# GROWTH, INSTITUTIONS AND KNOWLEDGE: A REVIEW AND REFLECTION ON THE HISTORIOGRAPHY OF 18TH-20TH CENTURY CHINA

By Debin Ma\*

Foundation for Advanced Studies on International Development (FASID), Tokyo

This article surveys major themes on the latest revisionist thesis of economic growth in China during the eighteenth and nineteenth centuries. With an emphasis on the role of informal and formal institutions to economic growth, this article reviews the traditional legal system and its impact on the organizational evolution of major Chinese merchant groups. It argues that, to understand the distinctive path of long-term economic growth or stagnation in China, we need to go beyond the study of resource endowments or technologies, to also incorporate an economic analysis of China's traditional social and political institutions and their associated ideologies.

### INTRODUCTION

The extent of economic growth and change in China during the last two decades has no historical parallel. While any analogy pairing intellectual progress with physical growth is bound to be inappropriate, a casual browse through economic history journals in China today would impress upon us the growth and maturing of historical research on Chinese economy since the 1980s. Two decades of sustained economic prosperity and openness have brought historians in China far better research conditions and most importantly, far greater exposure to frontier research overseas. Outside China, global academic interest in Chinese economic history also surged as evidenced by the amount of attention and number of

- \* I like to thank Pierre van der Eng, Yadira Gonzalez de Lara, Ramon Myers, Konosuke Odaka, Osamu Saito, Kaoru Sugihara and Tim Wright for comments and suggestions. I am alone responsible for any errors.
- 1 The 1980s have been an important transition period marked by intellectual recovery from the Cultural Revolution. The three-volume *Developmental History of Chinese Capitalism* (Xu and Wu), given the ideological constraints and limited scholar exposure of the period, stood as a landmark. This research project, like other important works of the time, was an outpouring of cumulative research that was mostly suspended in the 1950s and 1960s due to the onset of Cultural Revolution (See the preface by Xu in Vol. 1 pp. 1–11). Wright's *Chinese Economy in the Early Twentieth Century* also contains a selection of articles by some of the authors during the 1980s.

debates centred around the so-called California school revisionist thesis on the eighteenth century Chinese economy.<sup>2</sup>

Of course, there are downsides compared with the innocent 1980s. In China, greater economic prosperity coupled with the development of a market economy are draining talents and churning out cheap and fast research output. Academic independence and educational freedom, far more relaxed than before, continues to impose constraints. Outside China, economic history has grown farther apart from the discipline of economics, a trend in curious contrast to those in Western and Japanese economic history during the last few decades.<sup>3</sup> As far as I know, Rawski and Li's volume *Chinese History in Economic Perspective* (1992) was the last that brought China historians and economists together. This pales, at least in quantitative terms, in comparison to a series of earlier volumes, such as Perkins' *China's Modern Economy in Historical Perspective* (1975) and Hou and Yu's *Modern Chinese Economic History* (1977). Meanwhile, the long history of China has practically vanished in standard economic studies on China.<sup>4</sup>

This review article is not intended as a comprehensive survey. Instead, it takes the recent debates on the California school revisionist thesis on eighteenth century as a starting point, and then critically reviews and reflects on the important existing works (particularly in Chinese and Japanese) related to the legal and administrative systems and merchant organisation. With an economic perspective, this review aims to demonstrate the relevance of both institutions and history to our understanding of long-term economic growth in China.

The rest of the article is divided into four parts. The first examines the California school's revision of economic growth in eighteenth and nineteenth century China. The second section focuses on the traditional Chinese legal system. The third part provides a narrative of two major Chinese merchant groups. The fourth section turns to the long-term growth implications of Chinese economic institutions.

- 2 The California school includes scholars like Kenneth Pomeranz, James Lee, Bozhong Li, Bin Wong and others. To get a feel for the breadth and intensity of the debate on the historical comparison of economic growth between China and the West, see the Economic History Net forums at http://eh.net/lists/archives/eh.res/ under the headings 'Rethinking 18th Century China' and 'Frank vs. Landes'.
- 3 For example, the so-called Cliometric revolution in the US the rigorous application of economic discipline to the study of economic history produced two Nobel economic laureates. For a recent review of Cliometrics, see American Economic Review, 87(2) pp. 396–414. In Japan, the multi-authored eight volumes of Nihon Keizai Shi [Economic history of Japan] contained contributions from economists, was published in the 1980s and later translated in English, see Nakamura and Odaka, Economic History.
- 4 For example, China Economic Review, the journal entirely devoted to study of Chinese economy, contained not a single article on the pre-Communist era since its inception in 1989. While numerous explanations could be sought for the lack of interest of economists in Chinese history, the legacy of a modernization ideology within China today, which often equated China's past as a hindrance to economic development, is still an important factor. History as a discipline has been, and to a degree continues to be manipulated and restricted for purposes of political ideology in China today.

## CHINESE ECONOMY IN THE EIGHTEENTH AND NINETEEHTH CENTURIES: A REVISIONIST VIEW

Within China, since the 1950s, the question of interpreting what was perceived as China's long-term stagnation often fell under the so-called 'sprouts of capitalism' literature. Heavily influenced by the Marxist stages of social evolution, the literature sought to identify those budding 'production relations' in Chinese history that resembled those that blossomed into capitalism in Western Europe.

Outside China, Needham's question seized scholarly imagination. Later known as the Needham puzzle, it asked why, given her scientific and technological leadership over the rest of the world up until perhaps the fourteenth century, the Scientific Revolution eclipsed China. By the 1970s, this question was extended to the economic sphere by China historians such as Elvin; why, given the unmatched superiority of Chinese technology and institutions in the Southern Song (1126-1278), industrial revolution did not take place in China.<sup>5</sup>

As the latest revisionist wave by the California school has been widely published and debated in English, my review will mostly concentrate on Li Bozhong's publications in Chinese. Li's works started as a critical assessment of the so-called 'sprouts of capitalism' literature, which he viewed as fundamentally flawed in its implicit assumption of a uni-linear path of development where the European model is the universal standard. The relentless search for 'sprouts' could mislead us to miss out the fruits borne on China's own historical roots. Li attributed this obsession with the 'sprouts' to a profound inferiority complex (qinjie) developed in the Chinese public psyche from China's perceived backwardness relative to the West since the mid-nineteenth century.<sup>6</sup>

In a series of publications, largely focusing on China's historically most advanced region, the Lower Yangzi, during the Ming (1329-1661) and Qing (1662-1911) period, Li challenged the long-held thesis of a Song or Southern Song economic revolution championed by Elvin and others. He claims that the cited historical records such as the historically high crop yields in the Southern Song period – much higher than those during Ming and Qing dynasties – were based on biased and selective evidence. In fact, some of the key factors hailed as constituting the essence of the Song economic revolution – the cultivation of the Champ rice variety, the diffusion of new agricultural tools and best practices and agricultural intensification - might have appeared in the Song period but only diffused during the Ming and Oing.8

Li's The Early Industrialization in Jiangnan (2000) is particularly noteworthy for its systematic narrative of the growth of industries in cotton textile, food processing,

- For a comprehensive survey of the Needham puzzle, see Deng, A critical survey, and Lin, The Needham puzzle. The literature on the 'sprouts of capitalism' in Chinese is voluminous, a comprehensive treatment can be found in Xu and Wu, Zhongguo, vol. 1.
- Li, Lilun, chapters 1 and 2. For a recent and comprehensive survey of current scholarship on the Chinese economy in the Qing period, see Myers and Wang, Economic developments.
- Li, Agricultural Development; Li, Jiangnan; Li, Lilun; Li, Duoshijiao.
- Li, Lilun (chapters 5 and 6) contain most of the criticism on the Song revolution thesis. His thesis on the agricultural achievements in 1620–1850 is in Li, Agricultural Development.

apparel, tobacco, papermaking, printing, toolmaking, construction and shipbuilding in the Lower Yangzi during 1550–1850. His depiction of the rise of a dynamic, diverse and commercialised printing industry reveals the existence of a mass reading public in the Lower Yangzi. Overall his work attests to the indisputable industrial progress throughout these three centuries, not only in the scale and technology of production, but also in its organisation and the extent of the division of labour.

Urbanisation also grew in the Lower Yangzi, but with a distinctive pattern. Drawing on the works by Liu Shijie and others, Li argues that the small-scale, skill-intensive, handicraft industries in the Lower Yangzi did not give rise to megacities, but instead led to the formation of clusters of market towns along the dense and intricate waterways, characterised by extensive geographic specialisation in the production and marketing of agricultural and handicraft products, indistinguishable boundaries between urban and rural, and meshing of agricultural, commercial and industrial activities. Thus, standard historical classification of urbanisation applied in the Western context is inadequate and likely to seriously underestimate the degree of urbanisation.<sup>10</sup>

Lastly, the California school had a different take on the historical pattern of Chinese demography. A statistical analysis by James Lee *et al.* of historical microdemography data, complemented by Li's descriptive evidence for the Lower Yangzi, cast serious doubts on the long-held Malthusian perception of Chinese demography. This presents a strong case for preventive checks on population growth in China as revealed in widespread incidence of female infanticide, primitive contraception and abortions, birth-spacing to control marital fertilities, and adoptions.<sup>11</sup>

In sum, the revisionist vision for long-term Chinese economic change a la Li Bozhong is the displacement of the Song economic miracle thesis by an historical process with gradual and cumulative progress until the end of the nineteenth century. For Pomeranz, it thus seemed that the level of development and the

- 9 Li, Early Industrialization, pp. 169–188
- 10 Li's own case study of the city of Suzhou vividly portrayed the overtime dispersion of commercial activities outside its main centre. Li, *Duoshijiao*, pp. 377–445. Thus, previous scholarship, for example by Gilbert Rozman, which uses the number of residents as a cut-off point between urban and rural, tends to seriously underestimate the degree of urbanization in the Lower Yangzi. Using a variety of sources, Li estimates that urbanization in the Lower Yangzi reached as high as 20 per cent by the mid-Qing. Li, *Jiangnan*, p. 414.
- See Lee and Feng, One Quarter, and Li, Duoshijiao, pp. 137–240. In a review of Lee and Feng's book, Saito (Dentou Chugoku), pointed out that preventive checks and low birth rates seemed to be a shared feature of East Asian traditional demography, despite contrasting patterns of family system and geographical mobility. Saito's observation is a sharp departure from the scholarly consensus a couple of decades ago, which often viewed China as a Malthusian basket case versus Tokugawa Japan's 'precocious' demographic transition. See for instance Nakamura and Miyamoto (Social structure) for this view.
- 12 The Song revolution thesis is most vividly reflected in the work of Maddison. His graph of per capita GDP in China between 400 and 1800 AD is downright flat, except for an upward sloping Song dynasty (roughly between 950 and 1250 AD), while per capita GDP in Europe decreases with the fall of Rome, but rises continuously from 1000 AD to overtake China by the fourteenth century. (Maddison, *World Economy*, p. 42).

standard of living in China in the eighteenth century, at least in the advanced region of Lower Yangzi, were comparable to north-western Europe.

The California school pointed out that the pattern of 300 years of economic expansion in the Lower Yangzi had proceeded along a technological and institutional trajectory distinctly different from the well-known British or Western European model. In agriculture, efficiency came from gains in the use of better fertilisers, rationalisation of resource use, agricultural intensification and cashcrop cultivation. In industry, technology and organisation were geared toward the saving of scarce energy and resources. This technical bias induced by relative factor endowment in the Lower Yangzi, combined with the expansion in regional trade and geographic division of labour, constituted what they viewed as Smithian growth. It contrasts with that of the British model of the Industrial Revolution based on the massive switch to the use of inanimate power.

In essence, in the California school's revisionist thesis of long-term economic growth, the Lower Yangzi could be more finely classified as Boserupian (à la Ester Boserup), which viewed resource constraints more optimistically as a stimulus to technical change and intensification, and Smithian, which emphasised the expansion of trade and market. On the other hand, the Song economic revolution camp, particularly the 'high level equilibrium trap' hypothesis proposed by Mark Elvin and later the so-called 'involution' theory of Philip Huang, is fundamentally Malthusian with its more pessimistic view on resource constraints and overpopulation.

It is regrettable that the recent heated debate between the 'involutionist' and the California school has taken few cues from the extensive economic literature on induced innovation, which is a more rigorous formulation of the Boserupian thesis. 13 Applied in the Japanese context, Hayami and Ruttan demonstrated that, as a response to relative factor endowments, the technological path of the successful Japanese agricultural development since the Meiji era was distinctively labourusing and land-saving — as distinguished from the labour-saving path in the West, particularly in the US. 14 It revealed the insufficiency of the Malthusian framework, which ignored the potentials of factor-biased technological progress and factor substitution that would prevent the fall in marginal productivity of labour, at least up to a certain point.<sup>15</sup>

- For a recent debate between the California school and the 'involutionists', see Journal of Asian Studies 61(2) pp. 501-662. The articles of both Huang & Pomeranz in this journal have been translated and published in Chinese history journals. For an earlier debate in the 1990s about whether or not there were improvements in agricultural productivity and living standards in Chinese agriculture in the early-twentieth century between Huang and Rawski and Myers, see Richardson, Economic Change, chapter 6.
- 14 Hayami and Ruttan, Agricultural Development, and Hayami et al. Agricultural Development of Japan. For a penetrating criticism of the resource endowment pessimism in Chinese history, see Lin, 'Needham Puzzle.' Sugihara (East Asia path) discusses the so-called East Asian path of 'industrious revolution'. For a summary of the induced innovation literature and the historical debate in the US and British context, see David, Technical Choice, chapter 1.
- 15 Technically speaking, growth sustainability from labour-using technical change is positively constrained by the degree of the elasticity of input substitution. For a theoretical exposition on this issue, see Barro and Salai-i-Martin, Economic Growth, pp. 68–71.

Nonetheless, major issues remain in this debate. As is true of Chinese economic history in general, the scale and weight of the argument in this debate are an overfit for the amount of quantitative evidence presented. In the heat of the moment, one is tempted to forget that China's quantitative history still has a long way to go. We are still short of some basic quantitative benchmarks for the seventeenth to nineteenth centuries: price indices of any sort, nominal wage series, detailed family budget expenditure information and reasonably accurate labour force or even population estimates.<sup>16</sup>

More crucial is the revisionists' proposition of China's eventual failure to make a transition from a Smithian or Boserupian growth regime to a Kuznetsian process of growth characterised by the systematic application of science and technology and sustained per capita income increase. On this case, Pomeranz falls back to resource endowments – the absence of coal deposits in the Lower Yangzi versus the natural resource windfall from the discovery of the New World for Europe – as the explanation for ultimate divergent paths in China and Europe in the modern era. It is ironic that the resource endowments thesis has become the common starting and end points for both the 'involutionists' and the California school, despite their diametrically opposed conclusions. This focus on resource endowments seems like a far cry from the current burgeoning literature on growth and development which deems factors such as the growth of knowledge, human capital accumulation and most important of all, economic and political institutions as the ultimate determinants of long-term economic growth.<sup>17</sup>

#### ECONOMIC INSTITUTIONS: LAW IN TRADITIONAL CHINA

Property rights and contract enforcement are essential to inter-regional trade and market integration, the core of the Smithian growth process. Research on market integration based on statistical correlation of regional grain prices obtained from the elaborate government grain report system has advanced with increasing sophistication. For example, Wang and Shiue seem to confirm a reasonably high degree of market integration and efficiency in eighteenth century China, possibly rivalling or even exceeding that of contemporaneous Europe. <sup>18</sup>

- 16 Li's (Agricultural Development) work on early modern Chinese agriculture stopped short of any total factor productivity estimates despite his extensive evidence of rising land and labour productivity in the Lower Yangzi. This is unfortunate, as a TFP estimate would be crucial to his argument.
- 17 Elvin (Why China failed) also insisted that his economic and ecological explanation is far superior to Max Weber's cultural and ideological thesis. Pomeranz (Great Divergence, p. 14) treads lightly on North's thesis on economic institutions and lumps it with the Marxist-orientated arguments of Brenner. On the other hand, Li's (Agricultural Development, p.82) avoidance of economic institutions may be understandable considering the topic had so long been dominated by the Marxist class-based production relations framework in China.
- 18 Wang, Secular trends, Li, Integration and disintegration, Shiue, Transport costs, Shiue and Keller, Markets in China. Shiue's work breaks new ground with a trade arbitrage model that incorporates the effects of inter-regional trade and inter-temporal substitution through a storage system in 18th century China. A comprehensive survey of the price studies in Qing China can be found in Kishimoto, Shindai Chugoku, pp. 11–73.

But what is the nature of commercial organisation that supported this high level of market integration? More importantly, how were commercial contracts enforced, and how was the prevalent principal-agent problem in long-distance trade surmounted in an era of pre-modern transportation and communication technology? To answer these questions, we first turn to the formal legal system in traditional China.

That law matters to economic development has gained greater appreciation lately thanks to the recent surge of the so-called 'legal origins' literature. Unfortunately, the parochial focus of this literature on the Western legal traditions – whether common or civil law systems were more effective in promoting economic growth – lends little relevance to the study of Chinese legal tradition. <sup>19</sup> Conversely, the distinction by Max Weber between formal and substantive justice appears to be a more useful starting point for our purpose.

Under formal justice, legal adjudication and process for all individual legal disputes are bound by a set of generalised and well-specified rules and procedures. Substantive justice, on the other hand, seeks the optimal realisation of maximal justice and equity in each individual case, often with due consideration to comprehensive factors, whether legal, moral, political or otherwise. Formal justice tends to produce legal outcomes that are predicable and calculable, even though such outcomes may often clash with the substantive postulates of religious, ethical or political expediency in each individual case. Formal justice, as argued by Weber, reduces the dependency of the individual upon the grace and power of the authorities, thus rendering it often repugnant to authoritarian powers and demagoguery. Weber's framework, extended by influential scholars like Unger in the US, formed the theoretical foundation for explaining the rise of legal order and the rule of law in the West.<sup>20</sup>

Influenced by Weber and Unger, post-war Japanese legal scholarship on traditional Chinese justice system, as exemplified by the work of Shiga and others, is most notable for its careful analysis based on the reading of archived legal cases. Although some of their work was published as early as the 1970s, their recent translations into Chinese are generating renewed interest and debates both in China and overseas.<sup>21</sup>

Shiga started out with the well-known fact that the Chinese legal apparatus was an integral part of the administrative system; the administrative bureaucracy within the hierarchy – from the county level all the way to the emperor – was the final arbiters in criminal cases. This feature is crucial for understanding that the Ming and Oing penal codes, despite their reputed elaboration and comprehensiveness, were decision rules designed for the bureaucrats to meter out punishments proportionate to the extent of criminal violations. Similarly, legal rulings can be reviewed and changed only through the multiple layers of bureaucracy

<sup>19</sup> Ohnesorge (China's economic transition) provides a summary and criticism of the 'legal origins'

<sup>20</sup> Weber, Economic and Society, vol. 2, p. 812. Unger, Law in Modern Society.

See Shiga et al. Ming Qing Shiqi, Huang, Civil Justice.

within the administrative hierarchy. Legal statutes or sub-statutes were not open to contestation and interpretation by the litigating parties or independent third parties.

The fundamentally penal nature of the Chinese legal codes was not amenable to dispute resolution of a commercial and a civil nature. However, the county magistrates, the lowest level bureaucrat, did handle and rule on legal disputes that did not entail any corporal punishment. It has been shown now that a vast number of civil and commercial cases were actually brought to, and settled at, the court of the county magistrates. <sup>22</sup> But Shiga's main contribution, based on his reading of the rulings of the magistrates, is to point out that these county-level trials were something more akin to a process of 'didactic conciliation', a term he borrowed from the studies of Western scholars on the Tokugawa legal system in Japan. The decisions of the magistrates were not legal 'adjudication' as in the Western legal order. They invoked general ethical, social or legal norms as their legal basis without the citation of legal codes or customs, formal or informal. These rulings, in accordance with the intermediation nature, required the written consent of the litigants. <sup>23</sup>

The administrative and 'intermediation' nature of the legal system on civil matters is consistent with the absence of a formal civil and commercial code and a missing professional legal class. More importantly, partly because of the government dominance in the legal system, the extensive customary laws in the private sphere, as Shiga argued, would not, by nature, take on a formal structure. These features of the Chinese legal system were not, as Shiga emphasised, shortfalls of the Chinese legal system versus Western practice, but the intended consequence of China's cultural values. Thus, judged on her standards, China's legal system was sophisticated, consistent and distinctively rational, even though that rationality, as ably summarised by China legal scholar Wang Yaxin, comes squarely on the substantive side than that of the formal.<sup>24</sup> Shiga's emphasis on the 'rational' nature of Chinese legal system serves as a counterargument against the culturally biased or Eurocentric interpretation of the Chinese legal system, often attributed to Weber and Unger.<sup>25</sup> However, our interest is precisely in how different ideologies of 'rationalities' upon which the institutions of dispute resolutions were constructed, could give rise to differential paths of economic growth.

<sup>22</sup> For the extent of average people utilizing the county level civil trial system, see Fuma, Litigant masters, and also Huang, Civil Justice.

<sup>23</sup> Huang (Civil Justice), based on his archival legal cases, challenged Shiga's thesis and argued that the rulings of magistrates were binding and had basis in formal legal codes. However, such conclusions, as argued in Shiga and Terada's replies to Huang, were based on a questionable methodology, as Huang 'rediscovered' and matched the formal penal codes with the original legal rulings of the magistrates based on his own assessment. See Terada, Shindai minji.

<sup>24</sup> See Wang's summary of Shiga's works in Shiga et al. Ming Qing Shiqi, p. 104.

<sup>25</sup> For a criticism of the Eurocentric bias of Weber's interpretation of Chinese legal system, see Huang, Civil Justice, chapter 9.

## ECONOMIC INSTITUTIONS: MERCHANT GROUPS AND BUREAUCRACY

How were commercial transactions and particularly long-distance trade conducted and sustained in the absence of a formal legal code? Greif studied the role of a group of Iewish traders, the Magribis, in the late-Medieval Mediterranean.<sup>26</sup> Adopting a game-theoretic framework, he argued that the Magribi traders organised their group as an information-sharing coalition with multilateral or collective punishment strategies to deter opportunistic behaviour and sustain longdistance trade on a long-term basis in the absence of a formal legal mechanism. This strategy, known in the theory of repeated games as reputation mechanism, was the key to the revival of commerce in Mediterranean Europe during the late-Medieval period.

In China, the absence of formal justice, at least on commercial and civil matters, spawned a plethora of informal rules in the form of family bylaws, lineage rules and guild regulations which, enforced through a collective mechanism, alleviated the pervasive information and commitment problems to effectuate the commercial expansion in Ming and Qing China. Merchant groups and commercial guilds have long been a dominant form of commercial organisation throughout Chinese history. Historians often identify at least ten distinctive native-place merchant groups in China. 27 We will focus on two of the largest merchant groups originating in Huizhou and Shanxi that reached a truly national scale.

#### The Huizhou merchants

Ironically, the two prominent merchant groups originated from among the poorest inland provinces of China today; Anhui and Shanxi. The first group, from around Huizhou city area of Anhui province, also called the Hui Merchants, had been known as early as the Song period. They began to thrive during the Southern Song following the southward relocation of the Chinese capital to Hangzhou, Zhejiang province, which is within their easy access through the Xin'an River. They rose to commercial prominence, possibly from the middle of Ming.

Although the bulk of the trading activities of the Hui merchants was along the Yangzi, especially the Lower Yangzi region, their reach extended nationwide and even overseas to Japan.<sup>28</sup> The treacherous and mountainous geography of Huizhou supplied them with meagre arable land but abundant isolation, provid-

- 26 Greif, Contract enforceability; Greif, Cultural beliefs.
- 27 See Zhang et al. Huishang Yanjiu, for the ten merchant groups. Overall, research on Chinese business history, which includes the study of merchants, has flourished modestly in the past two decades, see Brown, Chinese Business Enterprise (4 vols.), and Gardella et al. Chinese business history.
- 28 The most dramatic overseas activities of the Hui merchants evolved around Wang Zhe who. using island bases along coastal Japan and China, dared to challenge Ming's banning of overseas trade in the sixteenth century. His rebellious military and commercial activities have been mistakenly attributed to Japanese pirates. Wang (Huizhou Shehui, pp. 519-78) showed that Hui merchants continued to play an important role in trading activities in Japanese ports such as Nagasaki even in the nineteenth century.

ing for effective shelter from outside aggression and stable village communities and – most fortunate of all – leaving us an astounding trove of historical documents ranging from private contracts, land deeds, genealogies, travel logs and account books, enough to give birth to a new academic discipline: Huizhou Studies (*Huixue*).<sup>29</sup>

Geography may be linked to another Huizhou phenomenon: its elaborate and sophisticated lineage system. Recent research revealed that Chinese lineage as a form of social and economic organisation was far more dynamic and flexible than previously understood. For example, Faure pointed out that lineage, as distinguished from family, has a distinctive 'corporate' character: properties were owned in the name of lineage with perpetuities lasting beyond the lives of any individual members; rights to partake in the distributions of lineage assets were regarded as shares (fen) that depended on contributions rather than descent; the managers had the rights and responsibilities to manage, but not to dispose of the property without the consent of the lineage segments concerned.<sup>30</sup>

More intriguingly, lineages could expand or contract through the so-called lineage union (lianzhong) — different lineages combining their genealogies (tongpu) and amalgamating under a common ancestor, who, in most cases, was actually fictitious. Sometimes a lineage union could result in the formation of a giant lineage encompassing several tens or even hundreds of thousands members across counties or even provinces governed by elaborate rules. The motivation behind lineage union, as most scholars agree, seemed economic and political more than anything else. Resources pooled by lineages provided important local public goods: charities for the poor; education funds for the young and promising; and opportunities for commercial and financial expansion.<sup>31</sup>

Thus, a region's degree of commercialisation seemed to positively correlate with its strength of lineage organisation. For example, lineage practices were most widespread in the Pearl River and the Lower Yangzi delta. But the Huizhou lineage seemed to top all. Trust among Hui lineages provided credit, capital and business partnerships. Lineage members and very often their domestic servants were the main staff members of the firms: managers, accountants, runners or agents across distant trading towns. The careful compilation and constant updating of lineage genealogies served the important function of information gathering and commercial networking. Genealogies, as one scholar put it, were the practical roadmap for the Hui migrant merchants.<sup>32</sup>

<sup>29</sup> Yao, Huizhou Xue. For an English language study of Huizhou, see Zurndorfer, Change and Continuity.

<sup>30</sup> Faure, Lineage, pp. 84–7. A fascinating study by Chung (Cultural foundations) reveals the intriguing legal dilemma confronted by the British legal system in Hong Kong on whether or not lineage asset holding qualified as an equivalent of the Western 'corporation'. Chung shows that most of the Chinese business registered as corporations in Hong Kong but operated under the name of lineage within China.

<sup>31</sup> See Qian (Xuyuan) for detailed research on the nature and extent of lineage and lineage unions. A careful study by Pyo (Huizhou merchants, pp. 211–12) shows that a lineage in Huizhou, through union and amalgamation had expanded from 10 branches in 1608 to 65 branches by 1753.

<sup>32</sup> Pyo, Huizhou merchants; Usui, Kishu shounin.

The organisational strength brought them unmatched competitiveness. In Nanjing, the coordination of 500 Hui merchant pawnshops drove out Fujian merchants with below-market interest rates. In Yangzhou (Northern Jiangsu), Hui merchants usurped the once dominant share of the Shanxi group in the highly profitable salt trade under government monopoly. Soon, trade in ink and printing products in Shanghai, grain and lumber in Wuhu, Anhui province and textiles in the Lower Yangzi, was to become their mainstay. Along the Yangzi, particularly the Lower Yangzi, their presence has become so ubiquitous as to give rise to the saving that 'no Hui, no market towns' (wuhui bu chengzhen).<sup>33</sup>

#### The Shanxi bankers

The Shanxi merchant group, from a region with its fair share of barren land, achieved commercial fame possibly even earlier than that of the Hui. Their trading routes, more in the north-south direction, extended nationwide and reached Russia through the caravan land routes. But what brought them unprecedented prosperity was their nationwide money remittance service from the 19<sup>th</sup> century. The legend has it that it started around the 1810s when a paint and dye merchant started China's first piaohao, a banking firm that provided merchants and long-distance travellers with drafts that they could exchange for cash at a specified branch after they reached their destination, thus effectively reducing the cost and risk of carrying bulky metallic cash.

By the mid-nineteenth century, dozens of piaohao firms based in three Shanxi counties were setting up branch offices throughout major commercial cities in China and turning, of all the places in China, a remote, little-known city, Pingyao, into the financial hub of a nationwide network of money remittance. After the turn of the century, they reached into Japan and Korea. Thus, for an entire century until the fall of Qing in 1911, the Shanxi bankers had locked up the money transfer business in China.<sup>34</sup>

The Shanxi bankers developed a distinctive set of organisational features that made little use of lineage ties, professedly weaker in Northern China. While the capital of a *piaohao* is based on business partnership or individual proprietorship with unlimited liability, the daily operation of a piaohao was actually run by outside managers and staff with minimal or no interference from its owners. In fact, as

<sup>33</sup> See Zhang, Qianjindai Zhongguo, pp. 156-68, Ye, Huizhou he Zhujiang, and Zhang et al. Huishang Yanjiu. For lineage organization in Huizhou, see Xiong, Shindai Huishu.

<sup>34</sup> For Shanxi bankers' branch offices in Japan and Korea, see Hamashita, Overseas financial networks. The city of Pingyao became a classic case of agglomeration offering complementary services to support the Piaohao business. These services, all privately owned and operated, included professional bodyguard service (Biao Ju) which offered protection for long-distance transport of silver and mail delivery (Ming-Xin Ju). For a narrative of Shanxi bankers, see Shi, Shanxi.

Zhang pointed out, many firms had an explicit exclusion clause barring the hiring of staff related to their owners.<sup>35</sup>

The second feature of *piaohao* is its reward structure. The assets of a *piaohao* consisted of capital share (*ninggu*) from owners and labour shares (*shenggu*) from managers and staff. Labour shares entitled staff to partake in the share of dividends from profits, a scheme in striking resemblance to the modern profit-sharing scheme designed as a way to provide incentives that align the interests of employees with the long-term interest of their company.

Finally, what made this surprisingly 'modern' system tick was the addition of a third, very 'traditional' element: all hiring was restricted to Shanxi natives only. Usually an apprentice system was used to recruit staff locally (including those to be sent to branch offices outside Shanxi) after careful background checks and often with their families or other reliable third parties as their guarantors. Any staff member caught and dismissed for fraudulent behaviour, as was reported, would be denied future employment opportunities by all Shanxi bankers. Clearly, the peace of mind of those who willingly parted with their silver taels – sometimes their life-savings' worth – for a piece of a draft paper, rested almost solely on the incorruptible reputation of the Shanxi bankers. <sup>36</sup>

## BUREAUCRACY, KNOWLEDGE AND MERCHANT ORGANISATION

It is important to place our study of traditional Chinese merchant organisation, particularly the collective mechanism that they adopted to surmount the pervasive contractual and information hazards in commercial transactions, in the larger political and institutional context of China. The issue at stake is larger than the study of merchant organisation itself. Did differential organisational responses to various contractual and information problems generate incentive structures that had implications for China's long-term trajectory of economic growth?

In the case of the Magribi traders, Greif pushed his thesis further through a comparative study of the contrasting organisations of the Magribi traders and the Genoa merchants. While Magribi traders, owing to their collectivist cultural beliefs, stuck to the informal mechanism of collective retaliation and community-based information-sharing to respond to the pervasive information and agency problems in long-distance trade, the individualist-oriented Genoa merchants based in the Italian city-state of Genoa evolved toward formal political and legal organisations such as state and courts to solve similar sets of problems in a comparable business environment. The collectivist organisation, as Greif argued, although more efficient in supporting personal-based exchanges and requiring

<sup>35</sup> Zhang, Jiannan, pp. 36–7. Shi, Shanxi, chapter 2. For a comparative study that characterize the Hui merchants as lineage based versus Shanxi merchants as native-place based, see Liu and Liu, Jinshang, pp. 342–48.

<sup>36</sup> Huang, Shanxi Piaohao, p. 608.

less costly formal organisation, was correspondingly less effective than the individualist system to facilitate the so-called anonymous or impersonal exchange which could better take advantage of a greater division of labour, a necessary condition for sustained long-run economic growth.<sup>37</sup>

In contrast to the European city-state based merchants, Chinese merchants operated in a centralised empire where they were largely powerless in the making and shaping of formal rules – a factor that could be important in accounting for their time-honoured preference for informal, internal and collectively oriented manner of resolving disputes and enforcing contracts. However, within the political system, Chinese merchants had access to other opportunities, which in fact, supplied part of the raison d'être for merchant groups in China.

It is well known that access to the Chinese bureaucracy was distinctively 'formal' or impersonal. The inside track to the political power structure was, in the majority of cases, acquired through one's success in the highly competitive, arduous and impartial Civil Service Examination based on Confucian classics. Successful examinees who became gentry or bureaucrats were entitled to taxation and legal privileges. In view of the status of bureaucrats as administrators, tax collectors and legal arbiters, this system generated enormous incentive effectives - or rather distortions - for Chinese society, particularly merchant groups whose accumulated wealth was most vulnerable to the damage of arbitrary power.<sup>38</sup>

It is precisely in this area that the Hui merchants scored the highest in penetrating the system. Scholars have long been mystified by the passion for Confucian learning in Huizhou, which took pride in its numerous academies, schools and literary associations. The emergence of a particular Huizhou school for the study of Confucius that upheld the social status of merchants has led some to question the old adage that Confucian ethics were anti-commerce, Instead, Confucian values were viewed as having supplied ethical standards and moral motivation for Hui's commercial success.<sup>39</sup>

But beneath all this passion lies hard economic rationality: Huizhou had a proven track record in turning out successful candidates for the Civil Service Examination and Huizhou natives claimed a disproportionate share in Chinese bureaucracy. 40 Chinese society overall, also responded to incentives. Passion for studying Confucius, as others have argued, was not a distinctively Huizhou phenomenon – it was a common trait of all major merchant groups. In Guangdong, Lower Yangzi and elsewhere, lineage properties, lineage union and other social organisations were invested and formed deliberately to enhance the chances of

<sup>37</sup> See Greif, Contract enforceability, and Greif, Cultural beliefs.

<sup>38</sup> See Chang's (Chinese Gentry) classic study on Chinese gentry and Civil Service Examination. For an argument that the Civil Service Examination as a retarding factor on the growth of scientific knowledge in China, see Lin, 'Needham Puzzle'.

<sup>39</sup> Ye, Rujia chuantong

<sup>40</sup> For academies and schools and successful candidates of Civil Service Examination in Huizhou, see Ye, Huizhou he jujiang, pp. 34-7. For literary association in Huizhou, see Xiong, Shindai Huishu, pp. 117-21.

success at the examination by their own candidates.<sup>41</sup> The bureaucrat-merchant nexus is important in accounting for the dominant position of the Shanxi and Huizhou merchants in the salt trade under government monopoly and later Shanxi bankers' role as Qing's official agents of money remittance.

The rapidly changing political context marked by the intrusion of Western powers in China since the mid-nineteenth century provides us a unique opportunity to examine the impact of shifting political institutions on the evolution of merchant organisation in China. The Huizhou merchants, who suffered their loss of salt trade privileges under Qing's 1830s salt reform, and the devastation of the 1860s Taiping rebellion, lost their predominance. In Shanghai, while some seemed to stay with their traditional trades in pawnshops, inks and tea and so on, others diversified and integrated with the local community. On the other hand, the Taiping rebellion increased the hazard of long-distance travel and proved a boon for the money remittance business of the Shanxi bankers. Their prosperity lasted into the twentieth century. However, possibly constrained by their exclusive hiring practices, they made little inroads in industrial finance in major coastal cities in the early twentieth century, even though their branch offices were located there.

This new era saw the rising prominence of coastal-based merchant groups over those from China's interior regions. In the treaty port of Shanghai, the so-called Ningbo clique, the merchants from around the city of Ningbo in Zhejiang province, acquired a dominating presence in Shanghai's rapidly growing native and later modern banking sectors through the cultivation of lineage and native-place ties. Shanghai's so-called golden 1920s saw an industrialisation boom and the traditional native banks (*qianzhang*) became the most important agents of industrial finance for Chinese entrepreneurs.

With the evolution of Shanghai from a Western colonial enclave towards a Western-style city-state following the fall of Qing in 1911, merchant organisation underwent profound transformations. <sup>44</sup> Du's recent study, based on newly opened archives, analyses the elaborate rules and regulations designed by the Shanghai Native Bank Association to ensure the rights and creditworthiness of its member banks in an era of political and national disintegration. <sup>45</sup> He notes that the association's rules for entry and exit of member native banks were entirely based on a bank's financial position; lineage or native place was no longer a factor. Moreover, the association's rules on dispute resolution, being formally published and distributed, often formed the legal principles for financial litigation in the Shanghai mixed court. In cases when the legitimate rights of its member native banks were violated by other agents outside Shanghai and negotiation for settle-

<sup>41</sup> For the importance of bureaucrat-merchant nexus, see Zhang, 'Jiaer haoru', p. 15 and Ye, Huizhou he Zhujiang, pp. 36–7.

<sup>42</sup> Zhang Haipeng et al. Huishang Yanjiu, chapter 11.

<sup>43</sup> Jones, Ningpo pang.

<sup>44</sup> See Ma, Modern economic growth, for Shanghai-based industrialization and the role of Citystate institutions.

<sup>45</sup> Du, A preliminary study.

ment failed, the association often resorted to a strategy of multilateral punishment by notifying all member banks to suspend any future transactions with that agent. Over time, their rules gained increasing recognition and often became guiding principles for native banks outside Shanghai, Clearly, a transition from informal to formal mechanisms of contract enforcement was taking place.

#### CONCLUSION

The revisionist thesis of the California school makes a positive contribution by challenging some enduring myths about economic growth or stagnation in Chinese history and more importantly, drawing academic attention worldwide to the importance of comparative economic history, particularly the growth experiences of non-Western countries. The crucial step forward hinges on whether or not there will be rigorous and quantifiable studies forthcoming that test the school's provocative hypotheses.

This survey of the organisational evolution of Chinese merchant groups highlights the viability of traditional communities or relations-based institutions to reduce transaction cost and moral hazard problems and facilitate sustained commercialisation. The rapid growth in East Asia of recent decades attests to these important institutional endowments. Although resource endowments inherited from China's past did not become the ultimate constraint to modern economic growth in China or East Asia as many had feared, they did become distinctive features of the East Asian path of growth, characterised by agricultural intensification and rural industrialisation.

On the other hand, zeal for learning, which survived far beyond the collapse of the Civil Service Examination in 1906, formed a cultural foundation for the rapid accumulation of human capital in much of Confucian East Asia. In fact, the disciplines of economics and history could both have benefited had Chinese economic history been more fully incorporated in debates on the nature and role of the household responsibility system, rural township and village enterprise, the considerable investment by overseas Chinese, as well as the reasons for the success of a gradualist reform strategy under a minimal formal legal system during China's past two decades of miraculous growth.

The revisionist thesis of the California school drew inspiration from the contemporary growth experience in China. To seek the historical roots of contemporary economic resurgence has its intellectual precedents – just recall the 'early modernist revolt' in the European context and the optimistic revisionist view of the Tokugawa era for Japan. 46 There is, however, an important caveat in the East Asian context.

<sup>46</sup> For a study emphasizing the importance of early modern development in European economic history, see De Vries, Industrious revolution. For a balanced summary of the optimistic revision of Tokugawa economic history in Japan, see Yasuba, Tokugawa legacy.

In the standard growth framework, productivity improvements along the path of labour-using technical change of the Boserupian type are not sustainable in the long-run. The transition to the Kuznetsian path of modern economic growth, characterised by an expansion of market size and a higher division of labour, may be contingent upon the rise of large-scale impersonal exchange which would require the support of some form of formal or rule-based institutions. Thus, we need to seriously question whether or not China's traditional belief system and its associated political bureaucracy were capable of endogenously generating institutions and incentives to provide the needed credible commitment to the security of contracts and returns to physical and human capital, conditions essential for the rise of large-scale impersonal exchange.<sup>47</sup>

With due recognition to the role and strength of traditional cultural and institutional endowments to the rise of East Asian miracles, we need to attach equal importance to those wrenching revolutionary changes, those historical discontinuities, which, in one way or another, enabled East Asia to borrow and adapt the formal institutions – from state-building to monetary regimes – from outside, particularly from the West since the mid-nineteenth century. In fact, as I argued elsewhere, much of the economic divergence in today's East Asia could be traced to the differential patterns of political and institutional response to the Western challenge in the mid-nineteenth century. <sup>48</sup> This point is of particular relevance to the contemporary Chinese economy which is beginning to recognise both the urgency and the difficulties to effectuate a transition to a rule of law.

#### REFERENCES

Barro, R., Sala-i-Martin, X. (2004) Economic Growth. (Cambridge: MIT Press).

Brown, R. A., ed. (1996) Chinese Business Enterprise. (London: Routledge), 4 volumes.

Chang, Chung-Ii. (1955) The Chinese Gentry: Studies on Their Role in Nineteenth Century Chinese Society. (Seattle: University of Washington Press).

Chao, Shuji (2000–01) Zhongguo Renkousi [Population History of China]. (Shanghai: Fudan University Press), volumes 5–6.

Chung, S. (2004) Cultural foundations of property rights: The translation of the idea of 'corporation' into modern China, 1800–1937. Unpublished Manuscript. (Hong Kong: Department of History, Hong Kong Baptist University).

David, P. (1975) Technical Choice, Innovation and Economic Growth. (Cambridge: Cambridge University Press).

De Vries, J. (1974) The Industrious Revolution and the Industrial Revolution. *Journal of Economic History*, 54, 249–270.

Deng, K. G. (2000) A critical survey of recent research in Chinese economic history. Economic History Review, 53, 1–28.

Du, Xuncheng (2004) Jindai Shanghai qianye shiguanfa chutan. [A Preliminary Study on the Customary Rules and Regulations of the Shanghai Native Bank Association.] Paper presented

47 For a remarkable provocative and exciting reinterpretation of long-term Chinese economic stagnation based on credible commitment problem posed by the Chinese state since the Qing, see Yang, *Bainian*. Yang is an eminent theoretical economist, and his work largely spreads through the internet and is gaining influence.

48 Ma, Why Japan, not China?

- at the Workshop on Institutions and Economic Change in China, Shanghai Finance College,
- Elvin, M. (1973) The Pattern of the Chinese Past. (Stanford University Press).
- Elvin, M. (1984) Why China failed to create an endogenous industrial capitalism. Theory and Society, 13, 379-392.
- Faure, D. (1989) The lineage as business company: Patronage versus law in the development of Chinese business. In: Brown, R. A., ed. (1996) Chinese Business Enterprise, Volume 1. (London:
- Fuma, Susumu (1998) Ming Oing shidai de songshi vu susong zhidu' [The litigant masters and the litigation system in Ming and Qing]. In: Shiga, Shuzo, Wang, Yaxin, and Liang, Zhiping, eds. (1998) Ming Qing Shiqi de Minsi Shengpan yu Minjian Qiyue [Civil justice and civil contracts during Ming and Qing]. (Beijing: Law Press).
- Gardella, R., Leonard, J. K., and McElderry, A. (1998) Chinese business history: Interpretative trends and priorities for the future. Chinese Studies in History, 31, 3–15.
- Greif, A. (1993) Contract enforceability and economic institutions in early trade: The Maghrib traders' coalition. American Economic Review, 83, 525-548.
- Greif, A. (1994) Cultural beliefs and the organization of society: a historical and theoretical reflection on collectivist and individualistic societies. Journal of Political Economy, 102, 912-950.
- Hamashita, Takeshi (2001) Overseas Financial Networks and Korea. In: Sugiyama, Shinya, and Grove, L., eds. Commercial Networks in Modern Asia. (Richmond: Curzon).
- Hayami, Y., Yamada, S., Akino, M., et al. (1991) The Agricultural Development of Japan. (Tokyo: University of Tokyo Press).
- Hayami, Y., and Ruttan, V. W. (1985) Agricultural Development: an International Perspective. (Baltimore: Johns Hopkins University Press).
- Hou, Chi-ming, and Yu, Tzong-shian, eds. (1979) Modern Chinese Economic History. (Taipei: Academia Sinica).
- Huang, Ph. (1996) Civil Justice in China: Representation and Practice in the Qing. (Stanford: Stanford University Press).
- Huang, Jianhui (2002) Shanxi Piaohao Shiliao [Historical archives of Shanxi Piaohao]. (Taiyuan: Shanxi Economy Press).
- Jones, S. M. (1974) The Ningpo pang and financial power at Shanghai. In: Elvin, M., and Skinner, W., eds. The Chinese City Between Two Worlds. (Stanford: Stanford University Press).
- Kishimoto, Mio. (1997) Shindai Chugoku No Bukka to Keizai Hendo [Prices and economic change in the Qing Dynasty]. (Tokyo: Kenbun Shuppan).
- Lee, James, and Wang, Feng. (1999) One Quarter of Humanity, Malthusian Mythology and Chinese Realities, 1700-2000. (Cambridge: Harvard University Press).
- Li, L. (2000) Integration and disintegration in North China's grain markets, 1738-1911. Journal of Economic History, 60, 665-699.
- Li, Bozhong (1998) Agricultural Development in Jiangnan, 1620–1850. (New York: St. Martin's Press).
- Li, Bozhong (2000) Jiangnan de Zaoqi Kongyehua 1550–1850 [The early industrialization in Jiangnan 1550–1850]. (Beijing: Publishing Press of Social Science Materials).
- Li, Bozhong (2002) Lilun, Fangfa, Fazhan Qusi [Theory, methodology and developmental trends]. (Beijing: Tsinghau University Press).
- Li, Bozhong (2003) Duoshijiao Kan Jiangnan Jinjishi (1250–1850) [A multiple perspective of Jiangnan economic history, 1250–1850]. (Beijing: Sanlian Sudian).
- Lin, J. (1995) 'The Needham Puzzle': Why the Industrial Revolution did not originate in China. Economic Development and Cultural Change, 44, 269–292.
- Liu, Jianshen, and Liu, Pengshen. (2002) Jinshang Yanjiu [A Study of Shanxi merchants]. (Taiyuan: Shanxi University Press).
- Liu, Shijie (1987) Ming-Qing Shidai Jiangnan Shizhen Yanjiu [Studies on cities and towns in Ming and Qing] (Beijing: Chinese Academy of Social Science Press).
- Ma, D. (2004) Economic growth in the lower Yangzi region of China: A quantitative and historical perspective. FASID Discussion Paper 2004–06–002. (Tokyo: FASID).
- Ma, D. (2004) Why Japan, not China, was the first to develop in East Asia: Lessons from sericulture, 1850-1937. Economic Development and Cultural Change, 52, 369-394.
- Ma, Xueqian (2002) Cong Chuantong Dao Jindai, Jiangnan Chengzheng Tudi Cianquan Zhidu Yanjiu [From tradition to. modern: A study on land property rights in Jiangnan cities and towns.] (Shanghai: Shanghai Academy of Social Science).

- Maddison, A. (2001) The World Economy: a Millennial Perspective. (Paris: OECD).
- Myers, R., and Wang, Yen-chien. (2002) Economic Developments, 1644–1800. In: Peterson, W. J., ed. The Cambridge History of China, Vol. 9 Part One: The Ch'ing Empire to 1800 (Cambridge: Cambridge University Press).
- Nakamura, J., and Miyamoto, Matao (1982) Social structure and population change: a comparative study of Tokugawa Japan and Ch'ing China. Economic Development and Cultural Change, 30, 229– 269.
- Nakamura, T., and Odaka, K., eds. (2003) The Economic History of Japan, 1600–1990. Vol. 3: Economic History of Japan 1914–55: A Dual Structure. (Oxford: Oxford University Press).
- Ohnesorge, J. (2003) China's economic transition and the new legal origins literature. China Economic Review, 14, 485–493.
- Peng, Zeyi (1983) Shijiu Shiji Houbanqi Zhongguo Caizheng Yu Jinji [Finance and economy in the later half of nineteenth century China]. (Beijing: People's Press).
- Perkins, D. H. (1969) Agricultural Development in China, 1368–1968. (Chicago: Aldine Publishing).
- Perkins, D. H. (1975) China's Modern Economy in Historical Perspective. (Stanford: Stanford University Press).
- Pomeranz, K. (2000) The Great Divergence: Europe, China, and the Making of the Modern World Economy. (Princeton: Princeton University Press).
- Pyo, Yuan-gao (2000) Ming Qing shidai Huizhou shangren yu zongzu zuzhi' [Huizhou merchants and lineage organization in Ming and Qing]. In: Zhou, Chaoquan, and Zhao, Huafu, eds. *Proceedings of the 1998 International Conference on Hui Studies*. (Hefei: Anhui University Press).
- Qian, Hang (2001) Xuyuan Yu Diyuan zhi Jian [Between blood and native place ties] (Shanghai: Shanghai Academy of Social Science Press).
- Rawski, ThG. (1989) Economic Growth in Prewar China. (Berkeley: University of California Press).
- Richardson, Ph (1999) Economic Change in China C.1800–1950. (Cambridge: Cambridge University Press).
- Saito, Osamu (2002) Dentou Chugoku no rekkishi jinkougaku [Historical demography for traditional China]. Shakai Keizai Shigaku, 68, 87–100.
- Shi Roumin (1998) *Piaoshang Xinshuashi* [The Rise and Fall of Piaohao Merchants]. (Beijing: China Economy Press).
- Shiga, Shuzo; Terada, Hiroaki; Kishimoto, Mio and Fuma, Susumu (translated and edited by Wang, Yaxin, and Liang, Zhiping) (1998) Ming Qing Shiqi de Minsi Shengban yu Minjian Qiyue [Civil justice and civil contracts during Ming and Qing]. (Beijing: Law Press).
- Shiue, C. (2002) Transport costs and the geography of arbitrage in eighteenth century China. American Economic Review, 92, 1406–1419.
- Shiue, C., and Keller, W. (2004) Markets in China and Europe on the eve of the Industrial Revolution. *CEPR Discussion Paper No. 4420*. (London: Centre for Economic Policy Research).
- Sugihara, Kaoru (2003) The East Asian path of economic development: A long-term perspective. In: Arrighi, G., Hamashita, T., and Selden, M., eds. The Resurgence of East Asia: 500, 150 and 50 Year Perspective. (London: Routledge).
- Tao, Shuimu (2001) Zhejiang jinrong cantuan de xenchen ji diwei [Formation and status of Zheijiang financial group]. Zhongguo Jinjieshi Yanjiu, 1.
- Terada, Hiroaki (1995) Shindai minji shihouron ni okeru 'zaihan' to 'choutei' ['Adjudication' and 'Conciliation' in Qing civil justice]. *Chugoku Shigaku*, 5, 177–213.
- Unger, R. M. (1976) Law in Modern Society: Toward a Criticism of Social Theory. (New York: Free Press).
  Usui, Sachiko (1991) Kishu shounin netsutowaku [Huizhou merchants and their networks]. Chugoku Shakai to Bunka, 6, 41–61.
- Wang, Jingyu, ed. (2000) Zhongguo Jindai Jinjishi, 1895–1927 [Modern economic history of China] (Beijing: People's Press), 3 Volumes.
- Wang, Yeh-chien. (1992) Secular trends of rice prices in the Yangzi delta, 1638–1935. In: Rawski, Th., and Li, L., eds. Chinese History in Economic Perspective. (Berkeley: University of California Press).
- Wang, Zhengzhong (2002) *Huizhou Shehui Wenhuashi Tamvei* [A study on social and cultural history of Huizhou] (Shanghai: Shanghai Academy of. Social Science Press).
- Weber, M. (1978) Economy and Society. (Berkeley: University of California Press), 2 volumes.
- Wong, R. B. (1997) China Transformed: Historical Change and the Limits of European Experience. (Ithaca: Cornell University Press).

- Wright, T., ed. (1992) The Chinese Economy in the Early Twentieth Century: Recent Chinese Studies. (New York: St. Martin's Press).
- Xiong, Yuanbao (2003) Shindai Huishu Chiiki Shakkaishi Kenkyu Regional social history of the Qing Huizhou]. (Tokyo: Kyuko Shoin).
- Xu, Dixin, and Wu, Chengming (1985) Zhongguo Zibenzhuyi Fazhanshi [History of Chinese capitalism]. (Beijing: People's Publishing House), 4 volumes.
- Xu, Dixin, and Wu, Chengming, eds. (1993) Xin Minzhuzhuyi Geming Shiqi de Zhongguo Zibenzhuyi [Development history of Chinese capitalism] (Beijing: People's Publishing House), 3 volumes.
- Xu, Dixin, and Wu, Chengming, eds. (2000) Chinese Capitalism, 1522–1840. (Basingstoke: Macmillan).
- Yang, Xiaokai (2001) Bainian Zhongguo Jingjishi Biji [Notes on one hundred years of Chinese economic history]. This paper can be found on various Chinese websites such as http:// www.muhong.com/.
- Yao, Bangcao, ed. (2000) Huizhouxue Gairen [A primer on Huizhou studies] (Beijing: Chinese Academy of Social Science Press).
- Yasuba, Yasukichi (1987) The Tokugawa legacy: a survey. Economic Studies Quarterly, 38, 290–307.
- Ye, Xian-en (1998) Rujia Chuantong wenhua yu Huizhou shangren [Traditional Confucius culture and Huizhou merchants]. In: Zhou, Chaoquan, and Zhao, Huafu, eds. Proceedings of the 1998 International Conference on Hui Studies. (Hefei: Anhui University Press).
- Ye, Xian-en (2003) Huizhou he Zhujiang Sanjiaozhou Zongfanzi Bijiao Yanjiu [A comparative study on lineage system in Huizhou and the Pearl River delta], http://www.guoxue.com/economics/.
- Zhang, Mingfu (2002) 'Jiaer Haoru' pinfei Huishang teshu ['Confucian Merchants' were not just the special characteristics of Hui merchants only]. Zhongguo Shehui Jinjishi Yanjiu, 4, 10-17.
- Zhang, Haipeng, Wang, Tingyuan, and Sheng, Shulin, eds. (1995) Huishang Yanjiu [Study of Hui merchants] (Hefei: Anhui People's Press).
- Zhang, Zhongmin (1995) Qianjindai Zhongguo Shehui de Shangren Ziben Yu Shehui Zaishengchan [Merchant capital and social reproduction in early modern Chinese society] (Shanghai: Shanghai Academy of. Social Science Press).
- Zhang, Zhongmin (2002) Giannan de Bianqian, Jindai Zhongguo Gongsi Zhidu Yanjui [A difficult transformation: A study on modern Chinese corporation system] (Shanghai: Shanghai Academy of Social Science Press).
- Zurndorfer, Harriet (1989) Change and Continuity in Chinese Local History: The development of Hui-chou Prefecture, 800 to 1800. (Leiden: E. J. Brill).