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Xiuqi Fang, Zhudeng , Wei Yun Su (Beijing Normal University)

Comparison of the economicfluctuations between the warm Han and Tang dynasties and the cold Ming andQing dynasties in China

Abstract: A comparison of historical economic fluctuation in different climatic contexts could provide a better understanding of the economic impact of current global warming. On the centennial scale, the Han and Tang dynasties in China were under a relative warm climate, while the Ming and Qing dynasties experienced a cold climate with frequent floods and droughts known as the Little Ice Age. Economic status proxy of the Han, Tang, Ming and Qing dynasties has been reconstructed based on the document records in China, so as to conduct a comparative analysis of the impacts of warm and cold climate on historical economic development. It shows patterns of agrarian economy of the four dynasties was featured cyclical changes, and displayed a well coincidence with climate change. Compared with that of the Ming and Qing dynasties, economic fluctuation of earlier Han and Tang dynasties displayed a more manifest linear response to the temperature change. It seems that a long- term cold period and repeated extreme disasters of drought and flood discouraged economic development, indicated by a longer recovery phase and a shorter flourishing phase in the cold Ming and Qing dynasties compared with that in the warm Han and Tang dynasties. However, in the dynastical-cycle change, the Ming and Qing dynasties experienced a longer growth phase and a higher ratio of growth phase to decline phase, which may resulted from an interaction between a long-term unfavorable climate and other nor climatic factors.

Keywords: Warm period, cold period; Economic comparison; Agrarian dynasties; Climatic impacts; China

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Leonard Dudley (Universit éde Montr éal)

Minding the Gap:

Language Standardization and the Great Divergence

Abstract: Why did China and the West switch roles in the development of new technologies after 1600? Current explanations fail to make clear why innovation in the West was confined to only a few regions while virtually no innovation occurred in comparable areas of China. The missing consideration, this paper argues, was language standardization in the West versus linguistic drift in China. As the complexity of new technologies rose, cooperation of individuals with different skill sets became increasingly necessary. Until 1850, only Britain, northern France and the USA possessed large networks of people able to communicate easily with one another. In China, standardization of the vernacular awaited the revolutions of the twentieth century.

Key Words: innovation, cooperation, language, Europe, China

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Myung Soo Cha (Yeungnam University)

Did Late Imperial China Go Forwards or Backwards or Stand Still?

Using grain and farmland price data, this article estimates the interest rate and land rent in five provinces of Qing China to find that they tended to fall in the eighteenth and nineteenth centuries. Given that population growth outstripped both acreage expansion and capital accumulation, the weakening in the rental income for capital and land leads one to predict that Chinese workers also suffered shrinking real incomes, which is what available wage evidence shows. The downward trends in factor prices imply late imperial China suffering deterioration in living standards and total factor productivity, rather than achieving Smithian growth or muddling through an involutory path. The Chinese failure contrasts with Tokugawa Japan improving total factor productivity and living standards without resorting to coal or foreign trade, which are believed to have helped England achieve the first industrial revolution. Hence the causes of the growth disaster occurring in late imperial China are more likely to be found in the country's institutions than luck.

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If Not Malthusian, Then Why?

Abstract: This paper shows that merely the Malthusian mechanism cannot explain the pre-industrial stagnation of living standards. Technological improvement in luxury production, if faster than improvement in subsistence production, would have kept living standards growing. The Malthusian trap is essentially a puzzle of balanced growth between the luxury sector and the subsistence sector. The author argues that the balanced growth is caused by group selection in the form of biased migration. It is proved that a tiny bit of bias in migration can suppress a strong tendency of growth. The theory reexplains the Malthusian trap and the prosperity of ancient market economies such as Rome and Song. It also suggests a new set of triggering factors of modern economic growth.

Key Words: Malthusian trap, group selection, very long run growth, source-sink migration
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Assessing market disintegration in pre-modern China

Abstract: Our study contributes to the debate over China's level of market integration on the eve of (Western) industrialisation. Exploiting rich historical data on monthly grain prices in 211 prefectures during the 'High Qing' period (1740 to 1820), we explore the evolution of market integration across space and time. We find that rice markets in the South of the empire were more integrated than wheat markets in the North, while the whole empire experienced a

prolonged process of market disintegration. Our empirical strategy emphasizes the importance of cross-section dependence arising from common shocks and the network effect of trade and price behaviour. We conclude by examining some historical explanations for the observed phenomena.

Keywords: China's market integration, price convergence, common factor model, cross-section dependence

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Meng Zhang (UCLA)

**The Mountain Land Economy in Southeastern Guizhou:
Co-ownership, Securitization and Risk-sharing, 1700-1900**

Timber produced from the southwestern regions in the Upper Yangzi has become increasingly important in meeting the burgeoning consumption market along the eastern coast since the seventeenth century. This paper focuses on the forested mountains in southeastern Guizhou and southwestern Hunan provinces, an area occupied mainly by the Miao people and only incorporated into bureaucratic civil governance since the 1730s with the expansion of the Qing Empire. Timber trade flourished thanks to the state's effort in dredging the Qingshui River, which transported high-quality Chinese firs produced in remote mountains to major water routes connecting to the Yangzi River, and the establishment of regular market intermediaries that facilitated trade between Miao sellers and Han Chinese itinerant merchants. Tree-planting and tenancy of mountain land became common practice by the 1750s in the mountainous areas close to the Lower Qingshui timber markets.

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Debin Ma, Liuyan Zhao (LSE and SUFE, Peking University)

**Institutional Change and Monetary Integration : Silver Exchange
between Shanghai and Tianjin in 1885-1930**

Abstract: Using monthly data set on exchange rates of silver dollars versus silver taels, our paper examines how institutional reform and rapid growth in monetary and financial intermediaries in early 20th century China improve efficiency in money market and promote commercialization. Specifically, We estimate the silver points and the speed of convergence among the exchange rates of silver dollar, and assess the extent to which Shanghai and Tianjin, two main monetary centers of China, were integrated. Given transaction costs, we modeled the spatial arbitrage process, which implies nonlinear dynamics of exchange spreads in the two centers. Based on this, threshold error correction mechanism was adopted to estimate the implicit silver points. The results strongly point toward that silver points that have significantly declined over our sample. The results provide an insight into the efficiency improvement of

Chinese silver standard, and the evolution of money market integration across southern and northern China in the early 20th century. Our findings on the dramatic improvement in the 1910s carry important implications for an assessment of economic performance in Republican China.

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Chen Yongwei, Zhao Yuheng (Tsinghua University, Peking University)

**Caught in the Net:An Inquiry into Shanghai Banking System
in the 1930s from a Social Network Approach**

Abstract: In this paper, we study Shanghai banking system in the 1930s from a social network approach. In order to model the banking network, we define any two banks as “linked” if they have common directors. Then, we use regression to investigate the relationship between banks’ network characteristics and their performance. We find banks with higher network centrality and shorter network distance to central banks (ie, Bank of China, the Central Bank, Bank of Communication and Bank of Agriculture) are more profitable and more likely to survive in the “silver crisis” in 1935, this result confirms the existing of the cross-bank insurance and political connection. We also find that after the “silver crisis”, the diameter of the banking network decreases and the average distance to central banks also becomes shorter, we argue can testify the hypothesis of “bureaucratic capital control the financial system through crisis” to a certain extent.

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Chen Qiang(Shandong University)

**Dynastic cycles and nomadic conquests:
Further evidence from China and world history**

Abstract: The conflict between nomadic and agricultural people had been a recurring phenomenon throughout world history. Recent study finds dynastic cycles as an important determinant of nomadic conquests in the context of Sino-nomadic conflict, where an aging Chinese dynasty was more likely to be conquered. This paper extends this result in two dimensions by using a sample of nomads in or near China and a sample from world history. The effect of dynastic cycles on nomadic conquests remain significant in a much broader context. Overall, dynastic cycles appear to be a general force shaping world history that has been hitherto underappreciated.

Keywords: Dynastic cycles, nomadic conquests

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Michael Huberman, Christopher Meissner, Kim Oosterlinck

Technology and Geography in the Second Industrial Revolution:

New Evidence from the Margins of Trade

Abstract: In the Belle Époque, Belgium recorded an unprecedented trade boom, but growth in output per capita was lackluster. We seek to reconcile this ostensible paradox. Because of the sharp decline in both fixed and variable trade costs, the trade boom was as much about the expansion in the number of products delivered and markets served as it was about shipping more of the same old products. We use a new highly disaggregated data set on bilateral exports at the product level to illustrate these claims. In line with new trade theory, the effect of trade on productivity was mediated by sector-level firm heterogeneity and product differentiation. In new technology sectors, like tramways, the high degree of firm heterogeneity amplified the effect of trade on productivity. But in other sectors, mainly old staple industries like cotton textiles, a high level of firm uniformity muted the effect of trade. Into the twentieth century, old staples trumped new technology sectors, per capita income growing modestly as a result.

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Cong.Liu (University of Arizona)

Distributional Effects of Trade Protection:

Evidence from China in the Early Twentieth Century

Abstract: This paper examines the distributional effects of industrial policies using a natural experiment in early twentieth-century China. Using wage-rental ratios in 104 counties in China from 1901 to 1933, I find the exogenous trade blockade due to WWI increased the ratio rapidly in coastal areas relative to inland areas. The difference remained after the war. I attribute the dramatic changes in wage-rental ratio to the rise of manufacturing industries during and after the war. Port-level trade flows on cotton products confirm the rise of manufacturing sectors. These findings provide an explanation on the persistent income gap between wage earners and land owners before WWII in China. This also helps to explain the puzzle on the persistent inequality along with recent globalization today.

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Duol Kim, Heejin Park (Myongji University, Kyung-pook National University)
**A Consequence of Coerced Free Trade: Biological Living Standards
of Korea during the Port-Opening Period, 1876-1910**

The confrontation of western powers in the mid- and late 19th century was the most decisive factor that has determined modern history of East Asia. Unlike their approaches to American continents where they populated their people or conquered the indigenes, western powers took a commercial approach. They threatened China, Japan, and Korea with guns and fleets to open ports and to trade commodities.

Conversion from autarchy to open economy, according to standard economics, would benefit the country. Foreign trade will grow, income will increase, and the general welfare of the people will improve. As the government can collect more taxes, she can strengthen herself and protect property rights of constituents better both inward and outward. The safer and more stable environment will stimulate economic activities, and it will reinforce and amplify the whole process. History of Japan in this period can be said to realize basically this virtuous circle. Although she was one of those who was forced to open ports by the western countries, Japan finally became a member of imperial powers at the turn of the century.

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Yifei Huang (California Institute of Technology)

**Does Access Matter for Meritocracy? An Empirical Study of
the Chinese Imperial Civil Service Examination, 1663-1736**

Abstract: The Imperial Civil Service Examination is one of the most distinctive institutions in Imperial China. Started in 607 and abolished only in 1905, its millennial persistence shaped Imperial Chinese politics and society in fundamental ways. On one hand, the Imperial Examination is considered as an exemplary of meritocracy, providing an efficient mechanism to select talents to govern the bureaucracy. On the other hand, the effectiveness of social mobility and meritocracy provided by the Imperial Exam is not without challenges. The argument is that in Imperial China, education was mainly privately funded and costly, so only those who could afford it had the access to success. We empirically study whether and to which extent access mattered, focusing on a particular kind of access associated with participation costs. Since there was only one examination center in each province for provincial exams, participation costs (i.e., traveling and time) were differentiated by space. We find student came from counties further away from the provincial exam center had higher provincial ranking and higher chance of passing next level national exam, and we provide a model of spatial selection to explain this pattern. Moreover, we find some evidence suggesting that the selection mechanism may have substantial impact on regional inequality in exam achievement. Specifically, an increase of average distance decrease a county's performance in provincial exam by 37.37%, as measured by number of provincial pass, or 41.04% as measured by the number of provincial graduates per capita.

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Mark Koyama, Melanie Meng Xue(George Mason University)

The Literary Inquisition:

The Persecution of Intellectuals and Human

Abstract: Imperial China used an empire-wide system of examinations to select civil servants. Using a semiparametric matching-based difference-in-differences estimator, we show that the persecution of scholar-officials led to a decline in the number of examinees at the provincial and prefectural level. To explore the long-run impact of literary inquisitions we employ a model to show that persecutions could reduce the provision of basic education and have a lasting effect on human capital accumulation. Using the 1982 census we find that literary inquisitions reduced literacy by between 2.25 and 4 percentage points at a prefectural level in the early 20th century. This corresponds to a 69% increase in the probability of an individual being illiterate. Prefectures affected by the literary inquisition had a higher proportion of workers in agriculture until the 1990s.

Keywords: China, Human Capital, Institutions, Persecutions, Persistence

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Buddha's Grace Illuminates All: Temple Destruction, School Construction, and Economic Growth in the 20 th Century China

Abstract: This study intends to estimate the causal effects of human capital investment on economic development. We do so by adopting a novel natural experiment in the early 20 th century China called the "Temple Destruction Movement," under which the local governments were required to close Buddha\Tau temples and take over temple assets to construct modern primary schools in the local areas. Our Difference-in-Differences estimates indicate that places with more temple assets ex ante constructed more schools during the movement. In addition, an Instrumental Variable approach provides evidence that regions constructed more schools during the movement period experienced faster economic development later on.

Keywords: Temple Destruction Movement; Human Capital; Economic Development

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The origins of cross-county income differences in China:

Treaty Ports System and Property Rights Institutions

Abstract: This paper demonstrates that a significant fraction of county-level income differences in China is due to differences in property rights institutions. This paper studies the effect of property rights institutions on economic performance by exploiting the effect of the opening of treaty ports from 1842 to 1948 in China. The opening of treaty ports leads to very different property rights institutions across counties in China. Counties with easy access to treaty ports develop better property rights institutions; for counties far away from treaty ports,

the property rights institutions are relatively poor. This divergent institutional pattern persists until today. Exploiting the effect of treaty ports system, this paper provides evidence that better property rights institutions could lead to better economic performance. Moreover, the estimated effect of property rights institutions on economic performance is insensitive to Buddhism belief, minority ratio and average education level.

Keywords: Property Rights, Institutions, Economic Development, Treaty Ports

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