Chinese Capital Markets: the Importance of History for Modern Development*

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Abstract

The historical determinants of modern economic development have been widely studied since the seminal work of Engerman and Sokoloff (1997, 2002) and Acemoglu et al. (2001, 2002). The literature is largely based on the former European colonies, especially in Africa. Notwithstanding China's long and rich history, its long-term effect on modern day development, particularly financial development, remains under-researched. The shocks experienced by China provide important settings for future research in that many of them were sufficiently severe and traumatic for their effects to be detectable today and for them to have an effect on the development of the country even now.

Keywords: China, economic development, financial development, history, traumatic shocks

JEL codes: G21; G30; N27; Z13

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1. Introduction

Following the success of the three Chinese Capital Markets Conferences in 2011, 2012 and 2013 (Cumming et al. 2014, 2016, 2017), the University of Nottingham Ningbo China, the National School of Development of Peking University, and Department of Economics, University of Birmingham co-organised the 4th conference on May 24th -26th, 2014. The conference attracted around 60 submissions from scholars all over the world and 18 papers were short-listed for presentation at the conference. Following the standard double blind review process, 9 papers have been accepted in this special issue. The keynote speakers were Professor Warren B. Bailey from the Samuel Curtis Johnson Graduate School of Management, Cornell University and Professor Weiying Zhang from Guanghua School of Management (now at the National School of Development), Peking University.

Professor Bailey delivered two speeches. The first one was on quantitative easing of China in the history. Quantitative easing refers to that the central bank applies an unconventional monetary policy based on the expansion of new assets and liabilities. Professor Bailey pointed out the controversial impacts of quantitative easing, which could not only lead to more spending, lending and investing, but could also cause the economic bubble. Based on the analysis of two episodes from Chinese history (hyperinflation from the late 1930s to 1949 and silver deflation in early 1930s), Professor Bailey interpreted China's money supply today, and concluded with the difficulties to test the effect of quantitative easing on Chinese economy.

Professor Bailey's second keynote address was on the mutual fund industry. Starting from an overview of the size of the mutual fund industry in US, globally and in China, he moved on to the function of mutual funds, such as meeting the needs of retail investors, professional management and low-cost diversification. Mutual funds achieve basic beneficial purposes. However, there is scepticism because sometimes mutual funds appear to abuse their investors. Professor Bailey argued mutual funds reflect the moral and ethical dilemmas of a capitalist society. In the future, it is worth continually discussing how to protect investors by appropriate legal and regulatory means and what kind of personal liability the retail investors shall have.

Professor Weiying Zhang's keynote address was on corporate governance in the context of China. In Zhang (2018), he examined the existing literature and summarized that the lack of comprehensive corporate governance has led to distrust on the market. He argued that the market has been misperceived and misunderstood partially by economists. The mainstream thinking of economics in China develops its conclusion and implication from a static model without entrepreneurship. The thinking is far from a good and right description of how the real market works. To understand markets and corporate governance correctly and make right policy recommendations, he suggested incorporating entrepreneurship into the basic model, and making the transit from the manager-centred model to the entrepreneur-centred model.

2. Contributions in the special issue

In this section, we summarize the findings and implications of the 9 accepted articles.

In China, regional commercial banks have issued significant proportion of lending to real estate sector. Given the recent slowdown in the housing market in China, Zhang et al. (2018) examines the relation between real estate markets and nonperforming loans. They find that a decline in real estate market activity increases NPLs and in turn increases banking instability. The relation is stronger in regions with higher levels of bank competition. We encourage future studies examine the impact of local government on the lending to real estate sector. While city commercial banks are often not controlled by the local government, they tend to be influenced by the policy of the local government. Some governments establish real estate as a pillar sector for the regional development and therefore have incentives to influence banks to provide more external financing.

Gou *et al.* (2018), titled *Does ownership matter in access to bank credit in China?* investigates the extent to which state ownership has an impact on banks' credit decisions in China. Small-and medium-sized enterprises (SMEs) have been the drivers of China's spectacular economic growth in recent years, but these firms typically have more difficulty securing bank loans compared with large and well-developed corporations. Several studies have found that having the state as a minority owner and/or having political connections could help firms gaining access to bank loans. By contrast, through the study of two World Bank Environment Survey (WBES) datasets, covering 2400 and 2848 SMEs respectively in 2002 and 2011, the paper finds that ownership discrimination does not exist any longer in China. Instead, it is other firm characteristics (such as financial strength) and the degree of financial development and financial marketisation which affect firm credit rationing. Finally, the paper also argues that self-rationing plays an important role among Chinese SMES.

Because of the constraints in external financing, Chinese firms often rely on retained earnings, cash reserves and loans from family and friends for investment. Guariglia and Yang (2018), titled *Adjustment behavior of corporate cash holdings: the China experience*, examines Chinese firms' cash-holding decisions. As predicted by the trade-off theory, they find that Chinese firms adjust their cash reserves to a target level. Since adjustment costs faced by Chinese firms is high, it takes them longer than firms in Western countries to do so. The adjustment speeds are higher for the firms which actively manage their cash balances through higher investment, dividend payments, and debt issuance. While they find regional development does not influence affect adjustment speeds, we encourage future studies explore how the recent institutional reforms such as the anti-corruption campaign and constitutional amendment influence the cash-holding decisions.

Using a sample of firms from 26 countries outside North America cross-listed on a US stock exchange between 1999 and 2008, the paper by Cumming *et al.* (2018), titled *Exchange trading rules, governance, and trading location of cross-listed stocks,* investigates how stock exchange trading rules and other governance regulations influence the location of trades for firms that cross-list in the US. The results show that the ratio of non-US volume to US-volume for cross-listed stocks increases with the strength of stock exchange rules, albeit at a decreasing rate. Moreover, trade appears to have shifted towards Europe following the promulgation of the 2005 Markets in Financial Instruments Directive (MiFID), which strengthened trading rules within the European Union.

Khurshed *et al.* (2018), titled *Split-share structure reform and the underpricing of Chinese IPOs*, make use of a large sample of Initial Public Offerings (IPOs) over the period 2000-2011 in China to study the extent to which the 2005 split-share structure reform alleviated the extreme underpricing characterizing the IPOs. The results suggest that the reform significantly reduced the magnitude of the underpricing. This is explained considering that the reform corrected the distorted supply-demand relationship in the stock market and reduced the significant information asymmetries between the firms issuing IPOs and investors. Furthermore, whilst there was there was no significant difference between the IPO underpricing of state-owned enterprises (SOEs) and other enterprises before the reform, the IPO underpricing of SOEs became significantly higher than that of non SOEs after the reform. Further results suggest that the reform had no impact on the IPO underpricing of SOEs controlled by local governments, whereas the IPOs of SOEs controlled by central governments were found to be more underpriced than other IPOs after the reform.

De Massis et al. (2018), titled *Family involvement and R&D expenses in the context of weak property rights protection*, examine the family involvement and the R&D expenses of private-controlled firms in China. An important feature for family firms is their non-economic motives and family-centred goals. They argue that the weak protection of private property rights in China may divert the interest of family owners to family-centred economic goals. By manipulating the reported R&D expenses, the controlling family pursue private benefits at the expenses of minority shareholders. They document that family involvement is positively related to reported R&D investments. We encourage future studies examine the quality of R&D of family business in China such as patent number and citations to confirm the expropriation interpretation of the positive relation.

Farag and Mallin (2018), titled *The influence of CEO demographic characteristics on corporate risk-taking*, studies the influence of demographic characteristics on corporate risk-taking based on the Chinese IPOs between 1999 and 2009. The upper echelons theory (Hambrick and Mason, 1984) suggest that managerial background characteristics are imprinted into firm outcome. They find that older CEOs, long-tenured CEOs are more risk averse compared with younger CEOs and short-tenured CEOs. CEOs with higher education or prior board experience are positively associated with risk-taking. We encourage future studies better link the growing literature on CEO characteristics led by the seminal work of Bertrand and Schoar (2003) and the literature on upper echelons theory (Hambrick and Mason, 1984) and make further efforts for credible causal inference (Atanasov and Black, 2016).

Chen et al. (2018), titled *Contrarian strategy and herding behaviour in the Chinese stock market*, study the profitability of various trading strategies in the Chinese stock market between 1994 and 2013. They find that momentum strategies are not profitable but a contrarian strategy based on Jegadeesh and Titman (1993) is, especially during high herding periods. We encourage future studies examine the effect of trading costs, including price impact, on the profitability of trading strategies.

3. Discussions and future research

The historical determinants of modern economic development have been widely studied since the seminal work of Engerman and Sokoloff (1997, 2002) and Acemoglu et al. (2001, 2002). The difference in the economic performance is attributed to the initial differences in endowments of land and geography (Engerman and Sokoloff, 1997, 2002) and the mortality rates of European settlers (Acemoglu et al., 2001, 2002). A number of other factors are also found to explain the variation in economic development, including ethnic diversity (Easterly and Levine, 1997), pre-colonial ethnic institutions (Michalopoulos and Papaioannou, 2013), slave trades (Nunn, 2008), rugged terrain (Nunn and Puga, 2012) and Tsetse fly which is unique to Africa and transmits a parasite lethal to livestock (Alsan, 2015). The literature is largely based on the former European colonies, especially in Africa.

Given the close link between financial development and economic development, the historical determinants of financial development and corporate governance is increasingly studied. La Porta et al. (1997 and 1998) show that the legal origin of British common law offers better investor protection than Roman civil law and therefore countries with common law origin tend to have more developed capital markets. Beck et al. (2003) find that the mortality rates of European setters explain more cross-country variation in financial market development than legal origin. Pierce and Snyder (2017) show that the historic slave trade is associated with firms' formal and informal access to finance. Levine et al. (2018) further show that the slave trade is also negatively related to household access to credit and overall financial development. Pierce and Snyder (2018) find that the effects of the slave trade go beyond credit-access effects. High slave export countries tended to have more concentrated ownership, majority ownership and sole proprietorships. An and Hou (2018) explore a unique feature of African ecology and find that the Tsetse fly holds back financial development through the channel of social cohesion. Nunn (2009) stresses that historical events should matter in the long run and summarises the major influencing channels such as domestic institutions, cultural norms of behaviour, knowledge and technology. Klüppel et al. (2017) review a wide range of traumatic shocks in history that can influence modern firms through institutions and culture, including colonialism, foreign occupation, slavery, organized crime, warfare, conflict, natural disasters, forced migration, religious persecution, religious conversion, economic downturn and disease.

Notwithstanding China's long and rich history, its long-term effect on modern day development, particularly financial development, remains under-researched. In the past, China experienced shocks that were sufficiently severe and traumatic for their effects to be detectable today and for them to have an effect on the development of the country even now.

First, there is a direct and large impact on important dimensions of society. The Great Chinese Famine (1959-1961), for example, caused an unprecedented number of deaths. Cao (2005) estimates that as many as 32.5 million people died of starvation and related diseases. Chen and Zhou (2007) find that the famine reduces the earnings of cohorts with exposure to the famine during their early childhood. Gooch (2017) shows that areas in which famine was most severe have significantly lower per capita GDP today. Other studies focus on the long-run consequence on health, educational attainment, labour supply and the marriage market outcomes (Meng and Qian, 2009; Almond et al., 2007). While the literature acknowledges the link between famine and institutional factors, how famine has influenced both China's institutions and its culture remains under-researched. Yao (1999) argues that the Great Leap Forward movement, the anti-rightist movement and commune movement reinforced the food shortage. Li and Yang (2005) find that 61 percent of the decline in grain output is attributable to the Great Leap Forward policies. Likewise, Meng et al. (2015) suggest that government procurement policy contributed to overall famine mortality. Gooch (2017) shows that sub-national leaders in areas liberated later are keen to enforce the Great Leap Forward policies and in turn increase the famine severity. Gooch (2018) adds that the interaction of terrain ruggedness and provincial-level political ideology determines the policy implementation.

Secondly, some traumatic shocks lasted long enough to influence institutions and culture. *Keju* is the civil service examination system in Imperial China to select candidates for the state bureaucracy, which lasted for around 1,300 years from 587 to 1905. The highest degree that one could achieve in the system is called *jinshi* and one level below is *juren*. Xue and Koyama (2018) find *keju*'s long-lasting effects on modern human capital. The number of *jinshi* is positively related with the average years of schooling today and the result is consistent when relating *jinshi* intensity with a prefecture's shortest river distance to the nearest sites of raw ingredients (pine and bamboo) of ink and woodblock printing. Xue and Koyama find that *keju* effects are not weakened by historical incidents such as Taiping Rebellion and opening treaty ports. Bai and Jia (2016) find the abolition of *keju* in 1905 contributed to the political instability in terms of the participation in the revolutionary organizations.

Thirdly, traumatic shocks can change some institutions or culture but may not change stable ones. The Qing takeover of power after 1644 represents a shock to the status of intellectuals who possess a degree in *keju*. The literary inquisitions (1661-1788) marked a political repression of intellectuals. Xue and Koyama (2018) find that Qing-era political repression reduced social capital, measured by the number of local charities. Individuals in more affected prefectures have less education opportunities have lower generalised trust in modern China. The effects are robust to the exposure to Taiping Rebellion (1850-1864), the exodus of two million individuals to Taiwan (1949), and the Cultural Revolution (1966-1976).

The Culture Revolution was a socio-political movement to preserve Communist ideology in China from 1966 until 1976. The college entrance examination was suspended during culture revolution until 1976. Roland and Yang (2017) find that the cohorts who miss out the college due to culture revolution believe that effort pays off to a much lesser degree. Cultural Revolution included a Send-Down Movement, in which urban youth were forced to move into rural communities and assume a peasant lifestyle. Around 18 million urban youth were sent to the countryside to live and work (Riskin, 2000). He (2018) shows that the ones involved grew up to have less interpersonal trust. Xue and Koyama (2018) show that *keju*'s effects on modern human capital has been weakened by the cultural revolution, implying that exogenous political shocks hold back cultural transmission.

While the literature shows that many historical events in China continue to matter today, the focus has not been on their effect on economic or financial development. We encourage more efforts to study detailed historical data and to find plausible identification strategies and influencing channels for causal inference.

Reference

Acemoglu D, Johnson S, Robinson JA. 2001. The colonial origins of comparative development: an empirical investigation. *American Economic Review*, 91:1369–401

Acemoglu D, Johnson S, Robinson JA. 2002. Reversal of fortune: geography and institutions in the making of the modern world income distribution. *Quarterly Journal of Economics*, 117:1231–94

Almond, D., Edlund, L., Li, H. and Zhang, J., 2007. Long-term effects of the 1959-1961 China famine: Mainland China and Hong Kong (No. w13384). National Bureau of Economic Research.

Alsan, M., 2015. The effect of the tsetse fly on African development. *American Economic Review*, *105*(1), pp.382-410.

An, J. and Hou, W., 2018, The Origins of Financial Development: How the Tsetse Fly Continues to Influence Modern Finance, Working Paper. Available at SSRN: https://ssrn.com/abstract=3152410

Atanasov, V. and Black, B., 2016. Shock-based causal inference in corporate finance research. *Critical Finance Review*, 5: 207–304

Bai, Y. and Jia, R., 2016. Elite recruitment and political stability: the impact of the abolition of china's civil service exam. Econometrica, 84(2), pp.677-733.

Beck, T., Demirgüç-Kunt, A. and Levine, R., 2003. Law, endowments, and finance. *Journal of Financial Economics*, *70*(2), pp.137-181.

Bertrand, M. and Schoar, A., 2003. Managing with style: The effect of managers on firm policies. *Quarterly Journal of Economics*, *118*(4), pp.1169-1208.

Cao, S. (2005).Da jihuang: 1950–1961 nian de Zhongguo renkou (The Great Famine: China's population 1959–1961). Hong Kong: Shidaiguoji chuban youxian gongsi.

Chen, Q., Hua, X. and Jiang, Y., 2018. Contrarian strategy and herding behaviour in the Chinese stock market. *European Journal of Finance*, forthcoming in this issue

Chen, Y. and Zhou, L.A., 2007. The long-term health and economic consequences of the 1959–1961 famine in China. *Journal of health economics*, *26*(4), pp.659-681.

Cumming, D., Guariglia, A., Hou, W. and Lee, E., 2014. The experiences and challenges in the development of the Chinese capital market. The European Journal of Finance, 20(7-9), 595-598

Cumming, D., Guariglia, A., Hou, W. and Lee, E., 2016. Chinese style capitalism: current development and future implications，*European Journal of Finance*, 22:4-6, 255-258

Cumming, D., Guariglia, A., Hou, W. and Lee, E., 2017. Chinese capital markets: institutional reforms and growing global links, *European Journal of Finance*, 23:7-9, 573-580

Cumming, D., Hou, W. and Wu, E., 2018. Exchange trading rules, governance, and trading location of cross-listed stocks. The European Journal of Finance, *European Journal of Finance*, forthcoming in this issue

De Massis, A., Ding, S., Kotlar, J. and Wu, Z., 2018. Family involvement and R&D expenses in the context of weak property rights protection: an examination of non-state-owned listed companies in China. *European Journal of Finance*, forthcoming in this issue

Easterly, W. and Levine, R., 1997. Africa's growth tragedy: policies and ethnic divisions. *The quarterly journal of economics*, *112*(4), pp.1203-1250.

Engerman SL, Sokoloff KL. 1997. Factor endowments, institutions, and differential paths of growth among New World economies: a view from economic historians of the United States. In How Latin America Fell Behind, ed. S Harber, pp. 260–304. Stanford, CA: Stanford Univ. Press

Engerman SL, Sokoloff KL. 2002. Factor endowments, inequality, and paths of development among New World economies. Work. Pap. 9259, NBER

Farag, H. and Mallin, C., 2018. The influence of CEO demographic characteristics on corporate risk-taking: evidence from Chinese IPOs. *The European Journal of Finance*, forthcoming in this issue

Gooch, E., 2017. Estimating the long-term impact of the great Chinese Famine (1959–61) on modern China. *World Development*, *89*, pp.140-151.

Gooch, E., 2018. Resistance is Futile? Institutional and Geographic Factors in China's Great Leap Famine. HiCN Working Paper 266. Available at: http://www.hicn.org/wordpress/wp-content/uploads/2018/03/HiCN-WP-266.pdf

Gou, Q., Huang, Y. and Xu, J., 2016. Does ownership matter in access to bank credit in China? *The European Journal of Finance*, forthcoming in this issue

Guariglia, A. and Yang, J., 2018. Adjustment behavior of corporate cash holdings: the China experience. *The European Journal of Finance*, forthcoming in this issue

Hambrick, D.C. and Mason, P.A., 1984. Upper echelons: The organization as a reflection of its top managers. *Academy of management review*, *9*(2), pp.193-206.

He C., 2018. In the Wrong Place at the Wrong Time? The Long-Run Effects of the Send-Down Movement in China. Working Paper. Available at: https://www.pdx.edu/econ/sites/www.pdx.edu.econ/files/He_JobMarketTalk_Paper.pdf

Jegadeesh, N. and Titman, S., 1993. Returns to buying winners and selling losers: Implications for stock market efficiency. The Journal of finance, 48(1), pp.65-91.

Khurshed, A., Tong, Y. and Wang, M., 2018. Split-share structure reform and the underpricing of Chinese initial public offerings. *European Journal of Finance*, forthcoming in this issue

Klüppel, L.M., Pierce, L. and Snyder, J.A., 2017. The deep historical roots of organization and strategy: traumatic shocks, culture, and institutions. *Organizational Science*.

La Porta R, Lopez-de-Silanes F, Shleifer A, Vishny R. 1997. Legal determinants of external finance. *Journal of Finance*, 52:1131–50

La Porta R, Lopez-de-Silanes F, Shleifer A, Vishny R. 1998. Law and finance. *Journal of Political Economy*, 106:1113–55

Levine, R., Lin, C. and Xie, W., 2017. *The origins of financial development: how the African slave trade continues to influence modern finance* (No. w23800). National Bureau of Economic Research.

Li, W. and Yang, D.T., 2005. The Great Leap Forward: Anatomy of a central planning disaster. *Journal of Political Economy*, *113*(4), pp.840-877.

Meng, X. and Qian, N., 2009. The long term consequences of famine on survivors: evidence from a unique natural experiment using China's great famine (No. w14917). National Bureau of Economic Research.

Meng, X., Qian, N. and Yared, P., 2015. The institutional causes of China's Great Famine, 1959–1961. *The Review of Economic Studies*, *82*(4), pp.1568-1611.

Michalopoulos, S. and Papaioannou, E., 2013. Pre-colonial ethnic institutions and contemporary African development. *Econometrica*, *81*(1), pp.113-152.

Nunn, N., 2008. The long-term effects of Africa's slave trades. *The Quarterly Journal of Economics*, *123*(1), pp.139-176.

Nunn, N., 2009. The importance of history for economic development. *Annual Review of Economics*, *1*(1), pp.65-92.

Nunn, N. and Puga, D., 2012. Ruggedness: The blessing of bad geography in Africa. *Review of Economics and Statistics*, *94*(1), pp.20-36.

Pierce, L. and Snyder, J.A., 2017. The historical slave trade and firm access to finance in Africa. *The Review of Financial Studies*, *31*(1), pp.142-174.

Pierce, L. and Snyder, J.A., 2018. Historical Origins of Firm Ownership Structure and Performance: The Persistent Effects of the African Slave Trade. Working Paper. Available at: https://apps.olin.wustl.edu/faculty/pierce/piercesnyderpost-4.pdf

Riskin, C., 2000, United Nations Development Programme, China human development report 1999: transition and the state, Oxford University Press, p. 37, ISBN 978-0-19-592586-9

Roland, G. and Yang, D.Y., 2017. China's Lost Generation: Changes in Beliefs and their Intergenerational Transmission (No. w23441). National Bureau of Economic Research.

Xue, M. M. and Koyama, M., 2018. Autocratic Rule and Social Capital: Evidence from Imperial China. Working Paper. Available at SSRN: https://ssrn.com/abstract=2856803

Yao, S., 1999. A note on the causal factors of China's famine in 1959–1961. *Journal of Political Economy*, *107*(6), pp.1365-1369.

Zhang W. 2018: Six understandings of corporate governance structure in the context of China, *European Journal of Finance*, forthcoming in this issue

Zhang, D., Cai, J., Liu, J. and Kutan, A.M., 2018. Real estate investments and financial stability: evidence from regional commercial banks in China *European Journal of Finance*, forthcoming in this issue