” sent shock waves through the global financial system. In China, this triggered a flight to safety, as investors and savers scrambled to move assets to Shanghai. Rather than falling back to par, Shanghai notes began to climb to unprecedented new heights. Anyone who had taken “advantage” of the high prices in February was suddenly in the red, as exchange spreads widened. The *piaohao* sent a panicked letter on July 5 describing the situation in grim detail:<sup>595</sup>

Austria-Hungary has given up on peace and declared war. It is ensnaring six or seven countries into the conflict, which all look upon each other with daggers drawn. The storm clouds are gathering. The impact on global commerce has been panic and financial tightening. Shanghai and Jiujiang are all the more panicked, and no remittances can flow, while all trade is stopped. Imports and exports cannot circulate either as the seaways are cut off. Alas, alas! News has it that Shanghai notes in Jiujiang have risen to 2,600-2,700 taels, and yet no one is willing to buy Jiujiang silver! These market conditions are unprecedented and we hope for them to settle down. In this chaotic world, our China is also in great peril. There is no silver to be had, and yet we cannot afford such a loss. Ordering the Jiujiang branch to save the Shanghai branch is really outrageous! Moreover, England, Japan, Russia, and others have issued an ultimatum which if not met will lead them to counterattack by the end of the month. Qingdao is being talked about, which will lead to incursions into China. Although our government is neutral, it has no power to stop other countries from going to war with each other within China. I don't know how this will develop, but it is truly dangerous. I only hope that peace will be restored as quickly as possible.

---

<sup>595</sup> “此次奥赛失和宣战后牵连欧洲六七国皆以兵戎相见，风云日急，影响全球商务恐慌，金融吃紧，申汉更形紧急，汇兑不通，百物停滞，进出口货不能流通，海道断绝，奈何奈何。闻及江地申票已涨至二千六七百金，尚无人肯收也，照此行市从未闻，惜乎处此，乱世我中亦在困难，实属无银，亦不能吃此大亏，令我江号接济申号可叹也，且英日俄法等国约期月内还攻，青岛之说似此渐逼进内地，我国政府虽京局外中立，然无力限制各国不在内地开战也。将来不知到何地步，真可危也。惟望战事早为和平了结，” Unknown *piaohao*, correspondence to Shanghai book, 1913-1915 (民国二年某票号申号收信稿), LJMPC, 17-18.

The letter's plangent and appropriately foreboding tone is unusual in business correspondence. Yet it tells us much about Chinese financial markets in 1914. The Jiujiang branch has been instructed to undo the previous remittance sales, and to try to *buy back* Shanghai remittances, even though to do so would incur excruciating losses. More broadly, the letters show how Chinese finance was already tightly bound to global markets, with prices in Jiangxi reacting to the July crisis within days. Moreover, the specific avenue by which global financial distress was transmitted was a market in remittances and in "Shanghai notes." But many questions remain. What were these notes? What was their relationship to remittances? Where did they come from?

I conclude my dissertation with an example of the Shanxi merchant financial system's post-imperial legacy. I examine the Republican-era market in domestic exchange, and argue that it grew partly out of the Shanxi remittance network. To pursue this argument, I first discuss the nature of remittance markets in the late imperial period. I begin this discussion at a basic level, explaining the market from the ground up. I argue that even prior to the Republican period, the remittance market should be conceived of as an exchange market. Second, I provide proof positive that a market in domestic exchange—long assumed to have emerged in out of *qianzhuang* remittance operations in the Republican period—had already existed by the end of the Qing. I further provide strong evidence of price unity between domestic exchange and remittance markets, as well as evidence of Shanxi-merchant participation in both. This suggests that exchange markets did not "replace" remittance markets as is generally assumed in the scholarship, but evolved out of them as the volume of financial flows grew large enough to permit more liquid markets. It also reinforces my interpretation of the remittance market as a

market in exchange—not unlike imperial China’s silver/copper market or today’s market in onshore/offshore Renminbi.<sup>596</sup>

### Remittances in late-imperial China

A remittance is a credit instrument that is redeemable for cash in another location. Today, most remittances are wire transfers. In the Qing, there were three types of remittances: note remittances (票汇 *piaohui*), correspondence remittances (信汇 *xinhui*), and—after the proliferation of telegraph wires—wire transfers (电汇 *dianhui*). In the case of a note transfer, a merchant with 1,200 taels of silver in Shenyang who needed credit in Guihua, could deliver the silver to a *piaohao* branch in Shenyang in return for a remittance note redeemable in Guihua. An example of just such a note can be found in Chapter 4, and is shown again here as Image 52.

---

<sup>596</sup> The offshore RMB market demonstrates how the same underlying currency requires an exchange market with itself when the cost of transmission is significant. Because China does not have an open capital account. In the Qing, these costs were imposed by distance and lack of infrastructure. Today, they are imposed by controls on the capital account. Thus, in the Qing, Shanghai silver was not always worth the same as Yunnan silver; nor is present-day Renminbi in Hong Kong always worth the same as Renminbi in Shanghai.



Image 52. Remittance note, 1873



Source: “Hui piao” collection, LJMP, 1.

In this example, a merchant from the Yongmaochang company has paid 1,200 taels of silver to the *piaohao*'s Shenyang office in return for a remittance not to Guihua. He could then put the note in his pocket, hitch a convey to Guihua, and upon arrival cash it for hard silver at the *piaohao*'s Guihua office.

At other times, the Shenyang merchant may want a business partner or affiliate to cash the silver. Indeed, perhaps the Shenyang merchant was not himself an employee of the Yongmaochang company, but wished to purchase tradable goods—say, mushrooms or furs—from Yongmaochang in Guihua. In this case, rather put a note in his pocket and travel to Guihua himself, the merchant would have the *piaohao* conduct a correspondence remittance. After he paid the 1,200 taels of silver to the *piaohao*'s Shenyang branch, the Shenyang branch would write a letter to its Guihua office notifying them to pay the funds to the designated party, or

Yongmaochang. From the *piaohao*'s point of view, there is no difference between a note remittance and a written correspondence remittance. In both cases, it is swapping silver in Guihua for silver in Shenyang.

In providing this service, the *piaohao* could earn three different types of income: 1. Fee income (费 *fei*), 2. Interest income (息 *xi*), and 3. Usance (期 *qi*).<sup>597</sup> Fee income was income charged in return for performing a remittance service. Interest income was charged when the payment (交 *jiao*) preceded the receipt (收 *shou*), such that the remittance in effect included a loan. Usance referred to the amount of time that the *piaohao* got access to free funding. For example, if the receipt preceded the payment by one month, then the *piaohao* had a full month with which to make loans or contract other remittances. It is therefore said to have “gained one month” (得期一个月). Any form of income could be positive or negative; in other words, there were times when a *piaohao* paid a remittance fee to the client, and other times when it paid silver prior to receiving silver and thus gave the client usance. When income was positive, this was signified with a “gained from client” (得其 *de qi*); when it was negative this was signified with a “lost to client” (贴伊 *tie yi*).

Interest income and usance are relatively straightforward. The key question is what the fee income was actually for. Most of the scholarship does not pose this question directly. It is usually taken for granted that the *piaohao* were being paid for obviating the need for risky and cumbersome transfers of physical silver. Luman Wang writes, “The remittance fees were necessary to cover the potential cost of shipping silver ingots by land to balance the supply and

---

<sup>597</sup> See Luman Wang's description of the importance of usance in inter-*piaohao* remittances. Luman Wang, *Chinese Hinterland Capitalism and Shanxi Piaohao: Banking, State, and Family, 1720-1910* (London: Routledge, 2021), 60.

demand of silver throughout the process of remittance.”<sup>598</sup> Meng Wu, in a fascinating quantitative study of Rishengchang’s remittance rates, makes a similar point by isolating distance between branches as one of three key predictive variables in determining remittance fees.<sup>599</sup> Costs of shipping physical silver across time and space were a key source of demand for remittances, and were correlated with remittance fees. My view of remittance markets calls into question the relationship between transportation costs and remittance prices posited by Wang and Wu. I believe that the specific price of any given remittance had little to do with shipping costs. Indeed, remittance fees should not be thought of as “fees” at all, but as a *premium or discount to par* in what was in fact an exchange market. As I explain below, this is understanding is perfectly consistent with Luman Wang and Meng Wu’s analysis. It also explains why piaohao so often “lost money,” or charged negative fees, an extremely common occurrence that neither Wang nor Wu addresses.

This predilection of remittance rates to go negative is key to understanding the nature of remittance markets. Examples of both positive and negative remittance rates can be found in virtually any *piaohao* correspondence book. One useful correspondence book is from the Jinshenrun piaohao headquarters in Qi County to its branch office in Tianjin. The book dates from the 30<sup>th</sup> year of the Guangxu imperial reign (1904). A typical passage reads:<sup>600</sup>

敬启者，附报咱在谷定妥冬标交大德贞宝银 5000 两，共贴伊费银 50 两，谷结，又在谷定妥冬标交大昌玉宝银 2000 两共贴伊费银 20 两谷结，二宗会至口皆十月标收伊宝银，又在谷定妥秋标交过仁记行宝银 3000 两共得其费利银 69 两谷结，又在谷定妥冬标交福和行宝银 5000 两共得其费利银 130 两谷结，又在谷定妥冬标交瑞记

---

<sup>598</sup> Luman Wang, 130

<sup>599</sup> Meng Wu, “How Did the Chinese Shanxi Merchants Determine the Remittance Fees? Micro Firm Analysis of Rishengchang Piaohao,” *Frontiers of Economics in China* 13, no. 3 (September 2018): 484–504.

<sup>600</sup> “Jinshenrun, Cao Runtang correspondence to Tianjin book, 8/1904” (光绪三十年八月锦生润曹润堂致天津信稿), LJMPC, 4.

行宝银 6000 两共得其费利银 156 两谷结，又在谷定妥冬标交高林行宝银 1000 两共得其费利银 26 两谷结，又在谷定妥冬标交福和行宝银 2000 两共得其费利银 60 两谷结，以上五宗皆会至津迟两个月收伊等番纸化宝银，又在谷定妥现交吕学斌兄宝银 103 两会至赤九月标收伊克兑真银共得其费利银 3 两谷结。

Respectfully, reporting: We have contracted in Taigu at the winter *biao* to pay Dadezhen 5,000 taels of silver sycee, losing to the client a total of 50 taels in fees, settled at Taigu. Also contracted in Taigu at the winter *biao* to pay Dachangyu 2,000 taels of silver sycee losing to the client a total of 50 taels in fees, settled at Taigu. These two items are remitted to Zhangjiakou, and will be received at the 10<sup>th</sup> month *biao*. Also contracted in Taigu and have already paid Renji 3,000 taels of silver sycee, gaining fee and interest income of 69 taels, settled at Taigu. Also contracted at the Taigu winter *biao* to pay Fuhehang 5,000 taels of silver sycee, gaining fee and interest income of 130 silver taels, settled at Taigu. Also contracted at the Taigu winter *biao* to pay Ruijihang 6,000 taels of silver sycee, gaining fee and interest income of 156 taels, settled at Taigu. Also contracted at the Taigu winter *biao* to pay Gaolinhang 1,000 taels of silver sycee, gaining 26 taels in fee and interest income, settled at Taigu. Also contracted at Taigu to pay Fuhehang 2,000 taels of silver sycee, gaining fee and interest income of 60 taels, settled at Taigu. The above five items will be remitted to Tianjin, to be received two months later. Also contracted in Taigu to pay spot silver to Brother Lv Xuebin of 103 taels of silver sycee, remitted to Chifeng to be received in Kedui true silver at the ninth month *biao*, gaining fee and interest income of 3 taels, settled at Taigu.

For all of the remittances to Tianjin, the *piaohao* collects both interest and fee income. The interest is on the two months' time of loans, while the fee is for the remittance services. But note that remittances to Zhangjiakou are money-losing! This is in part because the Taigu winter *biao* fell about one month after the Zhangjiakou tenth month *biao*. But it is also because demand for money will be high at the Zhangjaikou tenth month *biao*, as financial and commercial institutions need to make good on settlements.

What this means, is that the remittance fee is not a fee performed for moving money across long distances. Rather, it is an exchange rate between silver in one locale and silver in another. If it were a service fee, then *piaohao* would be little more than brokers for physical shipments of silver, akin to a contemporary broker for freight rates. In this case, it would be

impossible for fees to go negative, much as there is no “negative price” for cargo space.<sup>601</sup> But examples of negative remittance fees abound. Nor indeed should this be surprising. Differences in supply and demand for silver in Tianjin, Zhangjiakou, and Qi County have little to do with the distances between them. There are times when Zhangjiakou silver will be worth more than Qi County silver, and other times when it will be worth less. The market will fluctuate in order to send price signals communicating where silver is needed most.

This is evident in some of Jinshengrun’s market reports often attached at the bottom of its letters. Once such report reads:<sup>602</sup>

呈知，谷地景况，福泉涌在谷冬标收至津十月半，交长盛蔚银 10000 两，涌记每千两贴银 15 两，照此行市咱班无人随办，其余亦无甚事。

Reporting marketing conditions in Taigu. Fuquanyong is remitting funds from the Taigu winter *biao* to Changshengwei in Tianjin in the middle of the tenth month in the amount of 10,000 silver taels. Fuquanyong is losing 15 taels on the transaction. At these market prices, there is nothing that our group can do. Nothing further to report.

In Chapter 4, this passage was quoted to illuminate the competitive dynamics of the *biaoqi* system. Here, I quote it to emphasize that the remittance fee is not a bilateral negotiation, it is a market rate that can go quite negative. Moreover, the fact that the rate fluctuates indicates that it is an exchange rate, rather than a fee to replace the labor of physical transports.

There were two specific market prices that indicated to *piaohao* where silver was cheap and where it was dear. The first was the copper/silver price and the second was the interest rate. Toward the end of the Qing, the *yangli* (洋厘), or tael/yuan rate replaced the copper/silver rate as

---

<sup>601</sup> Technically, modern freight rates can go negative, but this is generally a loss leader so that shipping companies can sell documentation services and is extremely rare. It is not relevant to our example, since in the Qing armed couriers would never, ever have paid clients for the privilege of shipping goods overland.

<sup>602</sup> “Jinshengrun, Cao Runtang correspondence to Tianjin book, 8/1904” (光绪三十年八月锦生润曹润堂致天津信稿), LJMPC, 9.

the primary exchange rate of interest.<sup>603</sup> It is notable that in almost every letter sent from one piaohao branch to another, the copper price of silver is listed, and many letters include information on interest rates. I hypothesize that if one were to rerun Wu's regressions with variables for copper exchange and interest-rate differentials, those variables would provide even more explanatory value than and be colinear with the ones she uses.<sup>604</sup>

This does not mean that there was no relation to *piaohao* remittance rates and distances between branches. For the price of silver (as measured in, for example, copper or interest rates) to diverge between two different places, transportation costs had to be sufficiently high to prevent physical arbitrage from immediately forcing prices to converge. The cost of physical bullion shipments put a limit on the maximum volatility of the exchange rate as once shipments became economical, physical movement of silver would immediately bring silver prices in different locations back to parity. The maximum that silver could fluctuate before triggering physical shipments is called the "silver point," and has been studied extensively for the Republican period.<sup>605</sup> This means that the absolute value of remittance fees were likely to be

---

<sup>603</sup> While there was a physical exchange rate between minted *yuan* and silver *taels*, it was technically difficult to mint high quality *yuan*, and there were also costs associated with melting *yuan* into *taels*. The result were fluctuations in the market exchange rate between Chinese silver *taels* and Chinese silver dollars. The market price of *yuan* denominated in silver *taels* was known as the "yang li" (洋厘), and traded in liquid markets in most major Chinese economic hubs. See Austin Dean, "The Shanghai Mint and U.S.-China Monetary Interactions, 1920-1933," *Journal of American-East Asian Relations* 25, no. 1 (01 2018): 7–32, <https://doi.org/10.1163/18765610-02501002>; Debin Ma and Liuyan Zhao, "A Silver Transformation: Chinese Monetary Integration in Times of Political Disintegration, 1898–1933," *Economic History Review*, *Economic History Review*, 73, no. 2 (2020): 513–39, <https://doi.org/10.1111/ehr.12939>.

<sup>604</sup> This is probably feasible, but will take considerable time and effort to construct a copper/silver database.

<sup>605</sup> Ma and Zhao, 2020.

higher for remittances across longer distances, simply because there was more scope to fluctuate before triggering physical shipments.<sup>606</sup>

### Domestic exchange markets in Republican China

In the previous section I showed how late Qing and early Republican remittance markets were a form of exchange market. In this section I introduce Republican-era domestic exchange markets. Economically, they were extremely similar to remittance markets; the key difference was that drafts on *qianzhuang* replaced drafts on *piaohao* as the financial instrument being traded. Thus, the meaning of “domestic exchange” during the Republic was quite simply drafts on *qianzhuang* in other locales. These could be money orders initiated via post (信汇 *xinhui*) or, once telegraph became available, by wire transfer (电汇 *dianhui*). But the most common form of domestic exchange were banknotes issued by a *qianzhuang* that were redeemable in another locale (票汇 *piaohui*). An example of an early *qianzhuang* banknote, known as a *zhuangpiao* (庄票), from the 25<sup>th</sup> reign year of the Guangxu Emperor (1899), can be seen in Image 53.

---

<sup>606</sup> This is confirmed by Meng Wu’s statistical work, who finds a slight but significant correlation of 0.02% rise in remittance rates per kilometer of distance between branches. I suspect that if she were to measure the difference in absolute values, this correlation would be stronger still. Meng Wu, “How Did the Chinese Shanxi Merchants Determine the Remittance Fees? Micro Firm Analysis of Rishengchang Piaohao.,” *Frontiers of Economics in China* 13, no. 3 (September 2018): 484–504.

Image 53. Shanghai "zhuangpiao," 1899



Source: Weiqun Fu, *Jiu Fu Yu Min : Shanghai Qian Zhuang Piao Tu Shi*, Di 1 ban. (Shanghai : Shanghai shu dian chu ban she, 2002), 56.



The note in Image 53 was issued by a Shanghai *qianzhuang*. As long as it stayed within Shanghai, it was simply a banknote. But once it left Shanghai to circulate around other ports, say, in Hankou or Chongqing, it became “Shanghai exchange” (申匯 *shenhui*). A variation on these notes was a “remittance note” (匯票 *huipiao*) redeemable at a Shanghai but issued elsewhere. These were identical to *piaohao* remittance notes, except that they were issued by *qianzhuang* with a correspondent or branch in Shanghai, rather than by a *piaohao*. To purchase Shanghai exchange meant purchasing one of these notes either in the open market, or at a *qianzhuang*. It was economically identical to contracting with a *piaohao* for a remittance to Shanghai, or paying a *qianzhuang* outside of Shanghai to issue a Shanghai remittance note.

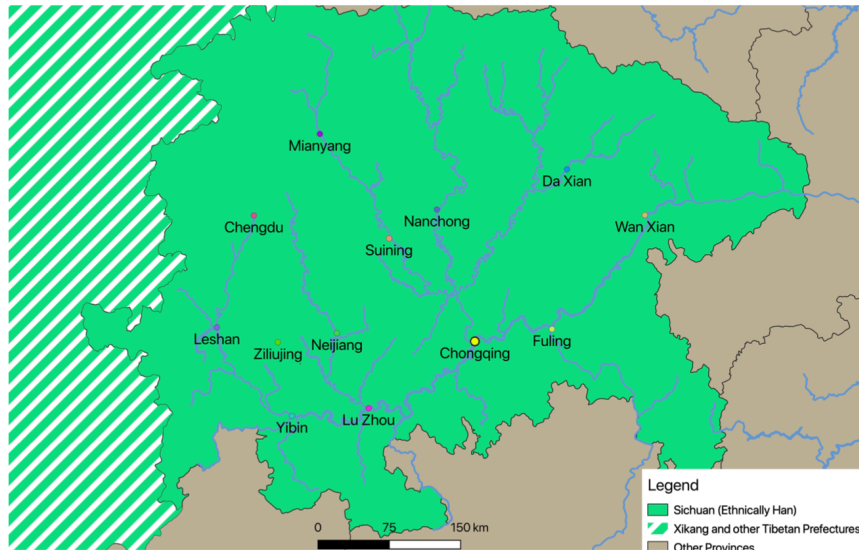
Just as remittance rates fluctuated during the Qing—and were sometimes positive, other times negative—so it was with Shanghai exchange. Markets in Shanghai exchange were quoted in notional values of 1,000 silver taels. For instance, when Shanghai exchange was “at parity” (平匯 *pinghui*) in Chongqing, the same weight and fineness of silver was worth the same amount in Chongqing as in Shanghai. In such cases, the market price of Chongqing Shanghai exchange would be 950 taels (owing to differences in weights and measures, 950 Chongqing taels equaled 1,000 Shanghai taels). But when demand for Shanghai silver was relatively high—perhaps because demand for Shanghai goods was high, or because fears of war triggered capital flight—then the price of Shanghai exchange in Chongqing would rise to a premium to par. In such circumstance, Shanghai exchange might trade at 1,100 taels of silver in Chongqing; meaning 1,100 Chongqing taels could purchase only 1,000 taels of silver in Shanghai. Conversely, if demand for Chongqing goods were high, Shanghai exchange might trade below par.

The structure of the domestic exchange market was hierarchical. Shanghai exchange was a universal currency. Because of Shanghai's increasing importance to the economy, during the Republican period Shanghai notes were money good anywhere in China, much as US Dollars are accepted anywhere in the world today. As with USD, Shanghai exchange became a place to park excess capital, or to acquire credit by shorting Shanghai exchange.<sup>607</sup> This is analogous to contemporary foreign corporations, which often park liquidity in USD-denominated liquid assets or borrow money in USD to take advantage of lower interest rates. Beneath the level of Shanghai exchange, notes from major ports circulated as a common currency within their wider geographical region. Just as Shanghai exchange was a national currency, so Chongqing notes (渝票 *yupiao*) were a regional currency in much of the southwest, where they traded in liquid financial markets. Image 54 shows a map of Sichuanese cities where I have confirmed the existence of liquid markets in Chongqing notes.

---

<sup>607</sup> Li Yixiang (李一翔), "Modern Chinese Urban Development and Social Economy: The direction of Chongqing's Shanghai exchange market fluctuations, 1922-1931" (中国近代城市发展与社会经济: 1922—1931年重庆申汇市场的价格变动趋势," in 中国近代城市发展与社会经济) (Shanghai: Shanghai she hui ke xue yuan chu ban she, 1999), 131–45.

Image 54. Chongqing in relation to Sichuanese Chongqing exchange markets, 1934



Source: *Sichuan Yuebao* (四川月报); Harvard CHGIS, 2015

Image 54 shows that at least 12 Sichuanese cities depended on Chongqing exchange markets to balance their trade, and to more efficiently allocate capital and credit. There were also markets in Chongqing exchange in Guizhou.<sup>608</sup> Markets in Tianjin exchange existed in much of the north. Hankou notes circulated in the middle-Yangzi, from Wanxian in Sichuan downriver to Changsha, Changde, Shashi, and Hekou. Further south, there were markets in Hong Kong, Guangzhou, Shantou, Fuzhou, and Xiamen exchange.<sup>609</sup>

Beneath the level of regional notes, notes from less important cities and commercial hubs circulated more locally. For example, just as Shanghai notes circulated nationally, Chongqing

<sup>608</sup> “Shiju jinzhang zhong zhi gebu jinrong shikuang (si): Guiyuang: yupiao fanghai shangye jinrong 時局緊張中之各埠金融市況（四）：貴陽：渝票妨害商業金融 [Financial markets in each port during these strained times (4): Guiyang: Chongqing notes harm commerce and finance],” *Yinhang yuekan* 銀行月刊 [*The bankers’ magazine*], 1924.

<sup>609</sup> Ma Jianhua 马建华 and Wang Yuru 王玉茹, “Jindai Zhongguo Guonei Huidui Shichang Chutan 近代中国国内汇兑市场初探 [A Preliminary Study of the Domestic Bill Market in Modern China],” *Jindaishi Yanjiu* 近代史研究 [*Modern Chinese History Studies*], no. 6 (November 2013): 114–25.

notes circulated around the southwest, so Chengdu notes circulated within a smaller catchment area within Sichuan. Thus, in September of 1941 the Meifeng Bank operating committee reported profits from wartime exchange speculation in Chongqing, Chengdu, and other regional notes, stating, "...our department earned profits of more than ¥120,000. These profits came from two sources. 1) Exchange profits from the purchases of Chongqing notes and Chengdu notes, with some other regional notes..."<sup>610</sup> In Chongqing, there were daily liquid markets in notes from at least Shanghai, Hankou, Chengdu, Xuyong county, and Luzhou.<sup>611</sup> It is probably that notes from Luzhou, Neijiang, Xuyong, and other Sichuanese cities traded in markets throughout the province. Domestic exchange markets were thus a patchwork of overlapping, tiered markets. National trade was mediated by Shanghai exchange; interregional exchange was mediated by markets in the exchange of regional commercial centers; while exchange in smaller cities circulated in markets within a narrower geographical ambit.

The Qing origins of Republican finance: from remittances to domestic exchange

The history of the domestic exchange market is understudied. In English, Frank Tamagna's classic on Chinese money and banking contains a single page on domestic exchange markets, singling out Shanghai and Hongkong Exchange as especially important. In Tamagna's

---

<sup>610</sup> "内处九月份获利十二万余元兹查获利原因 1、汇水收入以买渝票蓉票为最多速其它码头共得汇水收益十二万余元。三十年十月十四日上午十一时半第四八五次行务会议录。" Chongqing Municipal Archives, Archives of the Meifeng Bank of China, #02960014001300000002000

<sup>611</sup> "Guonei Jingji Shiqing: Chongqing Jinrong Jiguan Ji Huobi Zhuangkuang 国内经济事情:重庆金融机关及货币状况 [Domestic Economic Conditions: Chongqing Financial Institutions and Monetary Situation]," *Gongshang Banyue Kan 工商半月刊*, 1930.

words, “As a rule there was a very active market for Shanghai funds in central and northern China...”<sup>612</sup> Thomas Rawski’s monograph on the prewar economy contains a half a page about the domestic exchange market, but mistakenly attributes it to differences in weights and measures.<sup>613</sup> Recently, a fantastic econometric study by Nuno Palma and Liuyan Zhao uses domestic exchange rates to measure market integration in China over the course of the Republican period and confirm previous studies showing a significant improvement for most of the country apart from Sichuan.<sup>614</sup> But as impressive as these studies are, they focus—as with much of the historiography on Chinese finance—on the Republican period. There is no indication of where the domestic exchange market came from.

The Chinese literature has a similar focus. Shi Tao investigates speculation in the Chongqing Shanghai exchange market.<sup>615</sup> Liu Zhiying provides an excellent summary of the Chongqing Shanghai exchange market in the Republican period and, like Palma and Zhao, concludes that political turmoil made markets Chongqing and Shanghai markets less integrated

---

<sup>612</sup> Tamagna, 72-73. Eduard Kann alludes to the market, referring in places to “remittance rates,” but does not expand on it. Eduard Kann, *The Currencies of China: An Investigation of Silver & Gold Transactions Affecting China with a Section on Copper*, 2d ed., rev (London: P.S. King, 1928).

<sup>613</sup> See Thomas G. Rawski, *Economic Growth in Prewar China* (Berkeley: University of California Press, 1989), 165. In fact, the domestic exchange markets persisted well past the unification of weights, measures, and currency, even into the early PRC.

<sup>614</sup> Nuno Pedro G. Palma and Liuyan Zhao, “The Efficiency of the Chinese Silver Standard, 1920-33” (C.E.P.R. Discussion Papers, 2020), <https://ideas.repec.org/p/cpr/ceprdp/14860.html>. This makes eminent sense intuitively, as Sichuan was embroiled in increasingly intense civil war, include both warlord conflict and communist incursions. See Robert A. Kapp, *Szechwan and the Chinese Republic; Provincial Militarism and Central Power, 1911-1938* (New Haven,: Yale University Press, 1973).

<sup>615</sup> Shi Tao 石涛, “Huidui, Jiesuan Yu Touji: Jindai Shenhui Wenti Tansuo 汇兑、结算与投机: 近代申汇问题探析 [Remittances, Settlement, and Speculation: An Inquiry into the Modern Shanghai Exchange Problem ],” *Shehui Kexue Jikan 社会科学辑刊/Social Science Journal* 0, no. 3 (2008): 145–49.

in the 1930s.<sup>616</sup> Ma Jianhua and Wang Yuru conduct a network analysis of domestic exchange. They find a series of hierarchal “cores,” with Shanghai firmly in the center and secondary nodes at Tianjin, Hankou, Chongqing, Zhenjiang, Suzhou, Hangzhou, Ningbo, Hong Kong, Qingdao, and Jinan.<sup>617</sup> Li Yixiang mentions the historical origins of the Shanghai exchange markets, but only to locate it after the founding of the Republic. This Republican-era and Shanghai-centric narrative is useful inasmuch as Shanghai was the core of the Republican-era financial system. But it elides the historical question of where this market came from.

In this section, I demonstrate that domestic exchange markets emerged before the fall of the dynasty. Moreover, there is reason to believe that, at least in north China, they grew out of rather than replaced the old Shanxi-merchant remittance markets. The earliest clear evidence of a domestic exchange market can be found in a series of letters written in the thirty-first reign year of the Guangxu emperor (1905) from the Zhongxinghe *piaohao*'s Tianjin branch, by way of its Beijing branch, to headquarters in Qi County. A letter sent on the 11<sup>th</sup> day of the first month reads:<sup>618</sup>

附呈津收申票行市安以 1068 两之规，收主多刻涨至 1074 两，京克费 11 两，现钱数 2338

Also reporting that market quotations for Shanghai notes in Tianjin had settled at 1068 dougui silver taels. Because there were many buyers, it has now risen to 1074.

Remittance fees to Beijing are 11 taels. Spot silver is at 2,338 copper cash.

---

<sup>616</sup> Liu Zhiying 刘志英, “Jindai Shanghai Yu Xi’nan Diqu de Jinrong Hudong 近代上海与西南地区的金融互动 [Financial Interaction between Shanghai and Southwest China in Modern Times],” *Lishi Jiaoxue 历史教学 [History Teaching]*, no. 6 (2017): 18–26.

<sup>617</sup> Ma and Wang, 2013.

<sup>618</sup> Zhongxinghe Qi County correspondence book, 1905 (光绪三十一年正月祁县中兴和票号祁铺信稿), 2.

This means that there was a liquid market in Shanghai notes in Tianjin, by no later than 1905! Moreover, we see that the *piaohao* watch this market closely, and that it fluctuates based on the numbers of buyers and sellers. It is also meaningful that exchange rates are always listed next to copper exchange rates—indicating again that we are really looking at two inextricably linked exchange markets. The correspondence book contains numerous similar passages. Another example can be found in a letter sent on the 23<sup>rd</sup> of the month ends with a similar market quotation:<sup>619</sup>

附呈津收申票行市每千以 1086 两之规，津京克费 X 现钱数 2356。

Also reporting that market quotations for Shanghai notes in Tianjin area at 1086 dougui silver taels per thousand. Remittance fees to Beijing are X taels. Spot silver is at 2,338 copper cash.

In some of the letters we even see a difference between paper note Shanghai exchange and wire transfer exchange. A letter sent on the 11<sup>th</sup> day of the 2<sup>nd</sup> month concludes with the following market quotations:<sup>620</sup>

附呈：津收申票行市每千 1059 两，津申电会者 1041 两之规，京克费 5.5 两，现钱数 2352

Also reporting that market quotations for Shanghai notes in Tianjin area at 1059 dougui silver taels per thousand. Wire transfer orders for Shanghai are at 1041 dougui silver. Remittance fees to Beijing are 5.5 taels. Spot silver is at 2,352 copper cash.

This shows an active domestic exchange market was trading well before the end of the Qing dynasty, and that *piaohao* were basing business decisions off of the exchange market. These letters suggest, though they do not prove, that remittance markets and exchange markets were already well integrated.

---

<sup>619</sup> Zhongxinghe Qi County correspondence book, 1905 (光绪三十一年正月祁县中兴和票号祁铺信稿), 5.

<sup>620</sup> Zhongxinghe Qi County correspondence book, 1905 (光绪三十一年正月祁县中兴和票号祁铺信稿), 6.

For proof of remittance and exchange market integration, we may turn to a *piaohao* correspondence book from the 33<sup>rd</sup> reign year of the Guangxu emperor (1907). It contains letters from the Zhongxinghe (中兴和) *piaohao*'s Yingkou branch to the branch office in Pingyao (Zhongxinghe's headquarters were in neighboring Qi County). Many of its letters end with Yingkou market quotations showing evidence of an extremely complex domestic exchange market. A letter send on the 10<sup>th</sup> day of the sixth month concludes:

刻营上票 931 两，谷秋冬标 104.5 两、84.5 两、厂票 82.5 两、天津 115 两、沈票 75.6 两，元宝每定加色银 6.5 两，钱数 8.97 吊，余问再

Right now in Yingkou: Shanghai notes are at 931 taels, Taigu fall *biao* 104.5 taels, Taigu winter *biao* 84.5 taels, Chang notes 92.5 taels, Tianjin 115 taels, Shenyang notes 75.6 taels, spot ingots premium 6.5 taels, cash price 8.97 strings, that is all.

These quotations show a market in regional notes; that is, an exchange market. “Shangpiao” are Shanghai notes. They trade at 931 Yingkou taels per 1,000 Shanghai taels. This is nearly par, since 944.6 Yingkao taels were equal to 1,000 Shanghai taels. The next exchange market quotations are for the Taigu county *biaoqi*. These are notes—either from *piaohao* or *yinhao*—that are redeemable at the Taigu *biaoqi* fair. The incorporation of *biaoqi* settlements into the domestic exchange market is in itself fascinating. These quotes are followed by prices for “Chang notes” (厂票). I have not been able to locate these definitively, but I believe it is a homophone for “长”, or Changchun. Finally, we see quotations for Tianjin notes and Shenyang notes. This is nothing less than a regional exchange market connecting the Shanxi-merchant *biaoqi* to Shanghai.

Note also that the quotation system is different for Shanghai than for the other market rates. The Shanghai price is the price of dougui silver in Shanghai per 1,000 taels of Yingkou



silver. But I believe the other rates are *discount* rates. Thus, we see in a letter sent on the 24<sup>th</sup> day of the 6<sup>th</sup> month, market quotations reading:

刻营上票 938.5 两、谷秋冬标 91 两、70 两厂票 85 两天津 93 两、沈票 60 两，收主皆多，现宝银每定加色银 4.7 两钱数 8.96 吊余问再详  
 Right now in Yingkou: Shanghai notes are at 938.5 taels, Taigu fall *biao* 91 taels, Taigu winter *biao* 70 taels, Chang notes 85 taels, Tianjin 93 taels, Shenyang notes 60 taels with many buyers. Spot ingots premium 4.7 taels, cash price 8.96 strings, that is all.

On that same date, the *piaohao* records a number of transactions between the Yingkou branch and the Changchun branch, represented in Table 23.

Table 23. Transactions between Yingkou and Changchun

Client	Date	Sending branch	Receiving branch	Principal	Fee	Rate
Dashengxiang	6/24	Yingkou	Changchun	10700	-919.3	-8.6%
Dadeheng	6/24	Yingkou	Changchun	5350	-459.65	-8.6%
Quanhengda	6/24	Yingkou	Changchun	5350	-478.51	-8.9%
Gongshengqing	6/24	Yingkou	Changchun	5350	-478.51	-8.9%
Tongjuyuan	6/24	Yingkou	Changchun	10700	-881.57	-8.2%
Dajiyu	6/24	Yingkou	Changchun	5350	-434.5	-8.1%
Gongchengyu	6/24	Yingkou	Changchun	5350	-453.36	-8.5%

Source: Zhongxinghe correspondence book to Pingyao, 1907 (光绪三十三年六月中兴和寄平信), LJMPC, 4.

As Table 23 shows, the remittance rates are extremely close to the market quotations in the same day. This means two things. First, it allows us to interpret the market quotations as discounts to par. Second, it is proof positive that *piaohao* remittance markets had already merged with liquid, publicly quoted domestic exchange markets to such a remarkable degree that there was effectively a unity of price between the two.

We later see that price unity obtains not only of notes of major cities, but of *biaoqi* markets as well. A letter sent on the 26<sup>th</sup> day of the 6<sup>th</sup> month contains information about a contracted remittance from Yingkou to Shanxi. It reads:<sup>621</sup>

营定收会去平在谷明春标交竞宝银一万两立给伊会票一张，同期交大吉玉竞宝银一万两立给伊会票一张均无砵其平皆照营平比本合砵每百小 1.18 两兑。咱在营各现收伊等过账银合得 6 月 15 天宗共得其等费银 1000 两。  
Yingkou has contracted to receive funds for remittance to Pingyao, to be cleared at next year's spring biao with payments to Dadeyu in the amount of 10,000 mirror silver taels. A remittance note has been issued to them. Also payments to Dajiyu in the amount of 10,000 mirror silver taels. A remittance note has been issued to them. No scale is specified and so both will use the Yingkou scale which at our own scale means paying out 1.18 taels less per 100 taels. We will receive in Yingkou spot *guozhangyin*, and gain a total of 6 months and 15 days' time as well as remittance fees of 1,000 taels.

This passage is typical of piaohao correspondence, in which one branch informs another of recent business. In this case, the Yingkou branch has contracted to remit 20,000 silver taels from Yingkou to Pingyao, to clear at next year's Taigu Spring biao. This means that they will immediately receive silver in Yingkou, and pay out the 20,000 taels at Taigu six months and 15 days later. These taels are measured at the Yingkou scale, and so the Yingkou branch states the conversion rate to the firm's own scale; namely, for every contracted 100 taels in remittances, only 98.82 taels will be paid out in Taigu. Next we see that two forms of income are stated. First, the piaohao "gains" 6 months and 15 days, because it will have the use of silver for this period—in other words, free funding. In addition, it will also earn a remittance fee of 1,000 taels.

This transaction indicates that silver at the Taigu biao is worth more than spot silver in Yingkou. To purchase 20,000 taels of silver at next year's Taigu spring biao requires spot payments in Yingkou of 21,000 taels of silver. This means Taigu spring *biao* silver trades at a

---

<sup>621</sup> Zhongxinghe correspondence book to Pingyao, 1907 (光绪三十三年六月中兴和寄平信), LJMPC, 11.

premium to Yingkou spot silver of 5%.<sup>622</sup> This matches exactly the market quotations listed at the end of the letter, which read:<sup>623</sup>

刻营上票 943.5 两谷秋冬明春标 97 两、76.7 两、50 两，厂票 87.5、天津 98 两、沈票 66.7 两，现宝每定加色银 5.8 两，钱数 9.08 吊  
Right now in Yingkou: Shanghai notes are at 943.5 taels, Taigu fall *biao* 97 taels, winter *biao* 76.7 taels, next year's spring *biao* 50 taels, Chang notes 87.5 taels, Tianjin 98 taels, Shenyang notes 66.7 taels. Spot ingots premium 5.8 taels, cash price 9.08 strings.

In the above schedule of market quotations, notes for next year's Taigu spring *biao* are “50 taels.” This means “discount of 50 taels out of 1,000 taels” and corresponds precisely to the 5% discount in the remittance contract. In short, the Shanghai quotations are quoted like an exchange rate (the value of Shanghai exchange), while the following quotations are quoted like an exchange futures market (the net value of a *contract* on a notional 1,000 taels). From the perspective of an actual trader, there is little difference between the two—as long as you know how to read the quotations, they contain the same information.<sup>624</sup>

What this proves is that the domestic exchange markets that helped integrate capital markets in Republican-era China, had their origins in the late imperial period. Moreover, they were integrated with Shanxi-merchant remittance markets, with unity of price between the two. The most likely interpretation is therefore not that *qianzhuang* and exchange markets “replaced” remittances. Rather, the liquid, nationwide market in domestic exchange grew out of the Shanxi-

---

<sup>622</sup>  $(21,000 - 20,000) / 20,000 = 5\%$

<sup>623</sup> Zhongxinghe correspondence book to Pingyao, 1907 (光绪三十三年六月中兴和寄平信), LJMPC, 12.

<sup>624</sup> If we were to convert the futures quotation into an exchange quotation, it would be  $(1000 + 50) = 1,050$ . In other words, Taigu notes due at next year's Spring *biao* sell for 1,050 silver in Yingkou. I believe—though this is pure speculation—that the way of quoting Shanghai note prices is a southern convention, that comes from note markets throughout southern China. The way of quoting Taigu or Changchun notes is probably a northern convention that comes directly from the *piaohao*'s way of quoting remittance rates.

merchant remittance market. Once trade volumes reached a critical mass, exchange began to trade in liquid curb markets, rather than through piaohao-brokered transactions. An analogy can be seen in lending markets. In rural markets without enough liquidity, if a corporate entity wanted a loan they negotiated with a specialized lender such as a *qianzhuang* or a pawnshop. At the *biaoqi*, however, a borrower of sufficient size and creditworthiness could simply borrow on liquid lending markets at the *manjia* rate or by shorting exchange futures.

Nor, indeed, is it accurate to say that the Shanxi system disappeared. As we can see above, *biaoqi* silver continued to trade in the Shanghai-centered domestic exchange market. There is no doubt that Shanghai was far more central to the Republican-era economy than *biaoqi* markets. But just as southwestern markets were integrated with Shanghai *through* Chongqing, so northern markets were integrated with Shanghai through the *biaoqi*, Tianjin, and, in Shandong, via Jinan. In short the transition from empire to Republic is not one of one system replacing another. Rather, it is the story of the rise of Shanghai, which continued to transmit price signals through financial markets that the Shanxi merchants had constructed.

Further questions for study

This dissertation has concluded with a case for the “modern” legacy of the Shanxi merchants. The case is a modest one; even a cursory glance at the Republican-period will show that Shanghai replaced Shanxi as the financial center of the country, that banks would grow in importance relative to traditional forms of business organization, and that even indigenous institutions such as *qianzhuang*, *piaohao*, and *yinhao* would increasingly resemble western firms. Nevertheless, the historical importance of China’s indigenous financial system is undeniable. As

this conclusion has demonstrated, the structure of one of Republican China's most important financial markets, the market in domestic exchange, grew out of and eventually assimilated the older, Shanxi-merchant remittance market. But other sources of continuity remain to be explored. Much of the key personnel in China's modern, western-style banks came from older, traditional financial institutions. North of the Yangzi, this typically meant Shanxi bankers. Even accounting and business operations continued to borrow from older practices. Thus, the western-style Young Brother's Bank (聚兴诚银行 *Juxingcheng Yinhang*), Chongqing's first private bank, employed both western-style accounting, as well the traditional Chinese bookkeeping of its Shanxi merchant, *piaohao* forbears.

But the key focus of this dissertation has been empirical; it has attempted to map the financial plumbing of the Shanxi merchants from the late Qing to the early Republican period. Still, numerous questions remain. A key theme of this work has been the argument for "integrated" markets. I believe I have made the strongest case yet for competitive, market activity as determining the allocation of capital and credit across society and geographic space. Yet the fact remains that for some peasants, interest rates were an exorbitant 3% monthly, while for major commercial entities it was 1% per year. This difference is possible in a purely market economy; differences in risk profiles, geography, and other factor endowments can explain such disparities. But one is left uneasy as these explanations are difficult to falsify. Further research is thus required to understand the rural lending market; and it is not clear that the sources exist to settle this question definitively.

A second argument of this dissertation is that Chinese financial institutions were comparable in many respects to western institutions; or at least appear to have been developing the capacity for coordinating long-term capital investments. I have shown primitive markets in

shares, financial institutions capable of creating credit and mobilizing large sums of capital, and liquid markets that could convert land into financing. Nevertheless, the fact remains that China did not build many factories or long-term industrial concerns; nor have I seen evidence of Shanxi merchants funding infrastructure. Was this simply because the technology wasn't there? Or were Chinese financial institutions less capable of mobilizing long-term investment? These questions, too, require more research.

## Works Cited

### Abbreviations

LJMPC Liu Jianmin Private Collection, Shanxi University. (Published as Liu Jianmin 刘建民, ed. *Jinshang Shiliao Jicheng* 晋商史料集成 [Collected Historical Materials of Shanxi Merchants]. Di 1 ban. Beijing: Shang wu yin shu guan, 2018).

### Primary and Archival Sources

Cao Shuji 曹树基, Pan Xinghui 潘星辉, and Que Longxing 阙龙兴, eds., *Shicang Qi Yue* 石仓契约, Di 1 ban. (Hangzhou: Zhejiang University Press, 2010).

Sichuan Provincial Archives, Baxian Dang'an 巴县档案 [Magisterial Archives of Ba County]

Liu Jianmin Private Collection, Shanxi University. (Published as Liu Jianmin 刘建民, ed. *Jinshang Shiliao Jicheng* 晋商史料集成 [Collected Historical Materials of Shanxi Merchants]. Di 1 ban. Beijing: Shang wu yin shu guan, 2018).

Wang Xuenong 王雪农, and Liu Jianmin 刘建民. *Zhongguo Shanxi Min Jian Piao Tie* 中国山西民间票帖 [Popular Financial Notes in China's Shanxi Province]. Di 1 ban. Zhongguo Qian Bi Cong Shu 6. Beijing: Zhonghua shu ju, 2001.

### Secondary Sources

Accominotti, Olivier, and Stefano Ugolini. "International Trade Finance from the Origins to the Present: Market Structures, Regulation and Governance," 2020. <https://doi.org/10.1093/oxfordhb/9780190900571.013.1>.

———. "The Structure of Global Trade Finance: A Very Long-Run View." *VoxEU.Org* (blog), August 5, 2019. <https://voxeu.org/article/structure-global-trade-finance-very-long-run-view>.

Allen, Robert C. *Global Economic History: A Very Short Introduction*. Very Short Introductions 282. Oxford ; New York: Oxford University Press, 2011.

Allen, Robert C., Tommy Bengtsson, and Martin Dribe, eds. *Living Standards in the Past: New Perspectives on Well-Being in Asia and Europe*. Oxford ; New York: Oxford University Press, 2005.

Arrighi, Giovanni. *Adam Smith in Beijing: Lineages of the Twenty-First Century*. London ; New York: Verso, 2007.

- . *The Long Twentieth Century: Money, Power, and the Origins of Our Times*. New and Updated, [2nd] ed. London ; New York: Verso, 2010.
- Aston, T. H., and C. H. E. Philpin, eds. *The Brenner Debate: Agrarian Class Structure and Economic Development in Pre-Industrial Europe*. Past and Present Publications. Cambridge [Cambridgeshire] ; New York: Cambridge University Press, 1985.
- Atwill, David. *The Chinese Sultanate: Islam, Ethnicity, and the Panthay Rebellion in Southwest China, 1856-1873*. Stanford: Stanford University Press, 2005.
- Auyeung, Pak K., Lei Fu, and Zhixiang Liu. “Double-Entry Bookkeeping in Early-Twentieth-Century China.” *Business History Review* 79, no. 1 (2005): 73–96.  
<https://doi.org/10.1017/S000768050008020X>.
- Beckert, Sven. *Empire of Cotton: A Global History*. First edition. New York: Alfred A. Knopf, 2014.
- Bian Li 卞利. “Ming Qing Shiqi Huizhou de Shehui Chutan 明清时期徽州的会社初探 [A Preliminary Study of Ming and Qing Era Huizhou Huishe].” *Anhui Daxue Xuebao (Zhexue Shehui Kexue Ban) 安徽大学学报(哲学社会科学版) [Journal of Anhui University (Philosophy and Social Sciences)]* 25, no. 6 (November 2001): 29–34.
- Bing Changchu 宾长初. “Qingdai Huizhou Qianhui de Jiliang Fenxi: Jiyu ‘Huizhou Wenshu’ Di Er Ji Suo Shou Hui Shu de Kaocha: Jiyu 清代徽州钱会的计量分析——基于《徽州文书》第二辑所收会书的考察 [A Quantitative Analysis of Qing-Era Huizhou Credit Societies: Based on a Study of Society Documents in the Second Volume of Huizhou Documents].” *Zhongguo Shehui Jingjishi Yanjiu 中国社会经济史研究*, no. 4 (2011): 45–54.
- Bramall, Chris. *In Praise of Maoist Economic Planning: Living Standards and Economic Development in Sichuan since 1931*. Studies on Contemporary China. Oxford : New York: Clarendon Press ; Oxford University Press, 1993.
- Brandt, Loren. *Commercialization and Agricultural Development: Central and Eastern China, 1870-1937*. Cambridge ; New York: Cambridge University Press, 1989.
- Brandt, Loren, Debin Ma, and Thomas G. Rawski. “From Divergence to Convergence: Reevaluating the History behind China’s Economic Boom.” *Journal of Economic Literature* 52, no. 1 (March 2014): 45–123.
- Braudel, Fernand. *Civilization and Capitalism, 15th-18th Century*. Vol. 1. 3 vols. Berkeley: University of California Press, 1992.
- . *Civilization and Capitalism, 15th-18th Century*. Vol. 2. 3 vols. Berkeley: University of California Press, 1992.



- . *Civilization and Capitalism, 15th-18th Century: The Structures of Every Day Life*. Vol. 1. 3 vols. New York: Harper & Row, 1982.
- Broadberry, S. “Accounting for the Great Divergence: Recent Findings from Historical National Accounting.” Oxford Economic and Social History Working Papers. University of Oxford, 2021.
- Buffett, Warren. Annual Letter. “To the Shareholders of Berkshire Hathaway Inc.” Annual Letter, 2001. <https://www.berkshirehathaway.com/2001ar/2001letter.html>.
- Cai Guoqiang. “Rent Collection Courtyard” in “I Want to Believe.” February 22, 2008. Exhibit.
- Cao Shuji, and Meng Wei. “Shanxi Copper Notes: A Comparison between Qing-Era Shanxi Merchants’ Checks, Banknotes and Credit, and Southeastern Pingpiao (山西钱帖：清代晋商的支票、本票与信用——与东南地区凭票比较),” Unpublished.
- Cao Shuji 曹树基. “Chuantong Zhongguo de Diquan Jiegou, Tudi Shichang Yu Tudi Gaige: Yi Qiyue Wenshu Yu Xianji Dang’an Wei Yiju 传统中国的地权结构、土地市场与土地改革——以契约文书与县级档案为依据 [Land Reform and the Structure of Traditional Land Rights and Land Market: An Analysis of Contracts and County Archival Materials],” Unpublished.
- . “Diandi Yu Dianzu: Qingdai Minnan Diqu de Tudi Shichang Yu Jinrong Shichang 典地与典租：清代闽南地区的土地市场与金融市场 [Live Sales and Rents: Land Markets and Financial Markets in Qing-Era Southern Fujian].” *Qingshi Yanjiu 清史研究 [The Qing History Journal]*, no. 4 (2019).
- . “Qingdai Gannan de Tianmian Liudong Yu Xiangcun Jinrong 清代赣南的田面流动与乡村金融 [The Circulation of Topsoil Rights and Rural Finance in Qing-Era Southern Jiangxi].” *Zhongguo Nongshi 中国农史 [Agricultural History of China]*, no. 3 (2020): 54–68.
- Cao Shuji 曹树基, and Chen Zhiping 陈支平. *Ke jia zhen xi wen shu cong kan 客家珍稀文书丛刊 [Collection of rare Hakka materias from]*. Guangdong ren min chu ban she, 2019.
- Cao Shuji 曹树基, and Li Feiji 李霏霏. “Qingzhonghou Zhenan Shanqu de Tudi Diandang: Jiyu Songyangxian Shicangcun de ‘Dantianqi’ de Kaocha 清中后期浙南山区的土地典当——基于松阳县石仓村‘当田契’的考察 [Land Mortgage in Mountainous Regions of Southern Zhejiang during the Mid- and Late Qing: A Study Based on ‘Land Mortgage Contracts’ from Shicang Village, Songyang County].” *Lishi Yanjiu 历史研究 [Historical Research]*, no. 4 (2008): 40–54.
- Cao Shuji 曹树基, Li Jinzhang 李锦章, and Wang Guojin 王国晋. “‘Tong Yi Zhang, Ji Liang Bu’: Qingdai Fengshengtaihao Zhangben de Fushi Buji ‘同一账，记两簿’：清代丰盛泰

号账本的复式簿记 [One Transaction, Recorded Twice: Qing-Era Double-Entry Bookkeeping in the Accounts of the Fengshengtai Company],” Unpublished.

Cao Shuji 曹树基, and Liu Shigu 刘诗古. *Chuantong ZHONGGUO Diquan Jiegou Ji Qi Yanbian 传统中国地权结构及其演变 [The Structure and Evolution of Land Rights in Traditional China]*. Shanghai: Shanghai Jiaotong Daxue Chubanshe 上海交通大学出版社 (Shanghai Jiao Tong University Press), 2014.

Cao Shuji 曹树基, and Xu Junsong 徐俊嵩. “Qindai Shanxi de Qianti Yu Xinyong: Yu Dongnan Diqu Bijiao 清代山西的钱帖与信用:与东南地区比较 [Qing-Era Shanxi Monetary Notes and Credit: A Comparison with the Southeast Region].” *Shi Lin 史林 [Historical Review]*, no. 6 (2020).

Cao Shuji 曹树基, and Yang Qiming 杨启明. “Qingday Dongnan Difang Xiao Shichang Zhong de Pingpiao Yu Xinyong 清代东南地方小市场中的凭票与信用 [Pingpiao and Credit in Qing-Era Southeast Regional Markets].” *Zhongguo Jingjishi Yanjiu 中国经济史研究 [Researches in Chinese Economic History]*, no. 6 (2020): 102–17.

Carol H. Shiue and Wolfgang Keller. “Markets in China and Europe on the Eve of the Industrial Revolution.” *The American Economic Review* 97, no. 4 (2007): 1189–1216.

Chan, Wellington K. K. “Personal Styles, Cultural Values and Management: The Sincere and Wing On Companies in Shanghai and Hong Kong, 1900-1941.” *The Business History Review* 70, no. 2 (1996): 141–66. <https://doi.org/10.2307/3116879>.

———. “The Organizational Structure of the Traditional Chinese Firm and Its Modern Reform.” *The Business History Review* 56, no. 2 (1982): 218–35. <https://doi.org/10.2307/3113977>.

Chandra, Lokesh. “The Origin of Avalokitesvara.” *Indologica Taurinenaia* 13 (1984): 187–202.

Chang, Linshu, and Jinghao Zhang, eds. *Republican-Era Gazetteer of Yuci County*. 20 vols., 1942.

Chen Chunsheng 陈春声, and Liu Zhiwei 刘志伟, eds. *Yi da tou jian ji: ji nian Liang Fangzhong jiao shou dan chen yi bai zhou nian 遗大投艰集: 纪念梁方仲教授诞辰一百周年*. Di 1 ban. Guangzhou: Guangdong ren min chu ban she, 2012.

Chen Gongxian 陈公献. *Da liu ren zhi nan 大六壬指南 [Guide to Great Divination]*. Beijing: Hua ling chu ban she, 2013.

Chen Jiyan 陈继淹. *Zhangbei County Gazetteer 张北县志*. Chaha'er: Chengwen chubanshe, 1935.

Chen Qitian 陈其田. *Shanxi Piao Zhuang Kao Lue 山西票庄考略 [Investigation of Shanxi Piaohao]*. Shi Di Xiao Cong Shu. Shanghai: Shang wu yin shu guan, 1937.

- Chen Tianyi 陈添翼. “Qingdai Minguo Shiqi Zhangju Yanjiu 清代民国时期账局研究 [Research on the Zhang Ju During the Qing Dynasties to the Republic of China].” Ph.D. Dissertation, Hebei University, Center for Song History, 2020.
- Chen Tianyi 陈添翼, and Liu Qiugen 刘秋根. “Jiadao Shiqi Beijing Zhangju de Gongshangye Jiedai Yanjiu 嘉道时期北京账局的工商业借贷研究 [A Study on Industrial and Commercial Lending of Beijing Zhangju (Accounting Bureau) in Jia-Dao Period of Qing Dynasty].” *Hebei Shifan Daxue Xuebao (Zhexue Shehuikexue Ban) 河北师范大学学报(哲学社会科学版) Journal of Hebei Normal University (Philosophy and Social Sciences Edition)*, no. 6 (2020): 35–47.
- Chen, Yixin. “The Guomindang’s Approach to Rural Socioeconomic Problems: China’s Rural Cooperative Movement, 1918-1949.” *ProQuest Dissertations and Theses*. Ph.D., Washington University in St. Louis, 1995. ProQuest Dissertations & Theses Global (304246711). <https://search.proquest.com/docview/304246711?accountid=14657>.
- Cheng, Linsun. *Banking in Modern China: Entrepreneurs, Professional Managers, and the Development of Chinese Banks, 1897-1937*. Cambridge Modern China Series. Cambridge, UK ; New York: Cambridge University Press, 2003.
- Chircop-Reyes, Laurent. “Merchants, Brigands and Escorts: An Anthropological Approach of the Biaoju 镖局 Phenomenon in Northern China.” Edited by Paolo Santangelo. *Ming-Qing Studies*, December 1, 2018, 123–49.
- Coble, Parks M. *The Shanghai Capitalists and the Nationalist Government, 1927-1937*. Harvard East Asian Monographs 94. Cambridge, Mass: Council on East Asian Studies, Harvard University : distributed by Harvard University Press, 1980.
- Cochran, Sherman. *Chinese Medicine Men: Consumer Culture in China and Southeast Asia*. Cambridge, Mass: Harvard University Press, 2006.
- . *Encountering Chinese Networks: Western, Japanese, and Chinese Corporations in China, 1880-1937*. Berkeley: University of California Press, 2000.
- Confucius. “Yong Ye Section Six.” In *Analects*, n.d. [http://blog.sina.com.cn/s/blog\\_4e8f964f0100ad2v.html](http://blog.sina.com.cn/s/blog_4e8f964f0100ad2v.html).
- Cooper, Eugene. *The Market and Temple Fairs of Rural China: Red Fire*. Asia’s Transformations 37. London ; New York: Routledge, 2013.
- Dai, Yingcong. *The Sichuan Frontier and Tibet: Imperial Strategy in the Early Qing*. Seattle: University of Washington Press, 2009.
- Davis, Lance E., and Robert E. Gallman. *Evolving Financial Markets and International Capital Flows: Britain, the Americas, and Australia, 1865-1914*. Japan-U.S. Center Sanwa

Monographs on International Financial Markets. Cambridge, UK ; New York: Cambridge University Press, 2001.

Dean, Austin. “The Shanghai Mint and U.S.-China Monetary Interactions, 1920-1933.” *Journal of American-East Asian Relations* 25, no. 1 (01 2018): 7–32. <https://doi.org/10.1163/18765610-02501002>.

Debin Ma and Liuyan Zhao. “A Silver Transformation: Chinese Monetary Integration in Times of Political Disintegration, 1898–1933.” *Economic History Review*, Economic History Review, 73, no. 2 (2020): 513–39. <https://doi.org/10.1111/ehr.12939>.

Desan, Christine. *Making Money : Coin, Currency, and the Coming of Capitalism*. Oxford: Oxford University Press, 2014. <https://doi.org/10.1093/acprof:oso/9780198709572.001.0001>.

Dong Yonggang 董永刚. “Yaoshun Zai Jinnan 尧舜在晋南 [Yaoshun in Southern Shanxi].” *Taiyuan Wanbao 太原晚报*, December 5, 2007. <http://www.shanxiql.com/mlsx/94854d46863911e7aaa4c5fca12f0797.html>.

Dostoyevsky, 1821-1881, Fyodor. *Crime & Punishment*. Edited by 1861-1946 Garnett Constance. New York: The Heritage Press, 1938.

Dowell, David, Mark Morrison, and Troy Heffernan. “The Changing Importance of Affective Trust and Cognitive Trust across the Relationship Lifecycle: A Study of Business-to-Business Relationships.” *Industrial Marketing Management* 44 (January 1, 2015): 119–30. <https://doi.org/10.1016/j.indmarman.2014.10.016>.

Duara, Prasenjit. *Culture, Power, and the State: Rural North China, 1900-1942*. Stanford, Calif: Stanford University Press, 1988.

———. *Culture, Power, and the State: Rural North China, 1900-1942*. Stanford, Calif: Stanford University Press, 1988.

Dykstra, Maura Dominique. “Complicated Matters: Commercial Dispute Resolution in Qing Chongqing from 1750 to 1911.” *ProQuest Dissertations and Theses*. Ph.D., University of California, Los Angeles, 2014. ProQuest Dissertations & Theses Global (1589670794). <https://search.proquest.com/docview/1589670794?accountid=14657>.

Elvin, Mark. *The Pattern of the Chinese Past*. n.p: Rainbow-Bridge Book Co, 1973.

Erickson, Erling A. “Money and Banking in a ‘Bankless’ State: Iowa, 1846-1857.” *The Business History Review* 43, no. 2 (1969): 171–91. <https://doi.org/10.2307/3112271>.

Fan Guoqian 范国强. “Fanshi Tanghao Da Quan 范氏堂号大全 [Comprehensive List of Fan Lineage Halls],” April 3, 2018. [http://www.360doc.com/content/18/0304/11/13924396\\_734142727.shtml](http://www.360doc.com/content/18/0304/11/13924396_734142727.shtml).

- Fan Weiling 范维令. “Chapiaoye Jianying Zhi Chenggong Dianfan: Dadexing Piao Zhuang 茶票业兼营之成功典范——大德兴票庄 [The Model of Success for Combined Operations in Tea and Notes: Dadexing Piao Zhuang].” In “*Xingshang Qian Yao*” *Shidu Yu Yanjiu* 《行商遗要》释读与研究 [“*Xingshang Qian Yao*”: Interpretation and Research], edited by Zhang Yalan 张亚兰, 213–16. Taiyuan: Shanxi jingji chubanshe, 2018.
- Faure, David. *China and Capitalism: A History of Business Enterprise in Modern China*. Understanding China. Hong Kong: Hong Kong University Press, 2006.
- . *Emperor and Ancestor: State and Lineage in South China*. Stanford: Stanford University Press, 2007.
- . “The Lineage as Business Company: Patronage versus Law in the Development of Chinese Business.” In *Chinese Business Enterprise: Critical Perspectives on Business and Management*, edited by Rajeswary Ampalavanar Brown, 1:82–106. London: Routledge, 1996.
- . “What Made Foshan a Town?: The Evolution of Rural-Urban Identities in Ming-Qing China.” *Late Imperial China* 11, no. 2 (1990): 1–31.  
<https://doi.org/10.1353/late.1990.0000>.
- . “What Weber Did Not Know: Towns and Economic Development in Ming and Qing China.” In *Town and Country in China: Identity and Perception*, edited by David Faure and Tao Tao Liu, 58–84. London: Palgrave Macmillan UK, 2002.  
[https://doi.org/10.1007/978-1-137-07001-2\\_4](https://doi.org/10.1007/978-1-137-07001-2_4).
- . “Zhongguo Chuantong Diquan Zhidu Jiqi Bianqian 中国传统地权制度及其变迁 By Long Denggao 龙登高. Beijing: Zhongguo Shehui Kexue, 2018. 242 Pp. 69.00 Yuan. - Chuantong Zhongguo Diquan Jiegou Jiqi Yanbian 传统中国地权结构及其演变 By Cao Shuji 曹树基 and Liu Shigu 刘诗古. Shanghai: Shanghai Jiaotong Daxue, 2014. 320 Pp. 50.00 Yuan. - The Laws and Economics of Confucianism: Kinship and Property in Preindustrial China and England By Taisu Zhang. Cambridge: Cambridge University Press, 2017. 308 Pp. \$116.00.” *Journal of Chinese History* 中國歷史學刊 4, no. 1 (January 2020): 198–208. <https://doi.org/10.1017/jch.2019.17>.
- Fei, Xiaotong. *Peasant Life in China: A Field Study of Country Life in the Yangtze Valley*. New York: E.P. Dutton, 1939.
- Fei, Xiaotong, and Tse-i Chang. *Earthbound China: A Study of Rural Economy in Yunnan*. Rev. English ed. International Library of Sociology and Social Reconstruction. London: Routledge & K. Paul, 1949.
- Feuchtwang, Stephan. *Popular Religion in China: The Imperial Metaphor*. New ed. Richmond, Surrey: Curzon, 2001.

- Feuerwerker, Albert. *China's Early Industrialization: Sheng-Hsuan-Huai (1844-1916) and Mandarin Enterprise*. 1st Atheneum ed. Atheneum ; 153. New York: Atheneum, 1970.
- Finance Gazetteer of Inner Mongolia Editorial Committee (内蒙古金融志编委会), and Dong Huanan 董化南 et. al, eds. *Neimenggu Jinrongzhi 内蒙古金融志 [Finance Gazetteer of Inner Mongolia]*, 2007.
- Frank, Andre Gunder. *Reorient: Global Economy in the Asian Age*. Berkeley, Calif: University of California Press, 1998.
- Frost, Adam. "Chinese Business History: Origins, Legacies, and Future Directions." *Forthcoming at Business History Review*, n.d.
- Fu Weiqun 傅为群. *Jiu Fu Yu Min : Shanghai Qian Zhuang Piao Tu Shi 九府裕民—上海钱庄票图史*. Di 1 ban. Shanghai : Shanghai shu dian chu ban she, 2002.
- Gamble, Sidney. "A Chinese Mutual Savings Society." *The Far Eastern Quarterly* 4, no. 1 (1944): 41–52. <https://doi.org/10.2307/2048986>.
- Gardella, Robert. "Squaring Accounts: Commercial Bookkeeping Methods and Capitalist Rationalism in Late Qing and Republican China." *The Journal of Asian Studies* 51, no. 2 (1992): 317–39. <https://doi.org/10.2307/2058031>.
- "Gedi Jingji Shikuang: Xi'an (Sha'an Nian'er Nian Jiu Yue Fen 各地经济市况：西安（陕·卅二年九月份） [Market Conditions around the Country: Xi'an (9/1943)]." *Jingji Huibao 经济汇报 [Economic Reports ]*, 1944.
- "Gedi Jinrong: Weixian 各地金融：潍县 [Finance around the Country: Weifang]." *Jiaohang Tongxun 交行通讯 [Bank of Communications Bulletin]*, 1932.
- "Gedi Shangye Xiguan: Ha'erbin: Liangshi Maoqi Ji Qianshi Maoqi 各地商业习惯：哈行所属：哈尔滨：粮市卿期及钱市卯期 [Commercial Practices around the Country: Ha'erbin Branch: Ha'erbin: Grain Market Maoqi and Money Market Maoqi]." *Jiaotong Yinhang Yuekan 交通银行月刊 [Bank of Communications Monthly]*, 1923.
- "Gedi Shangye Xiguan: Ha'hang Suoshu Heilongjiang Maoqi 各地商业习惯哈行所属黑龙江卯期 [Commercial Practices around the Country: Ha'erbin Branch: Heilongjiang Maoqi]." *Jiaotong Yinhang Yuekan 交通银行月刊 [Bank of Communications Monthly]*, 1923.
- "Gedi Shangye Xiguan: Hanhang Suoshu Changsha Biqi 各地商业习惯汉行所属长涉比期 [Commercial Practices around the Country: Hankou Branch: Hankou: The Changsha Biqi]." *Jiaotong Yinhang Yuekan 交通银行月刊 [Bank of Communications Monthly]*, 1923.

- “Gedi Shangye Xiguan: Hanhang Suoshu Hankou Liang Biqu 各地商业习惯汉行所属汉口两比期 [Commercial Practices around the Country: Hankou Branch: Hankou: The Two Biqu].” *Jiaotong Yinhang Yuekan 交通银行月刊 [Bank of Communications Monthly]*, 1923.
- “Gedi Shangye Xiguan: Jinhang Suoshu: Baotouzhen: Sibiao Baluo 各地商业习惯：津行所属：包头镇：四标八骡 [Commercial Practices around the Country: Tianjin Branch: Baotou: Four Biaoqi and Eight Luoqi].” *Jiaotong Yinhang Yuekan 交通银行月刊 [Bank of Communications Monthly]*, 1923.
- “Gedi Shangye Xiguan: Jinhang Suoshu: Guihua: Biaoqi Luoqi 各地商业习惯：津行所属：归化：标期骡期 [Commercial Practices around the Country: Tianjin Branch: Guihua Biaoqi and Luoqi].” *Jiaotong Yinhang Yuekan 交通银行月刊 [Bank of Communications Monthly]*, 1923.
- Geertz, Clifford. “The Rotating Credit Association: A ‘Middle Rung’ in Development.” *Economic Development and Cultural Change* 10, no. 3 (1962): 241–63.
- Gleeson-White, Jane. *Double Entry: How the Merchants of Venice Created Modern Finance*. 1st American ed. New York: W.W. Norton & Co, 2012.
- Goetzmann, William N. *Money Changes Everything: How Finance Made Civilization Possible*. Princeton, NJ: Princeton University Press, 2017. <https://doi.org/10.1515/9781400888719>.
- Gong Guan 龚关. “Guanfu, Yahang, Yu Jishi: Ming Qing Zhi Minguo Shiqi Huabei Jishi de Shichang Zhidu Fenxi 官府、牙行与集市——明清至民国时期华北集市的制度分析 [Government, Yahang and Fair: An Analysis of Market System on Fair of North China During Ming, Qing and Minguo].” *Tianjin Shangxueyuan Xuebao 天津商学院学报 [Journal of Tianjin University of Commerce]* 1 (January 30, 2001): 18–22.
- Graham, Benjamin, and David L. Dodd. *Security Analysis*. New York: Whittlesey house, McGraw-Hill book company, inc, 1934.
- Guangxu Gazetteer of Yuci County*. Vol. 4, 1885.
- “Guonei Jingji Shiqing: Chongqing Jinrong Jiguan Ji Huobi Zhuangkuang 国内经济事情：重庆金融机关及货币状况 [Domestic Economic Conditions: Chongqing Financial Institutions and Monetary Situation].” *Gongshang Banyue Kan 工商半月刊*, 1930.
- Haar, B. J. ter. *Guan Yu: The Religious Afterlife of a Failed Hero*. First edition. Oxford, United Kingdom: Oxford University Press, 2017.
- . *Ritual and Mythology of the Chinese Triads: Creating an Identity*. Leiden: Brill, 1998.
- Hansen, Valerie, and Ana Mata-Fink. “Records from a Seventh-Century Pawnshop in China.” In *The Origins of Value : The Financial Innovations That Created Modern Capital Markets*,

edited by William N. Goetzmann, K. Geert Rouwenhorst –, Marc van de Mieroop –, Ulrike Malmendier –, Richard von Glahn –, William N. Goetzmann, Elisabeth Koll –, et al., 54–59. Oxford ; New York: Oxford University Press, 2005.

- Harris, Lane Jeremy. “The Post Office and State Formation in Modern China, 1896-1949.” *ProQuest Dissertations and Theses*. Ph.D., University of Illinois at Urbana-Champaign, 2012. ProQuest Dissertations & Theses Global (1426157426).  
<http://proxy.uchicago.edu/login?url=https://www.proquest.com/dissertations-theses/post-office-state-formation-modern-china-1896/docview/1426157426/se-2?accountid=14657>.
- Hayek, Friedrich A. von. *Denationalisation of Money: An Analysis of the Theory and Practice of Concurrent Currencies*. Hobart Papers Special ; 70. London: Institute of Economic Affairs, 1976.
- Hayek, Friedrich A. von, and I. F. Pearce. *Choice in Currency: A Way to Stop Inflation*. Occasional Paper - Institute of Economic Affairs 48. London: Institute of Economic Affairs, 1976.
- He Zhi 何志. “Cong Qingchu Dao Kangri Zhanzheng Qianxi de Huhehaote Shangye 从清初到抗日战争前夕的呼和浩特商业 [Commerce in Hohhot from the Early Qing to the Eve of the War of Resistance].” *Journal of Inner Mongolia University (Philosophy and Social Sciences)* 17 (June 15, 1961): 95–107.
- Henan Sheng (China), and Henan Sheng dang an guan, eds. *Jin Ji Lu Yu Kang Ri Gen Ju Di Cai Jing Shi Liao Xuan Bian. Henan Bu Fen 晋冀鲁豫抗日根据地财经史料选编: 河南部分 [Selected Historical Materials Relating to the Finances and Economics of the Shanxi, Hebei, and Henan Anti-Japanese Revolutionary Base Areas]*. Di 1 ban. Beijing Shi: Dang an chu ban she : Xin hua shu dian Beijing fa xing suo fa xing, 1985.
- Henrich, Joseph Patrick. *The Secret of Our Success: How Culture Is Driving Human Evolution, Domesticating Our Species, and Making Us Smarter*. Princeton: Princeton University Press, 2016.
- Hevener, Christy. “Alternative Financial Vehicles: Rotating Savings and Credit Associations (ROSCAs).” *Federal Reserve Bank of Philadelphia Discussion Paper*, November 2006.
- Hinton, William. *Fanshen: A Documentary of Revolution in a Chinese Village*. Berkeley: University of California Press, 1997.
- Hirata, Koji. “Steel Metropolis: Industrial Manchuria and the Making of Chinese Socialism.” *Enterprise & Society* 21, no. 4 (2020): 875–85. <https://doi.org/10.1017/eso.2020.58>.
- Hong Jialu 洪家禄, ed. *Daming Xian Zhi 大名縣志 [Daming County Gazetteer]*. Daming: s.n, 1934.



- Horesh, Niv. *Chinese Money in Global Context: Historic Junctures between 600 BCE and 2012*. Stanford, California: Stanford University Press, 2013.
- Hosseini, Caroline Shenaz. "Fringe Banking in Canada: A Study of Rotating Savings and Credit Associations (ROSCAs) in Toronto's Inner Suburbs." *Canadian Journal of Nonprofit & Social Economy Research / Revue Canadienne de Recherche Sur Les OSBL et l'économie Sociale* 8, no. 1 (March 2017): 29–43.
- Hsu, Cho-yun. "The Spring and Autumn Period." In *The Cambridge History of Ancient China: From the Origins of Civilization to 221 BC*, edited by Edward L. Shaughnessy and Michael Loewe, 545–86. Cambridge: Cambridge University Press, 1999.  
<https://doi.org/10.1017/CHOL9780521470308.010>.
- Hu Pingxi, and Shanghai Gazetteer Office, eds. "Zhongguo Renmin Yinhang Shanghai Fenheng 中国人民银行上海市分行 [People's Bank of China, Shanghai Branch]." In *Shanghai Finance Gazetteer 上海金融志*. Shanghai: Shanghai China Academy of Social Sciences Press, 2007.  
<http://www.shtong.gov.cn/Newsite/node2/node2245/node75491/node75498/node75567/node75593/userobject1ai92389.html>.
- Huang, Philip C. *Code, Custom, and Legal Practice in China: The Qing and the Republic Compared*. Law, Society, and Culture in China. Stanford, Calif.: Stanford University Press, 2001.
- Huang, Jianhui. *Studies on Ming and Qing Dynasty Shanxi Merchants (明清山西商人研究)*. Di 1 ban. Taiyuan Shi: Shanxi jing ji chu ban she, 2002.
- Huang Jianhui 黄鉴晖, Zhongguo ren min yin hang, and Shanxi cai jing xue yuan, eds. *Shanxi Piao Hao Shi Liao 山西票号史料*. Zeng ding ben, di 1 ban. Taiyuan: Shanxi jing ji chu ban she, 2002.
- Huang, Philip. "Further Thoughts on Eighteenth-Century Britain and China: Rejoinder to Pomeranz's Response to My Critique - ProQuest." Accessed June 5, 2021.  
<https://www.proquest.com/openview/1acaa85d46554d748eaff923daa78c5b/1?pq-origsite=gscholar&cbl=40508>.
- Huang, Philip C. *Chinese Civil Justice, Past and Present*. Asia/Pacific/Perspectives. Lanham, Md.: Rowman & Littlefield, 2010.  
<http://search.ebscohost.com/login.aspx?direct=true&scope=site&db=e000xna&AN=332864>.
- . *The Peasant Economy and Social Change in North China*. Stanford: Stanford University Press, 1985.
- . *The Peasant Family and Rural Development in the Yangzi Delta, 1350-1988*. Stanford: Stanford University Press, 1990.

- Huang, Philip C.C. "County Archives and the Study of Local Social History: Report on a Year's Research in China." *Modern China* 8, no. 1 (January 1, 1982): 133–43.  
<https://doi.org/10.1177/009770048200800104>.
- Huang Shili 黄世礼 and Gu Kunshan 谷昆山. *Chongqing Jinrong 重庆金融 [Chongqing Finance]*. Chongqing: Chongqing chubanshe, 1991.
- Hung, Ho-fung. *The China Boom: Why China Will Not Rule the World*. Contemporary Asia in the World. New York: Columbia University Press, 2016.
- Ingham, Geoffrey. "'The Great Divergence': Max Weber and China's 'Missing Links.'" *Max Weber Studies* 15, no. 2 (2015): 160–91.
- Isaacs, Harold R. *The Tragedy of the Chinese Revolution*. London,: Secker & Warburg, 1938.
- Isett, Christopher Mills. *State, Peasant, and Merchant in Qing Manchuria, 1644-1862*. Stanford, Calif: Stanford University Press, 2007.
- Ji Jinfu 冀锦富. "Jishi Piaohao 'Qianshengheng' Huitong Tianxia 冀氏票号'乾盛亨' 汇通天下 [Ji Family Piaohao 'Qianshengxiang,' Remittances across the Empire]," February 27, 2019.  
<http://jishiwenhua.com/html/xungensuyuan/20190227/1741.html>.
- Ji Zi 季子. *Zhongwai Jinrong Da Cidian 中外金融大辞典 [Chinese and Foreign Finance Dictionary]*. Taipei: Lianjing Press, 2014.
- Jiang Xuekai 蒋学楷. "Shanxi Zhi Jinrongye 山西省之金融業 [The Financial Industry of Shanxi Province]." *Banker's Weekly*, 1936.
- Jin Kaicheng 金开诚. *Pingyao Gucheng 平遥古城 [The Old City of Pingyao]*. Changchun: Jilin wenshi chubanshe, 2010.
- Jinshang shiliao quanlan 晋商史料全览 [Shanxi merchant historical materials]*. Taiyuan: Shanxi renmin chubanshe, 2007.
- Johnson, David G. *Spectacle and Sacrifice: The Ritual Foundations of Village Life in North China*. Harvard East Asian Monographs 315. Cambridge, Mass: Harvard University Asia Center : Distributed by Harvard University Press, 2009.
- Kann, Eduard. *The Currencies of China: An Investigation of Silver & Gold Transactions Affecting China with a Section on Copper*. 2d ed., Rev. London: P.S. King, 1928.
- Kapp, Robert A. *Szechwan and the Chinese Republic; Provincial Militarism and Central Power, 1911-1938*. New Haven,: Yale University Press, 1973.
- Karl, Rebecca E. *Mao Zedong and China in the Twentieth-Century World: A Concise History*. Durham, NC: Duke University Press, 2010.

- Ke, Rongzhu, and Min Ye. “The Practice of Rotating Saving and Credit Associations and Interest Rate Liberalization—A Case Study of Wenzhou.” *The Chinese Economy* 52, no. 2 (March 4, 2019): 155–70. <https://doi.org/10.1080/10971475.2018.1545355>.
- Keiler, Jonas, Christian S. Wirkner, and Stefan Richter. “One Hundred Years of Carcinization – the Evolution of the Crab-like Habitus in Anomura (Arthropoda: Crustacea).” *Biological Journal of the Linnean Society* 121, no. 1 (2017): 200–222. <https://doi.org/10.1093/biolinnean/blw031>.
- Keller, Wolfgang, Carol H. Shiue, and Xin Wang. *Capital Markets in China and Britain, 18th and 19th Century: Evidence from Grain Prices*. NBER Working Paper Series, no. w21349. Cambridge, Mass: National Bureau of Economic Research, 2015.
- King, Frank H. H. *Money and Monetary Policy in China, 1845-1895*. Harvard East Asian Series 19. Cambridge: Harvard University Press, 1965.
- Kirby, William C. “China, Unincorporated: Company Law and Business Enterprise in Twentieth Century China.” *Journal of Asian Studies* 54, no. 1 (1995): 43–63.
- Knapp, Georg Friedrich, Mrs H. M. Lucas, and James Bonar. *The State Theory of Money*. London: Published on behalf of the Royal Economic Society by Macmillan and Co., limited, 1924.
- Kong Xiangyi 孔祥毅. “Biaojū, Biaoqi, Biaoli Yu Zhongguo Beifang Shehui Xinyong 镖局、标期、标利与中国北方社会信用 [Armed Escort, Maturity and Interest Rate for a Deal and the Social Credit System in North China].” *Jinrong Yanjiu 金融研究 [Journal of Financial Research]* 1 (2004): 117–25.
- Kuhn, Philip A. *Rebellion and Its Enemies in Late Imperial China: Militarization and Social Structure, 1796-1864*. Cambridge: Harvard University Press, 1970.
- Kulp, Daniel Harrison. *Country Life in South China: The Sociology of Familism. Volume I: Phenix Village, Kwantung, China*. Taipei: Ch’eng-wen Pub. Co, 1966.
- Kuroda, Akinobu. “Another Monetary Economy : The Case of Traditional China.” In *Asia-Pacific Dynamism 1550 - 2000*, edited by A.J.H. Latham and Heita Kawakatsu, 187–98. New York: Routledge, 2000.
- . “Too Commercialised To Synchronize Currencies: Monetary Peasant Economy in Late Imperial China in Comparison with Contemporary Japan.” In *Session 106*. Helsinki, 2006.
- Lai Xinxia 来新夏, and Hebei Sheng di fang zhi ban gong shi 河北省地方志办公室, eds. *Hebei Di Fang Zhi Ti Yao 河北地方志提要*. Di 1 ban. Tianjin: Tianjin da xue chu ban she, 1992.

- Lamoreaux, Naomi R. *Insider Lending: Banks, Personal Connections, and Economic Development in Industrial New England*. Cambridge [England] ; New York: Cambridge University Press, 1994.
- . *Insider Lending: Banks, Personal Connections, and Economic Development in Industrial New England*. Cambridge [England] ; New York: Cambridge University Press, 1994.
- Law of the People's Republic of China on Negotiable Instruments*. Beijing: Zhongguo fa zhi chu ban she, 2007.
- Lee, James, Cameron Campbell, and Wang Feng. "Positive Check or Chinese Checks?" *The Journal of Asian Studies*, no. 2 (2002): 591.
- Levenson, Alec R., and Timothy Besley. "The Anatomy of an Informal Financial Market: Rosca Participation in Taiwan." *Interamerican Seminar on Macroeconomics* 51, no. 1 (October 1, 1996): 45–68. [https://doi.org/10.1016/S0304-3878\(96\)00425-7](https://doi.org/10.1016/S0304-3878(96)00425-7).
- Levy, Marion. "The Social Background of Modern Business Development in China." In *The Rise of the Modern Chinese Business Class: Two Introductory Essays*, by Marion Levy and Kuo-heng Shih, 1–18. New York: International Secretariat, Institute of Pacific Relations, 1949.
- Lewis, Mark. "Warring States Political History." In *The Cambridge History of Ancient China: From the Origins of Civilization to 221 BC*, edited by Edward L. Shaughnessy and Michael Loewe, 587–650. Cambridge: Cambridge University Press, 1999. <https://doi.org/10.1017/CHOL9780521470308.011>.
- Li Bozhong. "The 'Daoguang Depression' and the 'Guiwei Great Flood': Economic Decline and Climatic Cataclysm in Early Nineteenth-Century Songjiang in a New Perspective." *Etudes Chinoises* 34, no. 2 (2015): 89–119.
- Li, Bozhong, and Jan Luiten van Zanden. "Before the Great Divergence? Comparing the Yangzi Delta and the Netherlands at the Beginning of the Nineteenth Century." *The Journal of Economic History* 72, no. 4 (2012): 956–89.
- Li Chenguang 李晨光. *Jinshang Chalu 晋商茶路 [The Shanxi Merchant Tea Route]*. Taiyuan, Shanxi: Shanxi Chuban Jituan, 2008.
- Li Jinzhang 李锦章. *Jin Shang Lao Zhang 晋商老账 [The Historical Accounts of Shanxi Merchants]*. Beijing di 1 ban. Beijing Shi: Zhonghua shu ju, 2012.
- Li Jiulin 李九林, ed. *Liulinxian Zhi 柳林县志 [Liulin County Gazetteer]*. Haichao Press, 1995.
- Li Lifeng 李利锋, and Zhou Yanqing 周艳清. *Minguo Lulong Xian Zhi Jiao Zhu 民国卢龙县志校注*. Di 1 ban. Beijing Shi: Guang ming ri bao chu ban she, 2019.

- Li Maosheng 李茂盛, and Wang Jin 王谨, eds. “Qixian Qiaojiabao Qiaoshi Jiazu 祁县乔家堡乔氏家族 [The Qiao Family of Qi County’s Qiao Family Compound].” In *Jinzhong Shangye Jiazu 晋中商业家族 [Merchant Families of Jinzhong]*, 115–256. Taiyuan: Sanjin Press, 2019.
- Li Shengqing 李笙清. “Minguo Baibazi Liuxing Tianxie Jinlanpu 民国拜把子流行填写金兰谱 [In the Republic, Calling Cards Often Wrote Oaths of Sworn Brotherhood].” *Southern China Art (中国南方艺术)*, December 25, 2015. <http://www.zgnfys.com/a/nfrw-51882.shtml>.
- Li Yixiang 李一翔. “Zhongguo Jindai Chengshi Fazhan Yu Shehuijingji: 1922-1931 Nian Chongqing Shenhui Shichang de Jiage Biandong Qushi 中国近代城市发展与社会经济: 1922—1931 年重庆申汇市场的价格变动趋势 [Modern Chinese Urban Development and Social Economy: The Direction of Chongqing’s Shanghai Exchange Market Fluctuations, 1922-1931].” In *Zhongguo Jindai Chengshi Fazhan Yu Shehui Jingji 中国近代城市发展与社会经济 [Modern Chinese Urban Development and Social Economy]*, 131–45. Shanghai: Shanghai she hui ke xue yuan chu ban she, 1999.
- Li Zhenzhen 李真真, and Pan Sheng 潘晟. “Wanqing Huabei Xiangcun Shangye Jingying Ji Xiangguan Wenti: Yi Dong’anxian Xiaohuizhuang Sanchenghao Caipu Pancundan Wei Li 晚清华北乡村商业经营及相关问题——以东安县小惠庄三成号材铺盘存单为例 [Commerce and Society in Rural North China in the Late Qing Dynasty: Based on the Sancheng Hao’s Inventory Lists in the Xiaohuizhuang, Dongan County].” *Zhongguo Jingjishi Yanjiu 中国经济史研究 [Researches in Chinese Economic History]* 3 (2019): 58–70.
- Li Zhiguo 李治国. *Qingday Fannbubinli Yanjiu: Yi Menggu Wei Zhongxin 清代藩部宾礼研究——以蒙古为中心 [Research into the Qing-Era Board for the Administration of Outlying Regions’ Rites for Receiving Officials: Centering on Mongolia]*. Neimenggu Daxue chubanshe 内蒙古大学出版社, 2014.
- Liezi, Liming 列子, 力命, n.d. [http://www.shuzhai.org/gushi/liezi/7195\\_2.html](http://www.shuzhai.org/gushi/liezi/7195_2.html).
- Lin Hongzhuang 林红状. “Qingdai Qianqi Yahang Zhidu de Yanbian 清代前期牙行制度的演变 [The Evolution of the Brokerage System in the Early Qing Dynasty].” *Lanzhou Xuekan 兰州学科* 9 (September 15, 2008): 126–29.
- Lin, Manhong. *China Upside down: Currency, Society, and Ideologies, 1808-1856*. Harvard East Asian Monographs 270. Cambridge, Mass: Harvard University Asia Center, 2006.
- Lin Ping 林平. “Wenzhou Nongcun Hehui Huodong de Pouxu 温州农村合会活动的剖析 [An Analysis of Credit Society Activity in Wenzhou Rural].” *Zhejiang Academic Journal (浙江学刊)*, Research Office of Zhejiang Provincial Committee (浙江省委政策研究室), no. 6 (1987).

- Little, Daniel, and Joseph W. Esherick. "Testing the Testers: A Reply to Barbara Sands and Ramon Myers's Critique of G. William Skinner's Regional Systems Approach to China." *The Journal of Asian Studies* 48, no. 1 (1989): 90–99. <https://doi.org/10.2307/2057666>.
- Liu, Andrew B. *Tea War: A History of Capitalism in China and India*. Studies of the Weatherhead East Asian Institute, Columbia University. New Haven: Yale University Press, 2020.
- Liu Kexiang 刘克祥. "Jindai Nongcun Diqu Qianzhuangye de Qiyuan He Xingshuai: Jindai Nongcun Qianzhuangye Tansuo Zhi Yi 近代农村地区钱庄业的起源和兴衰——近代农村钱庄业探索之一 [The Origins, Rise, and Fall of the Modern Rural Qianzhuang Industry in Rural Areas: An Exploration into the Modern Rural Qianzhuang Industry]." *Researches in Chinese Economic History* 2 (2008): 3–16.
- Liu Liben 刘立本, and Fan Weiling 范维令, eds. *Qujia Da Yaun 渠家大院 [Qu Family Compound]*. Taiyuan: Shanxi jingji chubanshe, 2013.
- Liu Qiugen 刘秋根. "15-18 Shiji Zhongguo Zijin Shichang Fayu Shuiping Lici 15—18 世纪中国资金市场发育水平蠡测 [Speculations on the Level of Chinese Capital Market Development between the 15th and 18th Century]." *Renwen Zazhi 人文杂志 [The Journal of Humanities]*, no. 1 (2008): 160–69.
- . *Zhongguo Dian Dang Zhi Du Shi 中国典当制度史 [The Institutional History of Chinese Pawnbrokers]*. Di 1 ban. Shanghai: Shanghai gu ji chu ban she : Xin hua shu dian Shanghai fa xing suo fa xing, 1995.
- . *Zhongguo Gu Dai He Huo Zhi Chu Tan 中国古代合伙制初探 [An Exploration of Ancient Chinese Partnership Forms]*. Beijing: Ren min chu ban she, 2007.
- Liu Xiaohang 刘晓航. *Chuanyue Wanli Chalu 穿越万里茶路 [Traversing the 10,000 Li Tea Route]*. Wuhan: Wuhan University Press, 2015.
- Liu Xinlong 刘新龙. "Wanqing Fenxian Shanghao Zhanquanyong Tudi Jingying Yanjiu 晚清沁县商号漳泉湧土地经营研究 [Research on the Land Management of Zhangquanyong in Qinxian County in Late Qing Dynasty]." *Gujin Nongye 古今农业 [Ancient and Modern Agriculture]*, no. 3 (2019): 79–88.
- Liu Zhiying 刘志英. "Jindai Shanghai Yu Xi'nan Diqu de Jinrong Hudong 近代上海与西南地区的金融互动 [Financial Interaction between Shanghai and Southwest China in Modern Times]." *Lishi Jiaoxue 历史教学 [History Teaching]*, no. 6 (2017): 18–26.
- Lou Min 娄敏. "Jindai Zhongguo Changjiang Shangyou Diqu de Shangye Xingyong Piaoju: Yi Baxian Yu Jiangjin Wei Li 近代中国长江上游地区的商业信用票据:以巴县与江津为例 [Modern Chinese Commercial Bills in the Upper Yangzi: A Case Study of Ba County and

- Jiangjin].” *Zhongguo Jingjishi Yanjiu* 中国经济史研究 [*Researches in Chinese Economic History*], no. 6 (2020): 118–32.
- . “‘Youxian’ Yu ‘Wuxian’ Zhijian: Tanhuan Guize de Changzhai Luoji: Yi Jiangjinxian Zhaiwulei Sifa Dang’an Wei Zhongxin ‘有限’与‘无限’之间: 摊还规则的偿债逻辑\* ——以江津县债务类司法档案为中心 [Between ‘limited’ and ‘Unlimited’: The Rules and Logic of Repaying in Installments. A Case Study Using Legal Cases of Jiangjin County Debt].” *Zhongguo Jingjishi Yanjiu* 中国经济史研究 [*Researches in Chinese Economic History*], no. 2 (March 2018): 66–81.
- Lowenstein, Matthew. “Return to the Cage: Monetary Policy in China’s First Five-Year Plan.” *Twentieth-Century China* 44, no. 1 (January 1, 2019): 53–74.
- Lowenstein, Matthew, and Cao Shuji. “Double, Double, Debit and Credit: Double-Entry Bookkeeping in Late Imperial China,” Unpublished.
- Lu Xun. “Preface.” In *Call to Arms*. Beijing: Foreign Languages Press, Marxists Internet Archive, 1972.
- Luo Yingxiang 羅映湘, and Xie Kailai 謝開來. *Minguo Chong Xiu Guangyuan Xian Zhi Gao: 28 Juan 民國重修廣元縣志稿* [*Republican-Era Edited Guangyuan County Gazetteer*]. Chengdu: Ba Shu shu she, 2013.
- Ma, Debin. “Between Cottage and Factory: The Evolution of Chinese and Japanese Silk-Reeling Industries in the Latter Half of the Nineteenth Century.” *Journal of the Asia Pacific Economy* 10 (January 1, 2005): 195–213.
- . “Economic Growth in the Lower Yangzi Region of China in 1911–1937: A Quantitative and Historical Analysis.” LSE Research Online Documents on Economics. London School of Economics and Political Science, LSE Library, May 2008. <https://ideas.repec.org/p/ehl/lserod/32398.html>.
- . “Financial Revolution in Republican China During 1900–37: A Survey and a New Interpretation.” *Australian Economic History Review* 59, no. 3 (November 1, 2019): 242–62. <https://doi.org/10.1111/aehr.12173>.
- . “State Capacity and Great Divergence, the Case of Qing China (1644–1911).” *Eurasian Geography and Economics* 54, no. 5–6 (December 1, 2013): 484–99. <https://doi.org/10.1080/15387216.2014.907530>.
- Ma, Debin, and Jared Rubin. “The Paradox of Power: Understanding Fiscal Capacity in Qing China, 1644–1911,” London School of Economics and Political Science Economic History Working Papers, no. 261/2017 (March 2017).

- Ma, Debin, and Liuyan Zhao. "A Silver Transformation: Chinese Monetary Integration in Times of Political Disintegration, 1898–1933†." *Economic History Review* 73, no. 2 (May 2020): 513–39.
- Ma Jianhua 马建华, and Wang Yuru 王玉茹. "Jindai Zhongguo Guonei Huidui Shichang Chutan 近代中国国内汇兑市场初探 [A Preliminary Study of the Domestic Bill Market in Modern China]." *Jindaishi Yanjiu 近代史研究 [Modern Chinese History Studies]*, no. 6 (November 2013): 114–25.
- Ma Shaohua 马绍华. "Qixian Mxing Jinshangjia de Gushi 祁县马姓晋商家的故事 [The Qi County Ma's: A Story of a Shanxi Merchant Family]." Blog. *Chunyi Tang 纯一堂* (blog), February 17, 2012. [http://blog.sina.com.cn/s/blog\\_9c4b8a53010101bk.html](http://blog.sina.com.cn/s/blog_9c4b8a53010101bk.html).
- Mann, Susan. "Brokers as Entrepreneurs in Presocialist China." *Comparative Studies in Society and History* 26, no. 4 (1984): 614–36.
- . "Finance in Ningpo: The 'Ch'ien Chuang,' 1750-1880." In *Economic Organization in Chinese Society*, edited by W. E. Wilmott, 47–77. Stanford: Stanford University Press, 1972.
- Marx, Karl. "Chapter Twenty-Six: The Secret of Primitive Accumulation." In *Capital: A Critique of Political Economy*, 1867. <https://www.marxists.org/archive/marx/works/1867-c1/index.htm>.
- McCloskey, Deirdre N. *The Bourgeois Virtues: Ethics for an Age of Commerce*. Chicago: University of Chicago Press, 2006.
- . *The Bourgeois Virtues: Ethics for an Age of Commerce*. Paperback ed. Chicago, Ill: University of Chicago Press, 2007.
- McDermott, Joseph Peter. *The Making of a New Rural Order in South China*. Cambridge: Cambridge University Press, 2013.
- McElderry, Andrea Lee. *Shanghai Old-Style Banks (Ch'ien-Chuang), 1800-1935: A Traditional Institution in a Changing Society*. Michigan Papers in Chinese Studies, no. 25. Ann Arbor: Center for Chinese Studies, University of Michigan, 1976.
- Meng Nan 孟楠, and Meng Wei 孟伟. "Cong Guangzhou Dao Shanghai: Yincang Zai Minjian Wenxianzhong de Qingdai Zhongguo Jinrong Guanlian Yu Bianqian: Yi 'Guangxu Shisi Nian Dongyue Jili Wechanghou Piaohao Shanghai Fenhao Tongnian Jiezhang' Wei Zhongdian Shizheng 从广州到上海：隐藏在民间文献中的清代中国金融关联与变迁——以《光绪十四年冬月吉立·蔚长厚票号上海分号通年结账》为重点的实证 [From Guangzhou to Shanghai, Using Popular Materials to Uncover Qing-Era Financial Connections and Changes: A Case Study of Weichanghou's Yearly Accountbook]," Unpublished.



- Miller, Ian Matthew. *Fir and Empire: The Transformation of Forests in Early Modern China*. Weyerhaeuser Environmental Books. Seattle: University of Washington Press, 2020.
- Millward, James A. *Beyond the Pass: Economy, Ethnicity, and Empire in Qing Central Asia, 1759-1864*. Stanford: Stanford University Press, 1998.
- Mokyr, Joel. *The Gifts of Athena Historical Origins of the Knowledge Economy*. Edited by Joel Mokyr. Princeton N.J.: Princeton University Press, 2005.  
<http://search.ebscohost.com/login.aspx?direct=true&scope=site&db=e000xna&AN=403673>.
- Morck, Randall, and Fan Yang. *The Shanxi Banks*. NBER Working Paper Series, no. w15884. Cambridge, Mass: National Bureau of Economic Research, 2010.
- Morgan, J. Pierpont, Samuel Untermyer, United States., Congress., House., and Committee on Banking and Currency. *Testimony of J.P. Morgan before the Bank and Currency Committee of the House of Representatives, at Washington, D.C., Appointed for the Purpose of Investigating an Alleged Money Trust in "Wall Street."* [New York: [Printed by Mail and Express Print. Co.], 1912.
- Murray, Dian. "Migration, Protection, and Racketeering: The Spread of the Tiandihui within China." In *"Secret Societies" Reconsidered: Perspectives on the Social History of Modern South China and Southeast Asia, 177–89*. Armonk, NY: ME Sharpe, 1993.
- . *The Origins of the Tiandihui: The Chinese Triads in Legend and History*. Edited by Baoqi Qin. Stanford: Stanford University Press, 1994.
- Neal, L. "How It All Began: The Monetary and Financial Architecture of Europe during the First Global Capital Markets, 1648-1815." *Financial History Review*. Great Britain: CAMBRIDGE UNIVERSITY PRESS, 2000. British Library Document Supply Centre Inside Serials & Conference Proceedings.
- Neal, Larry. *The Rise of Financial Capitalism: International Capital Markets in the Age of Reason*. Studies in Monetary and Financial History. Cambridge [England] ; New York: Cambridge University Press, 1990.
- North, Douglass, and Robert Paul Thomas. *The Rise of the Western World: A New Economic History*. Cambridge: Cambridge University Press, 1973.
- Odedokun, M.O. "Alternative Econometric Approaches for Analysing the Role of the Financial Sector in Economic Growth: Time-Series Evidence from LDCs." *Journal of Development Economics* 50, no. 1 (June 1, 1996): 119–46. [https://doi.org/10.1016/0304-3878\(96\)00006-5](https://doi.org/10.1016/0304-3878(96)00006-5).
- Oi, Jean Chun. *Rural China Takes off: Institutional Foundations of Economic Reform*. Berkeley: University of California Press, 1999.

- Palma, Nuno Pedro G., and Liuyan Zhao. "The Efficiency of the Chinese Silver Standard, 1920-33." C.E.P.R. Discussion Papers, 2020. <https://ideas.repec.org/p/cpr/ceprdp/14860.html>.
- Pan, Ming-te. "Rural Credit in Ming-Qing Jiangnan and the Concept of Peasant Petty Commodity Production." *The Journal of Asian Studies* 55, no. 1 (1996): 94–117. <https://doi.org/10.2307/2943638>.
- . "Rural Credit Market and the Peasant Economy (1600-1949): The State, Elite, Peasant and 'Usury.'" *ProQuest Dissertations and Theses*. Ph.D., University of California, Irvine, 1994. ProQuest Dissertations & Theses Global (304081530). <https://search.proquest.com/docview/304081530?accountid=14657>.
- Peng Jinshan 彭金山. *Gaoyuan Jingshui Jian de Xianzhou Wenhua 高原泾水间的先周文化 [Early Zhou Culture in the Jingshui Plateau]*. Gansu Jiaoyu Chubanshe, 2014.
- Peng, Xinwei. *A Monetary History of China*. Ed. 1.0. East Asian Research Aids and Translations, v. 5. Bellingham, WA: Western Washington, 1994.
- People's Bank of China, ed. *Shanghai Qian Zhuang Shi Liao*. 1st ed. Shanghai: Shanghai ren min chu ban she : Xin hua shu dian Shanghai fa xing suo fa xing, 1961.
- Perdue, Peter C. *China Marches West: The Qing Conquest of Central Eurasia*. Cambridge: Harvard University Press, 2005.
- . "The Qing State and the Gansu Grain Market, 1739-1864." *Rawski, Thomas G.; Li, Lillian M., Eds. Chinese History in Economic Perspective*. Berkeley: University of California Press, 1992. 362p., January 1, 1992, 100–125.
- Pettis, Michael. *Avoiding the Fall: China's Economic Restructuring*. Washington, D.C: Carnegie Endowment for International Peace, 2013.
- . "Monetary Policy Under Financial Repression." Carnegie Endowment for International Peace, December 20, 2013. <https://carnegieendowment.org/2013/12/20/monetary-policy-under-financial-repression-pub-54008>.
- Pomeranz, Kenneth. "Is There an East Asian Development Path? Long-Term Comparisons, Constraints, and Continuities." *Journal of the Economic and Social History of the Orient* 44, no. 3 (2001): 322–62.
- . *The Great Divergence: Europe, China, and the Making of the Modern World Economy*. The Princeton Economic History of the Western World. Princeton, N.J: Princeton University Press, 2000.
- . *The Making of a Hinterland: State, Society, and Economy in Inland North China, 1853-1937*. Berkeley: University of California Press, 1993.

- . “‘Traditional’ Chinese Business Forms Revisited: Family, Firm, and Financing in the History of the Yutang Company of Jining, 1779–1956.” *Late Imperial China* 18, no. 1 (1997): 1–38. <https://doi.org/10.1353/late.1997.0008>.
- . “‘Traditional’ Chinese Business Forms Revisited: Family, Firm, and Financing in the History of the Yutang Company of Jining, 1779–1956” 18, no. 1 (1997): 1–38. <https://doi.org/10.1353/late.1997.0008>.
- Porter, Theodore M. *Trust in Numbers: The Pursuit of Objectivity in Science and Public Life*. Princeton, N.J: Princeton University Press, 1995.
- Qiao, George. “The Rise of Shanxi Merchants Empire, Institutions, and Social Change in Qing China, 1688-1850.” Ph.D., Stanford, 2017. <http://purl.stanford.edu/bg803zm7823>.
- Qiao Nan 乔南. “Qingdai Shanxi Shangren Xingshang Diyu Fanwei Yanjiu 清代山西商人行商地域范围研究 [A Research in the Domain Where Shanxi Merchants Took Their Commercial Activities in the Qing Dynasty].” *Jinyang Xuekan 晋阳学刊 [Academic Journal of Jinyang]*, no. 2 (2008): 36–40.
- Qin Yiya 秦宜雅, Huang Yiji 黄伊基, and Li Changxin 李昌忻 Li Changxin, eds. *Sichuanshengzhi Jinrongzhi 四川省志 金融志 [Sichuan Finance Gazetteer]*. Chengdu: Sichuan Cishu chubanshe, 1996.
- Modern History Database, Modern History Institute of Academia Sinica. “Qingdai Liangjia Ziliaoku 清代粮价资料库 [Database of Qing Dynasty Grain Prices].” Database, n.d. <http://mhdb.mh.sinica.edu.tw/databaseinfo.php?b=006>.
- Qinhuangdao Shi di fang zhi bian zuan wei yuan hui 秦皇岛市地方志编撰委员会, ed. *Qinhuangdao Shi Zhi Di Wu Juan 秦皇岛市志 第五卷 [Qinhuangdao Municipal Gazetteer: Volume 5]*. Electronic resource. Hebei: Tian jin ren min chu ban she, 1994. <http://c.wanfangdata.com.cn/LocalChronicle-FZ011865.aspx>.
- Qu, Tongzu. *Local Government in China under the Ch’ing*. Harvard East Asian Studies 9. Cambridge, Mass: Harvard University Press, 1962.
- Quan, Hansheng, and Richard A. Kraus. *Mid-Ch’ing Rice Markets and Trade: An Essay in Price History*. Harvard East Asian Monographs 54. Cambridge, Mass: East Asian Research Center, Harvard University : distributed by Harvard University Press, 1975.
- Rawski, Thomas G. *Economic Growth in Prewar China*. Berkeley: University of California Press, 1989.
- Reed, Bradley Ward. *Talons and Teeth: County Clerks and Runners in the Qing Dynasty*. Stanford: Stanford University Press, 2000.

- Richard von Glahn. "Economic Depression and the Silver Question in Nineteenth-Century China." *Global History and New Polycentric Approaches : Europe, Asia and the Americas in a World Network System*, Palgrave Studies in Comparative Global History, 2017, 81. [https://doi.org/10.1007/978-981-10-4053-5\\_5](https://doi.org/10.1007/978-981-10-4053-5_5).
- Riskin, Carl. *China's Political Economy: The Quest for Development since 1949*. Economies of the World. Oxford [Oxfordshire] ; New York: Oxford University Press, 1987.
- . "Surplus and Stagnation in Modern China." In *China's Modern Economy in Historical Perspective: Sponsored by the Social Science Research Council*, edited by Dwight H. Perkins, Gang Zhao, and Social Science Research Council (U.S.), 49–84. Stanford, Calif: Stanford University Press, 1975.
- Rithmire, Meg E. *Land Bargains and Chinese Capitalism: The Politics of Property Rights under Reform*. New York, NY: Cambridge University Press, 2015.
- Roover, Florence Edler de. "Early Examples of Marine Insurance." *The Journal of Economic History* 5, no. 2 (1945): 172–200.
- Rosenthal, Jean-Laurent, and Roy Bin Wong. *Before and beyond Divergence: The Politics of Economic Change in China and Europe*. Cambridge: Harvard University Press, 2011.
- Sands, Barbara, and Ramon Myers. "Economics and Macregions: A Reply to Our Critics." *The Journal of Asian Studies* 49, no. 2 (1990): 344–46. <https://doi.org/10.2307/2057301>.
- Sands, Barbara, and Ramon H. Myers. "The Spatial Approach to Chinese History: A Test." *The Journal of Asian Studies* 45, no. 4 (1986): 721–43. <https://doi.org/10.2307/2056084>.
- Selgin, George. "Free Banking in Foochow." In *The Experience of Free Banking*, edited by Kevin Dowd. New York: Routledge, 1992.
- Shanxi Chonghe wenhua 山西崇和文化. "Wenshui Hejia Yu Qixian Qujia de Youyuan 文水贺家与祁县渠家的渊源 [The Wenshui He Family and the Origins of the Qi County Qu Family]." *Kuaibao.Qq.Com*, May 23, 2019. <https://kuaibao.qq.com/s/20190523A04P3100?refer=spider>.
- Shanxi People's Political Consultative Conference, ed. *Jin Shang Shi Liao Quan Lan*. Commercial Townships. Taiyuan : Shanxi ren min chu ban she, 2007.
- Shanxi Sheng Jin shang wen hua ji jin hui. *Necessary Knowledge for Trade (交易须知)*. Taiyuan: San Jin chu ban she, 2013.
- Shanxi Zhengxie Jinshang Shiliao Quanlan Jinzhong Juan 山西省政协《晋商史料全览》编辑委员会. *Jinshang Shiliao Quanlan Jinzhong Edition 晋商史料全览 晋中卷 [Shanxi Merchant Historical Materials, Jinzhong Volume]*. Taiyuan, Shanxi: Shanxi People's Press, 2006.

Shanxisheng jinshang wenhua jijinhui 山西省晋商文化基金会, ed. *Jinzhong Shangye Jiazu* 晋中商业家族 [*Merchant Families of Jinzhong*]. Taiyuan, Shanxi: Sanjin chubanshe, 2019.

Shanxisheng Zhengxie “Jinshang shiliao quanlan” bianji weiyuanhui 山西省政协《晋商史料全览》编辑委员会, ed. *Jinshang Shiliao Quanlan Yangquan Juan* 晋商史料全览 阳泉卷 [*Shanxi Merchant Historical Materials, Yangquan Volume*]. Taiyuan, Shanxi: Shanxi renmin chubanshe, 2006.

Sheehan, Brett. *Industrial Eden: A Chinese Capitalist Vision*. Cambridge, Massachusetts: Harvard University Press, 2015. <https://doi.org/10.4159/9780674287167>.

———. *Trust in Troubled Times: Money, Banks, and State-Society Relations in Republican Tianjin*. Cambridge, Mass: Harvard University Press, 2003.

Shen Zhihe 沈致和. “Biaohui Zhi Yanjiu 标会之研究 [Research on Bidding Societies].” *Shang Zhuan Yuekan* 商专月刊, 1937.

Shi Ruomin 史若民. *Ping, Qi, Tai Jing Ji She Hui Shi Liao Yu Yan Jiu* 平、祁、太经济社会史料与研究 [*Pingyao, Qixian, and Taigu Economic and Social Historical Materials and Research*]. Edited by Niu Bailin 牛白琳. Di 1 ban. Taiyuan: Shanxi gu ji chu ban she, 2002.

Shi Tao 石涛. “Huidui, Jiesuan Yu Touji: Jindai Shenhui Wenti Tansuo 汇兑、结算与投机: 近代申汇问题探析 [Remittances, Settlement, and Speculation: An Inquiry into the Modern Shanghai Exchange Problem].” *Shehui Kexue Jikan* 社会科学辑刊 *Social Science Journal* 0, no. 3 (2008): 145–49.

Shih, Kuo-heng. “The Early Development of the Modern Chinese Business Class.” In *The Rise of the Modern Chinese Business Class: Two Introductory Essays*, by Marion Levy and Kuo-heng Shih, 19–56. New York: International Secretariat, Institute of Pacific Relations, 1949.

“Shiju jinzhang zhong zhi gebu jinrong shikuang (si): Guiyuang: yupiao fanghai shangye jinrong 時局緊張中之各埠金融市況 (四)：貴陽：渝票妨害商業金融 [Financial markets in each port during these strained times (4): Guiyang: Chongqing notes harm commerce and finance].” *Yinhang yuekan* 銀行月刊 [*The bankers’ magazine*], 1924.

Shiroyama, Tomoko. *China during the Great Depression: Market, State, and the World Economy, 1929-1937*. Harvard East Asian Monographs 294. Cambridge, Mass: Harvard University Asia Center : Distributed by Harvard University Press, 2008.

Shiue, Carol, and Wolfgang Keller. “Capital Markets and Colonial Institutions in China,” January 2014. [http://allucgroup.ucdavis.edu/uploads/5/6/8/7/56877229/keller\\_and\\_shiue\\_capital\\_markets\\_and\\_treaty\\_port\\_institutions\\_january\\_30\\_2014.pdf](http://allucgroup.ucdavis.edu/uploads/5/6/8/7/56877229/keller_and_shiue_capital_markets_and_treaty_port_institutions_january_30_2014.pdf).

- Silver, Beverly J., and Giovanni Arrighi. "Capitalism and World (Dis)Order." *Review of International Studies* 27 (December 1, 2001): 257–79. <https://doi.org/10.2307/45299513>.
- Sima, Qian. "Records of the Grand Historian of China." *ACLS Humanities E-Book*, Records of civilization, sources and studies no. 65, 2 (1971).
- Skinner, G. William. *Marketing and Social Structure in Rural China*. Ann Arbor: Association for Asian Studies, 1974.
- . "Marketing and Social Structure in Rural China: Part I." *The Journal of Asian Studies* 24, no. 1 (1964): 3–43. <https://doi.org/10.2307/2050412>.
- . "Marketing and Social Structure in Rural China: Part I." *The Journal of Asian Studies* 24, no. 1 (1964): 3–43. <https://doi.org/10.2307/2050412>.
- Skinner, William. "Regional Urbanization in Nineteenth-Century China." In *The City in Late Imperial China*, edited by G. William Skinner and Hugh D. R. Baker, 211–49. Studies in Chinese Society. Stanford, Calif: Stanford University Press, 1977.
- Sombart, Werner. "Medieval and Modern Commercial Enterprise." In *Enterprise and Secular Change: Readings in Economic History*, edited by Frederic Chapin Lane, 25–40. Homewood, Ill: R. D. Irwin, 1953.
- Sommer, Matthew Harvey. *Polyandry and Wife-Selling in Qing Dynasty China : Survival Strategies and Judicial Interventions*. Oakland, California: University of California Press, 2015.  
<http://proxy.uchicago.edu/login?url=http://search.ebscohost.com/login.aspx?direct=true&db=e000xna&AN=1020326&site=eds-live&scope=site>.
- . *Sex, Law, and Society in Late Imperial China*. Stanford: Stanford University Press, 2000.
- . *Sex, Law, and Society in Late Imperial China*. Law, Society, and Culture in China. Stanford, Calif: Stanford University Press, 2000.
- Song, Houze. "Provincial Snapshot—Liaoning: A Microcosm of Broader Policy Failures in Tackling China's State Sector Debt." *Macropolo*, December 12, 2017.  
<https://macropolo.org/analysis/provincial-snapshot-liaoning-a-microcosm-of-broader-policy-failures-in-tackling-chinas-state-sector-debt/>.
- Soto, Hernando de. *The Mystery of Capital: Why Capitalism Triumphs in the West and Fails Everywhere Else*. New York: Basic Books, 2000.
- Stoffle, Brent W., Richard W. Stoffle, Jessica Minnis, and Kathleen Van Vlack. "Women's Power and Community Resilience: Rotating Savings and Credit Associations in Barbados and the Bahamas." *Caribbean Studies* 42, no. 1 (2014): 45–69.

- Sugihara, Kaoru. "The East Asian Path of Economic Development: A Long-Term Perspective." In *The Resurgence of East Asia: 500, 150 and 50 Year Perspectives*, edited by Giovanni Arrighi. Asia's Transformations. London: Routledge, 2003.  
<http://proxy.uchicago.edu/login?url=https://search.ebscohost.com/login.aspx?direct=true&db=e000xna&AN=105290&site=ehost-live&scope=site>.
- Suiyuan tong zhi guan, ed. *Suiyuan Tong Zhi Gao* ("Draft Suiyuan Gazetteer"). Di ban. Huhehaote Shi: Nei Menggu ren min chu ban she, 2007.
- Tang Haiyun 唐海雲, and Li Peiqing 李培清, eds. (*Minguo*) *Gulang Xian Zhi* (民國) 古浪縣志. Electronic resource. Beijing Shi: Beijing Shi: Beijing Ai ru sheng shu zi hua ji shu yan jiu zhong xin, 2013. <http://server.wenzibase.com>.
- Tawney, R. H. "Introduction." In *Agrarian China: Selected Source Materials from Chinese Authors*, edited by Institute of Pacific Relations, x–xviii. London: G. Allen & Unwin, 1939.
- . *Land and Labour in China*. London: G. Allen & Unwin Ltd, 1932.
- Terada, Takanobu. *Shanxi Shangren Yanjiu* (山西商人研究). Translated by Zhang Zhengming. Tōyō Shi Kenkyū Sōkan 25. Taiyuan: Shanxi People's Press, 1986.
- Tian, Ye, and Richard W. Wilson. "Commercial Development and the Evolution of Political Cultures: Ming/Qing China and 17th Century England." *East Asia* 19, no. 3 (September 1, 2001): 147–80. <https://doi.org/10.1007/s12140-001-0013-1>.
- Timberlake, Richard H. "Private Production of Scrip-Money in the Isolated Community." *Journal of Money, Credit and Banking* 19, no. 4 (1987): 437–47.  
<https://doi.org/10.2307/1992612>.
- . "The Significance of Unaccounted Currencies." *The Journal of Economic History* 41, no. 4 (1981): 853–66.
- Timothy Besley, Stephen Coate, and Glenn Loury. "Rotating Savings and Credit Associations, Credit Markets and Efficiency." *The Review of Economic Studies* 61, no. 4 (October 1, 1994): 701–19.
- . "The Economics of Rotating Savings and Credit Associations." *The American Economic Review* 83, no. 4 (September 1, 1993): 792–810.
- Tsai, Kellee. "Banquet Banking: Gender and Rotating Savings and Credit Associations in South China." *The China Quarterly*, no. 161 (2000): 142–70.
- Tsai, Kellee S. "Financial Innovation and Regulation in Wenzhou." In *Back-Alley Banking: Private Entrepreneurs in China*, 120–65. Ithaca: Cornell University Press, 2002.

- Von Glahn, Richard. "Cycles of Silver in Chinese Monetary History." In *The Economy of Lower Yangzi Delta in Late Imperial China: Connecting Money, Markets, and Institutions*, edited by Billy K. L. So, 50–151. New York: Routledge, 2013.
- . *The Sinister Way: The Divine and the Demonic in Chinese Religious Culture*. Berkeley: University of California Press, 2004.
- Wang Jinding 王金钉, and Wang Rujie 王儒杰. *Zhongguo Lishi Jingsheng Shihaiougouchen 中国历史静升史海钩沉 [Delving Deeply into the Waters of Chinese History]*. Dongfang Chubanshe, n.d.
- Wang Jing 王静. *Gufeng Shilvue (古丰识略)*. Nei Menggu ren min chu ban she, 2017.
- Wang, Jinping. *In the Wake of the Mongols: The Making of a New Social Order in North China, 1200-1600*. Harvard-Yenching Institute Monograph Series 116. Cambridge, Massachusetts: Published by the Harvard University Asia Center, 2018.
- Wang, Luman. *Chinese Hinterland Capitalism and Shanxi Piaohao: Banking, State, and Family, 1720-1910*. London: Routledge, 2021.
- . "Money and Trade, Hinterland and Coast, Empire and Nation-State: An Unusual History of Shanxi Piaohao, 1820-1930." *ProQuest Dissertations and Theses*. Ph.D., University of Southern California, 2014. ProQuest Dissertations & Theses Global (1638195959). <https://search.proquest.com/docview/1638195959?accountid=14657>.
- Wang Yan 王岩, and Li Jiehui 李杰辉. "Biaohui Tourongzi Xiaolv, Fengkong He Cunxu Kongjian Tansuo: Jiyou Hui'anxian Wuge Biaohui Dian de Yanjiu Shishi Fang'an 标会投融资效率、风控和存续空间探索——基于惠安县五个标会点的调研实施方案 [ROSCA Investment and Financing Efficiency, Risk Control and Existing Space Exploration——Based on the Investigation and Implementation of Five Standard Meeting Points in Huian County]." *Fujian Jinrong Guanli Ganbu Xueyuan Xuebao 福建金融管理干部学院学报 [Journal of Fujian Institute of Financial Administrators]*, no. 2 (2017).
- Wang Yan 王昉, Yan Hongzhong 燕红忠, and Gao Yu 高宇. "Wanqing Quyu Huobi Shichang Fazhan Yanjiu: Yi Yingkou 'Guoluyin' Wei Zhongxin 晚清区域货币市场发展研究——以营口'过炉银'为中心 [The Development of Currency Market Regionalization in the Late Qing: A Study of Yingkou 'Guoluyin']." *Historical Research (历史研究)*, no. 3 (2016).
- Wang, Yeh-chien. "Secular Trends of Rice Prices in the Yangzi Delta, 1638-1935." *Rawski, Thomas G.; Li, Lillian M., Eds. Chinese History in Economic Perspective*. Berkeley: University of California Press, 1992. 362p., January 1, 1992, 35–68.
- Wang, Yi. "Irrigation, Commercialization, and Social Change in Nineteenth-Century Inner Mongolia\*." *International Review of Social History* 59, no. 2 (August 2014): 215–46. <https://doi.org/10.1017/S0020859014000133>.



- Wang Yidian 王夷典. “Guanyu Jinshang Biaoqi Zhidu de Jige Wenti He Xianshi Qishi 关于晋商标期制度的几个问题和现实启示 [Several Questions and Empirical Revelations about the Shanxi Merchant Biaoqi System].” *Jinzhong Xueyuan Xuebao 晋中学院学报 [Journal of Jinzhong University]* 25, no. 5 (October 2008): 29–32.
- Wang Yuan 王媛. “Yi Ge Jiating Daiji Fenjiazhong de Fangjian Fenpei Shi: Yi Shicang Queshi Fenjiashu (1750-1926) Wei Zhongxin 一个家庭代际分家中的房间分配史--以石仓阙氏分家书(1750-1926)为中心 [A Study of the Family Room Division Based on Clan Que’s Family Division Book, 1750-1926].” *Shanghai Jiao Tong Daxue Xuebao (Zhexue Shehui Kexue Ban) 上海交通大学学报 (哲学社会科学版) [Journal of Shanghai Jiaotong University (Philosophy and Social Sciences)]* 25, no. 3 (May 2017): 109–16.
- Wang Yukun 王玉坤, and Liu Daosheng 刘道胜. “Qingchao Zhi Minguo Shiqi Huizhou Qianhui Lilv Ji Yunzuo Jizhi Kaocha: Jiyu 89 Fen Huizhou Qianhui Wenshu de Kaocha 清朝至民国时期徽州钱会利率及运作机制考述 ——基于 89 份徽州钱会文书的考察 [On the Interest Rate and Operation Mechanism of ROSCA in Huizhou from the Qing Dynasty to Republic of China: Analysis Base on 89 Folk Documents of Huizhou].” *Anhui Shixue 安徽史学 [Historical Research in Anhui]*, no. 4 (2017).
- Wang Yun 王云. “Ming-Qing Shiqi Shandong de Shansha’an Shangren 明清时期山东的山陕商人 [The Ming- and Qing-Era Shan-Shaan Merchants of Shandong].” *Dongyue Luncong 东岳论丛 [Dong Yue Tribune]* 24, no. 2 (2003): 102–5.
- Wang Zhiyuan 王支援, and Shang Yourong 尚幼荣, eds. *Guzhi Shiyi 故纸拾遗 [Collection of Old Materials]*. Vol. 2. Luoyang, Henan Province: Sanqin Press, n.d.
- Wang Zhongliang 王中良, and Yang Xiaomin 杨小敏. “Xin Faxian de Jinshang Hengyudian Wanglai Xingao de Zhengli Ji Yanjiu Jiazhi 新发现的晋商恒裕典往来信稿的整理及研究价值 [Collation and Research Value of the Newly Discovered Hengyu Pawnshops’ Letters of Jin-Merchants].” *Shanxi Dang’an 山西档案*, no. 4 (2016).
- Wang Ziqi 王子琪. *Kai Zhang 开账 [Keeping Accounts]*. Rong bao zhai chu ban she, 2018.
- Watson, James L. “Chinese Kinship Reconsidered: Anthropological Perspectives on Historical Research.” *The China Quarterly*, no. 92 (1982): 589–622.
- Weber, Max. *General Economic History*. Translated by Frank H. Knight. Glencoe, Ill: Free Press, 1950.
- Wittfogel, Karl August. *Oriental Despotism: A Comparative Study of Total Power*. New York: Vintage Books, 1981.

- Wolfgang Keller and Carol H. Shiue. "China's Foreign Trade and Investment, 1800-1950." National Bureau of Economic Research, Inc, 2020.  
<https://ideas.repec.org/p/nbr/nberwo/27558.html>.
- Wong, Roy Bin. *China Transformed: Historical Change and the Limits of European Experience*. Ithaca: Cornell University Press, 1997.
- Wu, Meng. "How Did the Chinese Shanxi Merchants Determine the Remittance Fees? Micro Firm Analysis of Rishengchang Piaohao." *Frontiers of Economics in China* 13, no. 3 (September 2018): 484–504.
- . "How Did the Chinese Shanxi Merchants Determine the Remittance Fees? Micro Firm Analysis of Rishengchang Piaohao." *Frontiers of Economics in China* 13, no. 3 (September 2018): 484–504.
- . "Traditions and Innovations: An Exploration of the Governance Structure, Business Strategy and Historical Development of the Chinese Shanxi Piaohao, 1820s to 1930s." Ph.D. Dissertation, The London School of Economics and Political Science (LSE), 2016.  
<http://etheses.lse.ac.uk/3415/>.
- Wu, Xiaoyu, and Teresa D. Hutchins. "Immigrants Financing Immigrants: A Case Study of a Chinese-American Rotating Savings and Credit Association (ROSCAs) in Queens." *New York Economic Review* 46 (2015): 21–34.
- Xiaoyixian difang bianzuan weiyuanhui 孝义县地方编纂委员会, ed. *Xiaoyi Xianzhi 孝义县志 [Xiaoyi County Gazetteer]*. Haichao Press, 1992.
- "Xiushan Baohu Jiang Xuekai, Jiang Xuemo Guju: Zhe Xiongdi Lia Shi Cixi de Jiao'ao 修缮保护蒋学楷蒋学模故居 这兄弟俩是慈溪的骄傲 [Restoration and Preservation of the Historical Residence of Jiang Xuekai and Jiang Xuemo: These Two Brothers Are the Pride of Cixi]." *Zhongguo Ningbo Wang 中国宁波网*. June 17, 2020, sec. A.
- Xu Chang 徐畅. "'Hehui' Shulun '合会'述论 [Analyzing Mutual Credit Societies]." *Jindaishi Yanjiu [近代史研究]*, no. 2 (1998): 194–208.
- Xu Kai 许凯. "Yan Xishan de Jinrong Xing Sheng Shijian 阎锡山的金融兴省实践 [The Financial Measures of Yan Xishan]." *People's Daily Online*, April 21, 2014.  
[http://paper.people.com.cn/gjrb/html/2014-04/21/content\\_1417129.htm?fina](http://paper.people.com.cn/gjrb/html/2014-04/21/content_1417129.htm?fina).
- Xu Qian 徐潜, Yu Shushan 喻淑珊, and Huang Erli 黄二丽, eds. *Zhongguo Gudai Jinrong Yu Shangye 中国古代金融与商业 [Ancient Chinese Finance and Commerce]*. Changchun: Jilin wenshi chubanshe, 2018.
- Xu Yue 徐越. "Qingmo He Minguo Huizhou Minjian de Jingji Huzhu 清末和民国徽州民间的经济互助——以徽州文书为中心 [Mutual Economic Assistance among the People in

- Huizhou in the Late of Qing Dyansty and in the Republic of China: An Analysis Based on Huishu].” *Huangshan Xueyuan Xuebao* 黄山学院学报 [*Journal of Huangshan University*] 7, no. 2 (April 2005): 25–30.
- Yamey, Basil S. “Accounting and the Rise of Capitalism: Further Notes on a Theme by Sombart.” *Journal of Accounting Research (Wiley-Blackwell)* 2, no. 2 (September 1964): 117–36.
- . “Scientific Bookkeeping and the Rise of Capitalism.” *Economic History Review* 1, no. 1 (May 1949): 99–113.
- Yan ai’ying 阎爱英, Hou Wenzheng 侯文正, and Hou Pingyu 侯平宇. *Jinshang Shiliao Quanlan Jinrong Juan* 晋商史料全览 金融卷 [*Shanxi Merchant Historical Materials, Finance Volume*]. Taiyuan, Shanxi: Shanxi ren min chu ban she, 2007.
- Yan Hongzhong (燕红忠). “Qing Zhengfu Dui Yayang de Guanlli Ji Qi Wenti 清政府对牙行的管理及其问题 [Studies of the Qing Government’s Management of Intermediary Business and Its Problems].” *Qinghua Daxue Xuebao: Zhexue Shehuikexue Ban* 清华大学学报: 哲学社会科学版 [*Journal of Tsinghua University (Philosophy and Social Sciences)*] 4 (July 15, 2012): 72–80.
- Yan Hongzhong 燕红忠, and Gao Yu 高宇. “Qingmo Shiqi Guoluyin Weiiji Yu Zhidu Tiaozheng 清末时期的过炉银危机与制度调整 [The Crisis and Adjustment of the Yinlu System at the End of the Qing Era].” *Researches in Chinese Economic History (中国经济史研究)*, no. 2 (2017).
- Yan Hongzhong 燕红忠, and Li Yuwei 李裕威. “Jindai Zhongguo Neihui Shichang de Fazhan Ji Qi Tedian 近代中国内汇市场的发展及其特点 [The Development and Characters of the Internal Exchange Market in China from the 19th to 20th Century].” *Jinan Xuebao (Renwen Kexue Yu Shehuikexue Ban)* 暨南学报(人文科学与社会科学版) *Jinan Journal (Philosophy and Social Sciences)* 5 (May 2019).
- Yan, Jinxuan, Chengwu Fan, and Shanghai ba lei wu tuan guan xian yue dui. *The White-Haired Girl*. Electronic resource. Hong Kong: Naxos Music Library, 2004. <http://uchicago.naxosmusiclibrary.com/catalogue/item.asp?cid=82012>.
- Yang Bo 杨波. “Songdai Yilai Taihangshan Diqu Cunshe Yanjiu 宋代以来太行山地区村社研究 [Study on Village Community (She) in Taihang Mountain Area since Song Dynasty].” Ph.D. Dissertation, Hebei University, Center for Song History, 2020.
- Yang Buxia 阳步霞. *Guangxu Wenshui Xian Zhi* 光绪文水县志 [*Guangxu Wenshui Gazetteer*]. China, 1883.

- Yang Erxia 杨二霞. “Qianlun Minguo Shiqi Jinchao Faxing Dui Shanxi Jingji Shehui de Yingxiang 浅论民国时期晋钞发行对山西经济社会的影响 [A Brief Exposition on Republican-Era Shanxi Note Issuance and Its Effects on Shanxi Economy and Society].” *Jingji Shi 经济师*, no. 5 (2012).
- Yang, Lihui, and Deming An. *Handbook of Chinese Mythology*. Handbooks of World Mythology. Santa Barbara, Calif: ABC-CLIO, 2005.
- Yang Zhaonan 杨照南, and Wang Yanqing 王延庆. “Minjian Xinyong de Ling Yi Zhong Xingshi: Yaohui 民间信用的另一种形式—摇会 [Another Form of Minjian Credit: Dice Societies].” *Jinrong Yanjiu 金融研究 [Journal of Financial Research]*, no. 1 (1986).
- Yao Bohang 姚伯行. “Diaocha: Shanxi Minjian Huzhu Zhi Qing Qianhui 调查：山西民间互助之请钱会 [Investigation: Shanxi Folk Practice of Calling Mutual Assistance Societies].” *Shouxian Jie 寿险界*, 1935.
- Yao Huiyuan 姚会元. “Shilun Zhongguo Zibenzhuyi Jinrongye de Shehuizhuyi Gaizao 试论中国资本主义金融业的社会主义改造 [Preliminary Theory on the Socialist Transformation of the Chinese Capitalist Finance Industry].” *Jingji Wenti Tansuo 经济问题探索 [Inquiry into Economic Issues]*, no. 6 (1958).
- Yen, Dorothy A., Ibrahim Abosag, Yu-An Huang, and Bang Nguyen. “Guanxi GRX (Ganqing, Renqing, Xinren) and Conflict Management in Sino-US Business Relationships.” *Industrial Marketing Management* 66 (October 1, 2017): 103–14.  
<https://doi.org/10.1016/j.indmarman.2017.07.011>.
- “Yongkangzhen Biaoyan Dahui 永康镇表演大会 [Yongkang Town Has Big Performance].” *Shanxi Guoshu Tiyu Xunkan 山西国术体育旬刊 [Shanxi National Arts and Physical Training Review]*, 1935.
- Yu Jiang 俞江. “Qingzhongqi Zhi Minguo de Huizhou Qianhui 清中期至民国的徽州钱会 [Huizhou Credit Societies from the Mid-Qing to the Republic].” *安徽大学学报(哲学社会科学版) Journal of Anhui University (Philosophy and Social Sciences)* 4 (2017): 1–22.
- Yuan Bingling 袁冰凌. “Beijing Dongyuemiao Xianghui 北京东岳庙香会 [The Incense Society of Beijing Eastern Yue Temple].” Accessed March 30, 2020.  
[http://www.xiguan.org/yuanbingling/015.htm#\\_ftn1](http://www.xiguan.org/yuanbingling/015.htm#_ftn1).
- Yuan, Weipeng, Richard Macve, and Debin Ma. “The Development of Chinese Accounting and Bookkeeping before 1850: Insights from the Tǒng Tàì Shēng Business Account Books (1798–1850).” *Accounting and Business Research* 47, no. 4 (2017): 401–39.

- Yuzuru Kumon. “The Labor Intensive Path: Wages, Incomes and the Work Year in Japan, 1610-1932.” CIRJE, Faculty of Economics, University of Tokyo, 2020.  
<https://ideas.repec.org/p/ky/fseres/2020cfl154.html>.
- Zelin, Madeleine. “A Deep History of Chinese Shareholding.” *Law and History Review* 37, no. 2 (2019): 325–51. <https://doi.org/10.1017/S073824801800038X>.
- . “Chinese Business Practice in the Late Imperial Period.” *Enterprise and Society* 14, no. 4 (2013): 769–93. <https://doi.org/10.1093/es/kht087>.
- . *The Magistrate’s Tael: Rationalizing Fiscal Reform in Eighteenth-Century Ch’ing China*. Berkeley: University of California Press, 1984.
- . *The Merchants of Zigong: Industrial Entrepreneurship in Early Modern China*. Studies of the Weatherhead East Asian Institute, Columbia University. New York: Columbia University Press, 2005.
- Zhang Bo 张博, Huj Jinyan 胡金焱, and Ma Chicheng 马驰骋. “Cong Qianzhuang Dao Xiao’e Daikuan Gongsi: Zhongguo Minjian Jinrong Fazhan de Lishi Chixuxing 从钱庄到小额贷款公司:中国民间金融发展的历史持续性 [Where Traditional Banks Meet Modern Micro-Credit: The Long-Term Persistence of Informal Finance in China].” *Jingji Xue 经济学 [China Economic Quarterly]*, no. 4 (2018).
- Zhang Boqian 张佰仟. “Jingsheng Xiejie Wenwu Baohu Xiufu 静升西街文物保护修复.” *KKNews*, October 22, 2018. <https://kknews.cc/zh-sg/culture/2za6qyr.html>.
- Zhang Gongde 张巩德. *Shanxi Piaohao Zonglan 山西票号综览 [Shanxi Piaohao Overview]*. Beijing: Xinhua chubanshe, 1996.
- Zhang, Meng. “Financing Market-Oriented Reforestation Securitization of Timberlands and Shareholding Practices in Southwest China, 1750–1900.” *Late Imperial China* 38, no. 2 (2017): 109–51. <https://doi.org/10.1353/late.2017.0006>.
- . “Timber Trade along the Yangzi River: Market, Institutions, and Environment, 1750–1911.” *ProQuest Dissertations and Theses*. Ph.D., University of California, Los Angeles, 2017. ProQuest Dissertations & Theses Global (1917423354).  
<https://search.proquest.com/docview/1917423354?accountid=14657>.
- Zhang, Taisu. *The Laws and Economics of Confucianism: Kinship and Property in Pre-Industrial China and England*. Cambridge Studies in Economics, Choice, and Society. Cambridge, United Kingdom: Cambridge University Press, 2017.
- Zhang, Zhengming, Lili Song, and Shu Zhang, eds. *Ming Qing Jinshang Shangye Ziliao Xuanbian*. Di 1 ban. Taiyuan Shi: Shanxi jing ji chu ban she, 2016.

- Zhang Zhengming 张正明, and Zhang Shu 张舒. *Guotianshuhu Yirenshihu: Shanxi Difangshi Tanlue 果天数乎抑人事乎——山西地方史探略 [Is It Cosmology or Human Endeavor? An Exploration of Shanxi Regional History]*. Shanxi jingji chubanshe, 2017.
- Zhang Zhongmin 张忠民. “Wanqing Dashengshachang de Zaoqi Qiye Zhidu Tezheng 晚清大生纱厂的早期企业制度特征 [The Characteristics of Enterprise System of Early Dasheng Cotton Mill in the Late Qing Dynasty].” *Qingshi Yanjiu 清史研究 [The Qing History Journal]*, no. 3 (August 2016).
- Zhangjiakou Municipal Gazetteer Editorial Committee, ed. *Zhangjiakou Municipal Gazetteer 张家口市志*. China Translation & Publishing Corporation, 1998.
- Zhao Guodong 赵国栋. “Zangcha Zhi Lv (Si): Ronghui de Ya’an Chachang Zhi Lishi 藏茶之旅 (四) : 荣耀的雅安茶厂之历史 [Tibetan Tea Travels (IV): The Glorious History of Ya’an Tea Producers].” *Zhongguo Xizang Wang 中国西藏网*, December 10, 2019. [http://m.tibet.cn/cn/rediscovery/201912/t20191210\\_6721175.html](http://m.tibet.cn/cn/rediscovery/201912/t20191210_6721175.html).
- Zhao Haikuan 赵海宽, and Yao Zhongmin 姚中民, eds. *Xin Bian Jin Rong Da Ci Dian 新编金融大辞典 [New Edited Comprehensive Finance Dictionary]*. Di 1 ban. Peking: Jing ji ri bao chu ban she, 1994.
- Zhao Jingheng 赵景亨, and Ji Maolin 吉茂林. “Yuan Lanzhou Siying Shangye Jiankuang 原兰州私营商业简况 [A Brief Overview of Lanzhou’s Former Private Commerce].” In *Lanzhou Wen Shi Zi Liao Xuan Ji 兰州文史资料选集*, edited by Zhongguo ren min zheng zhi xie shang hui yi 中国人民政治协商会议, 3:157–63. Lanzhou: Gansu Renmin Chubanshe, 1985.
- Zhao Shiyu 赵世瑜. *Kuang huan yu ri chang: Ming Qing yi lai de miao hui yu min jian she hui 狂欢与日常: 明清以来的庙会与民间社会 [Carnival and everyday: Temple fairs and popular society since the Ming and Qing dynasties]*. Beijing di 1 ban. Beijing Shi: Sheng hui, du shu, xin zhi san lian shu dian, 2002.
- Zheng Maoda 郑茂达. *Bai Nian Rong Bao Zhai Ji Yi 百年荣宝斋记忆 [Remember One Hundred Years of Rongbaozhai]*. Beijing: Rong bao zhai chu ban she, 2019.
- Zheng xie Duolun Xian wen shi wei yuan hui 政协多伦县文史委员会, ed. *Duolun Wen Shi Zi Liao 多伦文史资料*. Hohhot: Nei Menggu da xue chu ban she, 2006.
- Zheng Yufu 郑裕孚. “Guisui Xian Zhi: Bu Fen Juan 歸綏縣志: 不分卷 [Guisui County Gazetteer: Not Broken out by Volume].” Electronic resource. *Zhongguo Fang Zhi Ku*, 1947. <http://server.wenzibase.com>.
- Zhengxie, Wenshui xianweiyuanhui wenshiziliao bianji weiyuanhui 政协文水县委员会文史资料编辑委员会, ed. *Wenshui Wenshi Ziliao Di 12 Ji 文水文史资料 第12辑*, n.d.

- Zhong Guangsheng 鍾廣生. (*Minguo*) *Xinjiang Zhi Gao* (民國)新疆志稿 [*Republican Period Draft of Xinjiang Gazetteer*]. Electronic resource. Beijing Shi: Beijing Ai ru sheng shu zi hua ji shu yan jiu zhong xin, 2009. <http://server.wenzibase.com>.
- Zhou Lin 周琳. “Chan He Yi Cun? Qingdao ‘Baoxian Dang’an’ Zhong de Hangbang Gongchan Jiufen 产何以存?——清代《巴县档案》中的行帮公产纠纷 [How to Settle the Public Property Disputes: A Case Study on Chongqing Hangbang in the Qing Dynasty].” *Wen Shi Zhe* 文史哲 [*Journal of Chinese Humanities*], no. 6 (2016): 116–35.
- Zhou Lin 周琳, and Ma Ran 马冉. “Chanquan de Shanbian: Qianlong Zhi Tongzhi Shiqi Chongqing de ‘Jiaoli Shengyi’ 产权的嬗变——乾隆至同治时期重庆的‘脚力生意’ [The Evolution of Property Rights: The Porter Business in Chongqing from the Qianlong to Tongzhi Reigns, 1771 - 1874 ].” *Zhongguo Jingjishi Yanjiu* 中国经济史研究 [*Researches in Chinese Economic History*], no. 2 (2020): 101–18.
- Zhou, Shaoqing, and Hequ xian zhi bian zuan wei yuan hui, eds. *Gazetteer of Hequ County* 河曲縣誌. Di 1 ban. Taiyuan: Shanxi ren min chu ban she : Shanxi sheng xin hua shu dian fa xing, 1989.
- Zhou, Xinhua, Guicheng Shi, Matthew Liu, and Huimei Bu. “The Mediating Roles of Renqing and Ganqing in Chinese Relationship Marketing.” *Nankai Business Review International* 6 (June 1, 2015): 156–76. <https://doi.org/10.1108/NBRI-03-2014-0014>.
- Zhou Yongnan 周咏南. “Zhejiangsheng Daibiao Weiyuan Jianyi: Dushubingju Guifan Minjian Jiedai 浙江省代表委员建议——堵疏并举 规范民间借 [Zhejiang Provincial Representative Committee Recommendations: Build Dykes and Dredge Rivers, Regulate the Private Lending Market].” *Zhejiang Ribao* 浙江日报, March 11, 2012. [http://www.gov.cn/2012lh/content\\_2089036.htm](http://www.gov.cn/2012lh/content_2089036.htm).
- Zhu Yingui 朱荫贵. “Shilun Jindai Zhongguo Zhengquan Shichang de Tedian 试论近代中国证券市场的特点 [A Study on the Characteristics of the Stock Market in Modern China].” *Jingji Yanjiu* 经济研究 [*Economic Research Journal*], no. 3 (2008).