Dear Colleagues,

For "The Chinese Economy in the Long Run" conference I am submitting the conclusion to a book ms. that I have just completed entitled "The Rise and Demise of Paper Money in Imperial China, 1000-1500: Fiscal Innovation, Market Growth, and Monetary Transitions." Although this project is not focused on economic growth per se, the conclusion situates China's precocious development of paper money (and its eventual abandonment) within the long arc of evolution in Chinese economic history, and it also compares the monetary system of middle-late imperial China with the very different trajectory of monetary history in medieval and early modern Europe. My book is primarily a study of political economy, which in my view has not yet been given sufficient due in the conceptualization of the origins of the modern economy. The "divergence" between the monetary systems of China and the West (which goes back to the seventh century BCE, with the invention of Greek silver coinage and the emergence of bronze currencies in China) in many respects is of a different order than the "Great Divergence." The shift from fiat paper currency in the eleventh-fourteenth centuries to uncoined bullion silver in the fifteenth-nineteenth centuries certainly appears to be "regressive" within the conventional interpretive framework of monetary history, but its significance and implications require deeper scrutiny.

Generally speaking, the conclusion presented below should be intelligible to those without any expertise in Chinese history (I hope!). Just a few words of orientation: the Chinese imperial state first issued paper money in the early eleventh century, under the Song dynasty (960-1276; subdivided into the Northern [960-1127] and Southern [1127-1276] Song periods) as a supplement to the bronze coinage that was the prevailing monetary standard. The Mongol-ruled Yuan dynasty (1276-1368) exclusively relied on paper money for both public finance and market trade. Initially the Ming dynasty (1368-1644) also sought to institute fiat paper currency, but by the early fifteenth century its paper money was largely defunct, to be superseded by (uncoined) silver as the monetary standard. One of the key episodes in this story, which I refer to several times in the conclusion, was the inauguration of the New Policies of the prime minister Wang Anshi in the 1070s. I characterize the New Policies reforms as "mercantilist" in the sense of intrusive state intervention in commerce and industry to promote economic growth and state power at a time of military crisis (this Chinese mercantilism differs in important respects from the mercantilism of early modern Europe, of course). The New Policies were mostly repealed in the 1120s-1130s, although a signal feature of them—reliance on indirect taxation of commerce and consumption rather than direct taxation of land and people as the main source of state revenues—endured for the remainder of the Song dynasty.

I summarize my own conceptualization of the course of Chinese political economy over the entire imperial era in a previously published article: Richard von Glahn, "Modalities of the Fiscal State in Imperial China," *Journal of Chinese History* 4.1 (2020): 1-29. I also preface the conclusion below with the table of contents for the whole book.

The Rise and Demise of Paper Money in Imperial China, 1000-1500: Fiscal Innovation, Market Growth, and Monetary Transitions

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The Rise and Demise of Paper Money in Imperial China, 1000-1500: Fiscal Innovation, Market Growth, and Monetary Transitions

Conclusion

Making money was integral to imperial governance in China. The sovereign's responsibility to provide for the economic welfare of his subjects laid the foundation for the fiscal constitution of the Chinese empire. Philosophers and statesmen conceived of money as the crucial tool by which the ruler ensures economic prosperity. The canon of Chinese monetary theory, which coalesced already at the inception of the first empires, leaned heavily toward chartalist ideas that invested sole authority to make money in the state. Power over money—sanctioned since Han times as the monarch's rightful command of "the levers of profit" (*quanli* 權利)—entailed control over the ratios of exchange between money and goods. Whereas the supply of goods—determined by productive forces, market institutions, and (for the most important necessity of life, grain) the unpredictable vicissitudes of weather and harvests—remained beyond the ruler's reach, the supply of money was amenable to the state's monetary and fiscal policies.

But control over the money supply, the ability to issue and withdraw money at will, rested on the premise that making money incurred minimal cost. Gold and silver were far too scarce and precious to enable the ruler to adjust the money supply as needed. In contrast, the supply of bronze coin, manufactured from cheaper and more abundant metals, was in theory unlimited. Bronze currency implicitly was a fiat money, yet its value was determined not simply by the ruler's decree but rather through careful management of the money supply relative to the demands for money and goods. To exercise such command over the money supply, the ruler was obliged to hold substantial stocks of coin in his treasury. The common form of money-making in medieval Europe, in which individuals at their own initiative brought gold and silver to the moneyer to be struck into the prince's coin (so-called "free minting"), surrendered sovereign power to private agents in ways wholly antithetical to Chinese monetary theory and practice.[1]

[1] In England, free minting was inaugurated by Henry II in 1154. Desan, *Making Money*, p. 70.

Of course, the prerogative to create money faced formidable technical, political, and economic obstacles. Bronze coin was by no means cost free; on the contrary, the low unit value of bronze coin meant that the state typically lost money minting it rather than reaping seigniorage income. Nor were the supplies of copper as limitless as theory presumed. Even the most successful full-bodied early imperial coinages, the Han Wuzhu and Tang Kaiyuan coins, could not be produced in sufficient quantities to meet the demand for means of public and private payments. During the Northern Song period fiscal policymakers dramatically increased the output of state mints, far beyond the peak levels of preceding dynasties, yet coinage was unable to keep pace with demand, resulting in what contemporaries described as "coin famines." Still, by this time money had become one of the principal institutions mediating the relationship between the imperial state and its subjects. Monetization of taxation, especially during the New Policies era, reshaped the political economy by deepening the populace's indebtedness to the state. The New Policies agenda was focused not so much on nurturing the growth of the market as strengthening the interdependence between the state and its subjects. Indeed, the particular form of the "mercantilist state" that took shape under the New Policies regime (in many ways harking back to the fiscal strategies of Emperor Wu of the Han) aimed at shielding the populace from the pernicious effects of the market. Economic justice would be achieved by substituting public-minded state agents in place of profiteering private merchants. As monetization of obligations to the state advanced, control over the money supply once again leapt to the forefront of the state's fiscal priorities.[2]

The economic agenda of the New Policies has served as the template for Miyazawa Tomoyuki's concept of "fiscal circulation," in which the state retains the bulk of the money supply in its treasuries and directly or indirectly organizes the circulation of goods on an empire-wide scale through its procurement policies, especially military expenditures. In Song times, Miyazawa argues, money was used principally for payments to the state rather than in market exchange. He concludes that the expanding use of money did not betoken the growth of a market economy; instead, within the long arc of imperial history the Song marked the zenith of the state's autocratic control over society and economy.[3] In Miyazawa's view, the Song also

[2] On the "mercantilist state" in Chinese fiscal history, see von Glahn, "Modalities of the Fiscal State": 14-17.

[3] Miyazawa, *Kokka to keizai*, pp. 21-26.

witnessed the maturation of a unified "fiscal currency" in the form of bronze coin. In contrast to Peng Xinwei, who argued that the multiplicity of currencies in the Song engendered the most fragmented monetary system in Chinese history, one that inhibited political centralization, Miyazawa contends that the Song state successfully utilized its bronze currency standard to unify the national economy.[4] Consequently, state procurement exerted a powerful influence on commodity prices. Miyazawa emphasizes that prices displayed long-term stability throughout the Song, excepting the inflationary spikes triggered by war and invasion in the Qingli War of the 1040s, the Jurchen conquest of the north in the 1120s-1130s, the Kaixi War in the early thirteenth century, and after the onset of the Mongol invasions in 1234. Administered prices set through state procurement systems determined market prices at the national level, although local markets, isolated from the fiscal circulation system, displayed a high degree of seasonal and annual volatility.[5]

Miyazawa is certainly correct to stress the important influence of the Song fiscal administration and its logistical requirements on the Song economy. Yet his analysis is limited by his focus on particular fiscal institutions and practices, notably the New Policies, in isolation from larger economic trends. The case studies he cites as examples of fiscal circulation, such as Wang Anshi's state trade agency and *mianhangqian* 免行錢 levy (a money tax levied on merchants and artisans in lieu of requisitions of goods), were short-lived experiments that, contrary to Miyazawa's argument, betrayed the limitations of the fiscal powers of the Song state even in its most activist mode. Miyazawa's version of the "state theory of money"—borrowed from G.F. Knapp by way of Max Weber—surely exaggerates the extent of the Song state's sovereign control of money and the dominance of fiscal circulation within the money economy as a whole.[6]

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[4] Miyazawa, *Kahei to zaisei*, pp. 45-55. In arguing for a unified currency system in the Song, Miyazawa emphasizes that cloth lost the monetary functions it performed in the early empires and that silver remained a special form of state finance, not a general purpose money. In his view, paper money was a mere substitute for coin and should be seen as an extension of the unified fiscal currency system. For Peng Xinwei's emphasis on the fragmentation of the Song monetary system, see Peng, *Zhongguo huobi shi*, p. 398.

[5] Miyazawa, *Kokka to keizai*, pp. 481-82.

[6] Miyazawa, *Kokka to keizai*, p. 16. Miyazawa draws on the Weberian distinction between administrative and market monies delineated by Adachi Keiji, a fellow member of the Chūgokushi kenkyūkai circle of Chinese historical studies in Japan. See Adachi Keiji 足立啟二, "Sensei kokka to zaisei kahei" 專制國家と財政貨幣, in Chūgokushi kenkyūkai (ed), *Chūgoku sensei kokka to shakai tōgō: Chūgoku shizō no saihensei (II)* 中國專制國家

Still, the prominent role of fiscal circulation within the distinctive fiscal constitution and institutional infrastructure of the Song state gave a distinctive cast to its money-making. The turn toward monetization of taxation had begun in the wake of the An Lushan rebellion in the mid-eighth century. Yang Yan's twice-a-year tax system, introduced in 780, reestablished the principle of direct taxation, but it was premised on private ownership of land and the disparities of wealth among taxpayers. Already in 792 the state councilor Lu Zhi condemned the twice-a-year tax system for abetting the corrosive effects of the market economy. Since antiquity, Lu avowed, taxation had been based on the labor power of adult males. Rulers enacted uniform levies in the form of labor services and taxation of the goods—grain and cloth—directly produced by household labor. The *zu-yong-diao* tax system instituted by the founders of the Tang dynasty had abided by these principles. The twice-a-year tax, levied on household wealth (measured as an abstract sum of money) and collected (partly) in coin, violated the principle of uniform taxation and engendered profound inequities, not least by exposing farming families to the marketplace by forcing them to sell their produce to earn coin.[7] Although some Song scholars (notably of the Dao Learning persuasion) reiterated Lu's critique of the twice-a-year tax as a perversion of classical institutions, as a practical matter Song statesmen, including even Ye Shi, endorsed it as a pragmatic adaptation to the irreversible privatization of landownership since the late Tang era.[8]

An even more significant change was the shift from direct taxation of land and people to commercial and consumption taxes inaugurated with the salt monopoly established by Liu Yan in 760. This trend intensified during the post-Tang period of disunion and under Song imperial dominion. The adoption of indirect taxation as the main source of state revenues was not explicitly theorized, but it revealed a radically different conception of taxation that aroused vehement opposition among many Confucian literati. Already at the dawn of the imperial era the *Guan Zi*, a seminal repository of Chinese mercantilist ideas, had in fact advocated this shift on

と社會統合: 中國史像の再構成 (II) (Tokyo: Bunrikaku, 1990), pp. 117-46, esp. pp. 124-27. For Weber's formulation, see Max Weber, *Economy and Society* (Berkeley: University of California Press, 1978), 1, pp. 75-79.

[7] Lu Zhi 陸贄, "Junjie fushui xu baixing liutiao" 均節賦稅恤百姓六條, in *Lu Xuangong ji* 陸宣公集 (Hangzhou: Zhejiang guji chubanshe, 1988), pp. 243-61. See also Li Zhixian, *Yang Yan*, pp. 327-79.

[8] For a brief survey of the Song discourse concerning the twice-a-year tax, see Song, "Debates on Just Taxation": 261-67.

the pragmatic grounds that indirect taxation disguised the tax itself (consumers paid these taxes through higher prices, not payments directly to the state, and thus they would not resent the ruler), but few Song statesmen dared to cite *Guan Zi* as an authority.[9] Proponents of the New Policies from Wang Anshi to Cai Jing aimed at enhancing the fiscal capacity of the state through monetization of direct taxation, greater reliance on indirect taxes, and the displacement of private merchants by state agents. Southern Song policymakers withdrew from the kind of direct control of commercial exchange enacted under the New Policies. But, faced with the urgent need to raise revenues to meet intractable military costs, they largely acquiesced to even greater reliance on indirect taxation.

Fiscal governance assumed an unusually prominent place in the Song as the cornerstone of what Charles Hartman has defined as the "technocratic state." Hartman observes that the standard narrative of Song history from the twelfth century down to modern times has depicted the Song as the epitome of civil bureaucratic governance, consolidated by the resurgence of Confucianism (in its Neo-Confucian forms) as the core of Chinese intellectual and cultural values. This narrative, constructed by literati historians themselves, has trained attention on Confucian literati and enlightened emperors as the positive forces for the installation of the moral rulership essential to good governance.[10] But this narrative obscures crucial features of Song political culture, marginalizing the fiscal operations of the state (typically depicted in Neo-Confucian writings as predatory and malignant) and erasing the participation of major stakeholders in governance, including the imperial clan, eunuchs, palace women, military-grade officials, merchants, and the landholding elite. These groups, deeply deplored by literati officials, influenced governance not through success in the civil service examinations and bureaucratic office but rather through their roles in the operation of a "technocratic state" centered in the inner court, the emperor and his palace administration. In contrast to the career bureaucrats, esteemed for their classical education and generalized knowledge of government affairs, the technocratic elite developed expertise in finance, accounting, engineering, and military technology that made them invaluable subalterns in service to imperial will. Hartman

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[9] For arguments in *Guan Zi* for the wisdom of indirect rather than direct taxation, see chapter 78, "Kuidu"; chapter 80, "Qingzhong (jia)"; chapter 81, "Qingzhong (yi)," in *GZ*, 3, pp. 1379, 1412-13, and 1450-51 respectively.

[10] Charles Hartman, *The Making of Song Dynasty History: Sources and Narratives, 960-1279 CE* (Cambridge: Cambridge University Press, 2021).

recenters Song political culture on the abiding tension between the technocratic state administered from the inner court and the "bureaucratic institutionalism" espoused by activist literati committed to Neo-Confucian moral precepts. The ideological triumph of the latter—which prevailed throughout the late imperial era—must not overshadow the reality of the predominance of the technocratic state within Song governance, however.[11]

Fiscal expertise had become a crucial feature of imperial governance since the late Tang period. The fiscal reforms enacted by Liu Yan and Yang Yan were accompanied by the compilation of treatises on "national accounts" (*guoji* 國計) to provide policymakers with comprehensive data on the empire's fiscal resources. The Song created an Accounting Bureau (Kuaijisi 會計司) to compile statistical digests on a regular basis.[12] Originally subordinate to the finance commission, in 1005 the accounting bureau was transferred to the Supervisory Office for Capital Agency Treasuries and Storehouses (Tiju zaijing zhusi kuwu si 提舉在京諸司庫務司), a new agency attached to the inner court. Along with the expanding role of the inner palace treasury (Neicangku) in state finances, this agency—headed by eunuchs and military-grade officials—ensured that the emperor and his staff would have a monopoly on the most comprehensive information regarding state finances.[13] In the New Policies era, the functions of the supervisory office for treasuries and storehouses were transferred to the state trade agency, part of Wang Anshi's plan to wrest control over fiscal affairs from the inner court.[14] The inauguration of the New Policies marked the beginning of systematic use of fiscal accounting to guide budget planning.[15]

The finance commissioners likewise consisted of technocrats with long experience in fiscal matters, at least up until the Qingli War, which marked the onset of the ascendancy of

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[11] Hartman, *Structures of Governance*, passim.

[12] The *Song Dynastic History* is the only official dynastic history to include a chapter on national accounts (*kuaiji* 會計), which appears prominently at the head of the chapters devoted to state finance. See Christian Lamouroux, *Fiscalité, comptes publics et politiques financières dans la Chine des Song: le chapitre 179 du* Songshi (Paris: Collège de France, Institut des Hautes Études Chinoises, 2003).

[13] Hartman, *Structures of Governance*, pp. 204-6.

[14] Li Weiguo 李偉國, "Lun Bei Song de tiju zhusi kuwu si" 論北宋的提舉諸司庫務司, in Li, *Songdai caizheng he wenxian kaolun* 宋代財政和文獻考論 (Shanghai: Shanghai shiji chuban gongsi, 2007), pp. 43-61.

[15] Lamouroux, *Fiscalité et politiques financières*, pp. 57-62.

Confucian literati within the Song bureaucracy.[16] Both Wang Anshi and Cai Jing created ad hoc agencies staffed by relatively low-ranking officials who were given freedom from regular civil service protocols and broad discretion to devise strategies to raise revenues. This mechanism for mobilizing fiscal expertise—which Paul Smith, in reference to Wang Anshi's personnel strategy, has dubbed "bureaucratic entrepreneurship"—was routinely practiced throughout the Southern Song as well.[17] As we have seen, a notable feature of Song fiscal governance was the regular consultation with merchants as legitimate stakeholders in fiscal decision-making, for example in the ad hoc commissions created to deliberate on tea and salt policies. Certainly, such consultations were controversial, and literati officials often complained that merchants had too much influence in crafting policies that were unduly favorable to their interests. Implicit in the operation of fiscal administration throughout the Song—with the notable exception of Wang Anshi's brand of mercantilism—was an acceptance of the market economy and the crucial role of merchants in facilitating exchange. As I have suggested elsewhere, the Song manifested what might be described as a "synergistic fiscal state" predicated on cooperative rather than antagonistic relationships with merchant groups. Song policymakers sought to harness market forces, rather than arrest or subvert them, to achieve their fiscal and economic goals.[18]

The crucial position of fiscal policymaking within Song governance elevated the importance of making money. The massive increase in mint output during the Northern Song facilitated both fiscal circulation and market expansion, but demand for money continued to outrace supply. Moreover, the viscosity of low-value bronze and iron coins inhibited their utility as means of fiscal circulation as well as long-distance trade. Already at the time of the fiscal reforms of the late eighth century the Tang state had begun to issue "flying cash" bills to enable long-distance remittance transfers, a practice renewed during the Song under the rubric of "convenient cash." A long history of paper contracts and debt instruments in common use

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[16] Based on examination of the bureaucratic careers of Northern Song officials Robert Hartwell found a pattern of repeated service in fiscal offices, in essence a separate career track for officials who developed fiscal expertise. See Robert M. Hartwell, "Financial Expertise, Public Policy, and the Formation of Economic Policy in Northern Sung China," *Journal of Asian Studies* 30.2 (1971): 281-314. Hartman has determined that this pattern only held up until 1040. See Hartman, *Structures of Governance*, pp. 125-29.

[17] Smith, *Taxing Heaven's Storehouse*, pp. 111-18. Hartman counts at least six instances of the creation of such ad hoc fiscal agencies in the Southern Song. See Hartman, *Structures of Governance*, p. 209.

[18] Von Glahn, "Modalities of the Fiscal State": 17-22.

among ordinary farm families as well as merchant firms buttressed the general validity of paper documents as promises of payment. Provisioning armies on the empire's northern frontiers, the preeminent fiscal concern of the Song state, fostered innovation in the form of bills of exchange. Revenues from the tea and salt monopolies, mediated through paper bills, became a principal means of inducing merchants to supply provisions to the frontier garrisons through the *ruzhong* system. Making the commodity bills of exchange negotiable and transferable enhanced their attractiveness to merchants. To be sure, the functioning of commodity bills of exchange was by no means smooth, principally because the state had difficulty balancing their supply and demand; the urgent need for military supplies led to overissue of licenses, depressing their market value and prolonging the time to redeem them. *Jiaoyinpu* exchange bill dealers provided a secondary market that sustained the circulation of these bills. Denunciations of *jiaoyinpu*—voiced by merchants and fiscal policymakers alike—for the "stranglehold" they exerted over one of the crucial elements in state finance only underscored their importance as an indispensable link between state and market. The adoption of Fan Xiang's salt license system in 1048, which decoupled the salt monopoly from frontier provisioning, struck a more sustainable balance. Salt licenses themselves became monetary instruments, held by the rich as savings, according to the testimony of the finance commissioner Shen Gua in 1077.

Recognizing the constraints of bronze coin as the primary form of money, Shen Gua also advocated making greater use of silver to augment the money supply. Shen did not go so far as to propose coining silver, but he implicitly acknowledged the rising importance of silver as a monetary instrument. The state already had come to rely on silver as the means for transferring revenues from the distant southern provinces to the capital, and silver was the principal conduit for conducting trade between Sichuan, an iron coin monetary region, and both the frontiers and the metropolitan regions of the empire. Silver was not used in ordinary market transactions, but it had become a preferred store of value and was widely held as savings. In the Southern Song period silver would become an integral part of state finance as the hard currency reserve backing the issue of paper money.

The invention of paper money was a logical corollary of the ruler's supreme authority to make money. Yet the first bills to circulate as means of exchange, the *jiaozi* currency, emerged from the private sector. The immediate circumstances surrounding the birth of *jiaozi* in the 990s—created by private firms in Sichuan, whose robust commercial economy was handicapped by its designation as an iron currency zone and the outbreak of a rebellion that shut down the iron coin mints—were unique. Sichuan officials were quick to recognize the utility of *jiaozi* even as lack of regulation resulted in reckless issuance and insolvencies. State interventions to impose discipline on the market for private *jiaozi* bills failed. But *jiaozi* had become vitally important to the Sichuan economy, and rather than abolishing them in 1023 the state itself took over the issue of paper bills as state-authorized money. Although fiscal policymakers soon moved to incorporate *jiaozi* into the *ruzhong* procurement system, the paper bills also displaced iron coins as the principal market money in Sichuan (and also in the frontier zone of neighboring Shaanxi). Fiscal exigencies and monetary turbulence under Cai Jing's regime in the early twelfth century led to profligate overissue of *jiaozi*, causing their value to collapse. The government devalued the paper currency by replacing *jiaozi* with a new paper money, *qianyin*, at a steep discount. Nevertheless, the introduction of *qianyin* proved a success. The Sichuan monetary system stabilized with *qianyin* as the monetary standard and iron coin reduced to a subsidiary currency. During the Southern Song period the success of Sichuan's *qianyin* currency was repeatedly invoked as the model for the adoption of paper money in other parts of the empire.

In contrast to the history of the Sichuan paper currencies, the creation of *huizi* bills in the metropolitan region of southeastern China in 1161 from the outset was designed to facilitate fiscal circulation, specifically to cope with the surge in expenditures triggered by renewed war with Jin. Initially intended as a temporary wartime expedient, the *huizi* paper currency quickly achieved broad acceptance in the marketplace. When the government began to withdraw *huizi* bills from circulation by redeeming them with silver, merchants clamored to retain the *huizi*. In 1168 the court decided to institutionalize *huizi* on a permanent basis, following the model of the *qianyin* currency in Sichuan. During the Song-Jin war of the early 1160s the court also approved the issue of paper currencies in the war zone borderlands of Huainan and Jing-Hu. These two paper currencies (*huaijiao* in Huainan and *huhui* in Jing-Hu) likewise were used to provision and pay the frontier troops, but they also served as a buffer zone of low-value currencies (both paper currencies were linked to regionally-specific iron coins) to stem the outflow of bronze coin into the Jin territories. Although *huaijiao* and *huhui* were less favored by long-distance merchants because they were denominated in iron currencies and not directly exchangeable with the bronze coin-denominated *huizi*, they prevailed as the monetary standards in their respective regions until well into the thirteenth century. Rather than a unified monetary regime, the Southern Song empire was divided into four separate monetary regions, each with its own distinct paper money and link-coins. The Jin, too, imitated Song practice and created its own paper currency.

Huizi bills, like *qianyin*, were an inconvertible fiat currency. What sustained their value were the strategies employed by the state to "maintain equilibrium" (*chengti* 稱提): (1) implicitly backing paper bills with hard currency by redeeming excess bills with silver (bronze coin being in short supply); (2) mandating that some portion (typically half) of tax payments be made in paper currency; and (3) requiring merchants to use paper currency to purchase commodity licenses. For the first three decades after *huizi* were established as a permanent institution these strategies worked well and the bills enjoyed favor in the marketplace, maintaining their value at or close to par. The value of *huizi* began to slip in the 1190s, and the military crises of the early thirteenth century burgeoned into monetary crises as the state vastly increased its issue of paper currency, causing sharp depreciation. Devaluations that accompanied new issues of *huizi* in 1211 and 1234 helped to stabilize the currency, but at significant cost to those holding old bills, and popular confidence in paper money faltered. Yet despite the steep depreciation in the value of *huizi* relative to bronze coin, *huizi* superseded coin as the monetary standard in both state payments and market exchange, so much so that substantial quantities of coin began to drain off to overseas markets. Fiscal circulation was crucially important to the transition to the paper money standard, but so too was the use of paper currency in private transactions.

The powerful Mongol military juggernaut assembled by Chinggis Khan invaded and occupied a large portion of the Jin realm in 1215 and completed the conquest of Jin in 1234 under the leadership of Chinggis's successor Ögödei. Already by 1215 silver had superseded both coin and paper currency in market exchange within the Jin territories, and under Mongol suzerainty silver became the chief instrument of trans-Eurasian trade and the main source of revenue for the Mongol regimes in China. Yet the fiscal and monetary policies initiated by Khubilai after his election as great khan in 1260 led not to the adoption of silver as the primary means of market exchange but rather to the creation of a fiat paper money that displaced metallic money altogether. The rulers of the appanages established by the Mongols in the former Jin territories—including Khubilai himself—had devised their own paper currencies modeled after Jin precedents, using silver or silk as their units of account. Khubilai introduced a new paper currency as the sole form of legal tender within his empire while demonetizing both bronze coin and precious metals. In contrast to the Song and Jin paper monies, however, Mongol paper money was tied to a silver money of account that served as the basis for government fiscal accounting. In the wake of the Mongol conquest of Southern Song in 1276 Khubilai's paper currency system was extended to south China as well. For the next seventy years Mongol paper currencies linked to a silver unit of account prevailed as the monetary standard throughout the Chinese ecumene and became the chief means of exchange even in everyday market transactions.

But the implosion of Mongol rule in the face of popular rebellions in the 1340s quickly ramified into fiscal and monetary crises. Desperate efforts to revive paper currency by linking it to a fresh issue of bronze coin only further undermined popular faith in its value. Zhu Yuanzhang, founder of the Ming dynasty that supplanted Mongol rule in 1368, was no more successful in restoring a bronze coin monetary standard. Zhu, born a peasant but schooled in Neo-Confucian morality, nurtured an abiding hostility to the flourishing market economy of the Song-Yuan era and sought to shelter his subjects from what he perceived as the corrupting influences of markets and money. The fiscal system instituted by Zhu returned to direct in-kind taxation of agricultural produce and corvée labor services instead of the indirect taxation of commerce and consumption that had been the foundation of state finance since the late Tang. Zhu also resorted to imitating Khubilai's example by creating a paper currency as the exclusive form of legal tender, even going so far as to demonetize the bronze coin he had issued in the early years of his reign. Rampant overissue of the Ming *baochao* paper currency without mechanisms for reabsorbing paper money through state payments deeply eroded its value, however. Efforts by Zhu's successors to revive the *baochao* currency proved fruitless. With the demise of *baochao* as a viable currency and in the absence of new state-issued coin, market exchange was principally conducted using uncoined silver and "private" (i.e., counterfeit) coin. Despite Zhu Yuanzhang's anti-market policies, commercial activity gradually revived over the course of the fifteenth century. The flood of foreign silver that poured into China from the mid-sixteenth century onward lifted market expansion even beyond Song levels.

The institutional infrastructure of Zhu Yuanzhang's command economy, including fiat paper currency, already was in shambles by the mid-fifteenth century. The late Ming leadership reconciled itself to the rise of the silver monetary standard and withdrew from activist management of the economy. By the eighteenth century, writers on political economy both within and outside the government to an unprecedented degree conceded to the autonomy of the market and the efficiency of market prices in adjusting the circulation of goods. In the words of William Rowe, "the Qing imperial administration as a whole was remarkably committed to relying on what we would call 'market mechanisms' to achieve its economic ends."[19] Helen Dunstan suggests that the mid-eighteenth century witnessed a swerve toward a kind of "economic liberalism" that eschewed state intervention in favor of "allowing [market forces] to follow their own course" (*ting qi ziran* 聽其自然), even if it did not pose a radical challenge to paternalist and ethical precepts of Confucian governance.[20] In my own formulation, the late imperial fiscal regime can be characterized as a "providential state" in which steadfast commitment to the welfare of the agrarian populace guided fiscal policies. The providential state was premised on a low level of taxation levied primarily on landholding, with minimal taxation of commerce, industry, or consumption.[21] Despite (or perhaps because of) the general principle of non-interference in the workings of the market economy, the merchant class was placed at an even farther remove from political power.

With the rise of the silver economy, the monetary order envisioned in the classical tradition of monetary thought tracing back to the *Guan Zi* had been inverted. Metallist convictions overturned chartalist theory. Private monies, not state-issued currencies, provided the essential liquidity markets needed to function. During the eighteenth century the revival of bronze coinage restored some flexibility to the money supply and sustained a relatively stable bimetallic currency system encompassing coin as the medium of local and proximate transactions complemented by silver as the high-value currency for commercial exchange and state payments. But faith in the sovereign power of the state to make money had evaporated. The early Ming *baochao* debacle utterly discredited paper money. In reaction to the reversal of bullion flows and the drain of silver abroad in the second quarter of the nineteenth century a few

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[19] William T. Rowe, "State and Market in Mid-Qing Economic Thought: The Case of Chen Hongmou (1696-1771)," *Études Chinoises* 12.1 (1993): 7-40.

[20] Dunstan is careful to distinguish this form of economic liberalism from "laissez-faire" liberalism. Helen Dunstan, *Conflicting Counsels to Confuse the Age: A Documentary Study of Political Economy in Qing China, 1644–1840* (Ann Arbor: University of Michigan Center for Chinese Studies, 1996), pp. 327-33; Dunstan, "A Different Trajectory: Market-Consciousness in Chinese Political Economy, 800-1800," *Journal of Chinese History* 4.1 (2020): 55–83.

[21] Von Glahn, "Modalities of the Fiscal State": 22-29.

intrepid voices such as Wang Liu embraced the cause of reviving paper currency. Yet fiscal policymakers remained resolutely opposed to fiat money.

By the end of the nineteenth century the imperial state began to issue its own silver coin in imitation of the Mexican Republican dollars that had already become a significant part of the domestic money supply.[22] Still, on the eve of the fall of the empire in 1911 China's money supply remained a heterogeneous mix of uncoined (sycee) silver (including a multitude of *tael* standards), foreign and domestic silver coins (abiding to a relatively uniform *yuan* monetary standard derived from the Mexican dollar), new and old copper coins, and a variety of paper bills (denominated in both copper coin and silver) issued by private firms and foreign banks that had highly circumscribed spheres of circulation.[23] Only in 1935, when the Guomindang Republican government nationalized the banking sector and issued a new fiat paper currency (*fabi* 法幣), did China abandon the silver standard.[24]

The invention of paper money in China was rooted in the basic principles of Chinese monetary theory, the fiduciary nature of the bronze coin standard, and the specific forms of the fiscal state that characterized Song political economy rather than simply being an outgrowth of market expansion. The demise of paper money in the early Ming dynasty likewise stemmed from radical changes in the fiscal constitution of the imperial state. Not surprisingly, then, the course of Chinese monetary history diverged markedly from the path leading to the adoption of paper money in Western Europe. To clarify this divergence, it is worth considering the long-term trends in money-making in Europe and the distinctive forms of paper money that arose there in the early modern era.

In early medieval Europe, even as coins receded from market exchange, they remained potent symbols and instruments of political power, their iconography encoding the legitimacy of sovereign authority.[25] As in China, the quality of coin was believed to personify the moral

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[22] Von Glahn, "Foreign Silver Coins."

[23] For an overview of the monetary landscape in late nineteenth century China, see Niv Horesh, *Chinese Money in Global Context: Historic Junctures Between 600 BCE and 2012* (Stanford: Stanford University Press, 2014), chapters 4 and 5.

[24] On the creation of the *fabi* currency, see Tomoko Shiroyama, *China During the Great Depression: Market, State, and the World Economy, 1927-1937* (Cambridge: Harvard University Asia Center, 2008); Dean, *End of Global Silver*.

[25] This paragraph draws on Naismith, *Making Money in the Early Middle Ages*.

integrity of the ruler, perhaps even more so as lordship fragmented among a broad spectrum of landed elites and ecclesiastic institutions. Charlemagne's restoration of the royal bust on his coins harked back not only to Roman practice but to the Roman idea of emperorship, even if Carolingian claims to universal dominion proved fleeting. The geography of coinage mirrored the distribution of political power, not the contours of commercial networks. Demanding payment in money tightened the grip of lords over peasants. Yet elite demand for coin fostered its wider circulation among the populace and its use in local market exchange. The intensity of monetization varied unevenly across and within regions, often flowing and ebbing in temporal cycles. Moreover, although the proliferation of coin as a medium of exchange altered the modes of peasant-based agricultural production and the social and political dominance of the elites, it did not fundamentally transform them.[26]

The principle that the king exercised sovereign authority over the making of money remained inviolable. Aquinas, seeking to settle the inconsistencies in Aristotle's declarations about money, affirmed the right of the prince to make or unmake money and, through the instrument of law, to establish his coin as the exclusive means of public and private payments.[27] Still, given the vagaries of the supplies of gold and silver European monarchs only had limited flexibility to coin money as they desired. Bills of exchange were highly encumbered and had no validity as means of public payments. Instead, when strapped for cash for its current expenditures the English Crown resorted to issuing wooden tallies (claims on future revenues) that were denominated in the official units of account (pounds and shillings), convertible with silver coin, and transferable to third parties. These tokens, precursors of bonds as a form of public debt, constituted as large a share of the English money supply in the late fourteenth and fifteenth centuries as did coin. The proliferation of tallies testified to the power of the English monarchy to make money on the strength of sovereign authority.[28]

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[26] For a trenchant but contestable argument for the fundamental stability of agrarian modes of production throughout Eurasia during the middle ages, see Chris Wickham, "How did the Feudal Economy Work? The Economic Logic of Medieval Societies," *Past and Present* 251 (2021): 3-40.

[27] Lapidus, "Metal, Money, and the Prince": 25-27.

[28] Desan, *Making Money*, pp. 171-89.

Yet sovereign power over money became increasingly contested in the late medieval and early modern eras, when European rulers constantly resorted to depreciation, debasement, recoinage, and legislation to steady the value of their coin, with decidedly mixed results. The onset of the Hundred Years' War with the English invasion of Flanders in 1337 forced the French king Henry IV to resort to radical debasement of the *livre tournois*, which provoked strident reaction among the landed aristocracy. An even more vehement uproar greeted Edward III's debasement of English coinage in 1351, compelling him to surrender crucial fiscal powers to Parliament and to pledge never to seek recourse to debasement in the future. Guillaume le Soterel, treasurer general of Navarre, cogently observed c. 1340 that those who live off rents favored strong money (full-bodied coin that retained its value over time); the laboring classes desired "weak" money (cheap and plentiful coin for conducting immediate transactions); merchants favored "a middle sort of money," neither too cheap nor too dear; while princes debased their coin in times of war to pay their armies.[29] Writing two decades later, Nicholas Oresme denounced debasement as a royal tax on the wealth of the people. Oresme's famous declaration that money belongs to the community, not the prince, won widespread endorsement in no small part because it defended the interests of the rentier landowners, the lay and clerical elites. In the context of the general debasement of silver currencies across Europe during the fourteenth and fifteenth centuries (excepting England and Aragon, whose kings could more readily levy taxes to raise revenues), Oresme's views became enshrined as the new orthodoxy intended to constrain the ruler's arbitrary manipulation of the money he coined.[30] In this intellectual and political milieu, credibility would not be readily granted to fiat money of any sort.

Not surprisingly, then, the earliest form of paper money to appear in Europe was the invention not of sovereign authorities but rather private agents. In Naples in the early 1570s bills known as *fedi di credito* (literally, "statements of trust") issued by deposit branches of lay charitable foundations began to circulate as means of payment. Only later did the Neapolitan government charter these institutions as public banks and authorize them to issue such bills. *Fedi di credito* originated as receipts for deposits; endorsed by the issuing institution, they could

[29] Cited in Spufford, *Money in Medieval Europe*, pp. 305-6.

[30] Spufford, *Money in Medieval Europe*, pp. 289-318.

be transferred to third parties and were payable to the bearer on sight. *Fedi* were liabilities against the assets of the bank, not the depositor, and enjoyed public confidence because of the reputation of the charities' powerful benefactors and the aura of piety evoked by their religious mission. In principle, *fedi* could only be issued to depositors, in amounts equal to the coin they deposited, and thus were fully backed by cash assets. But behind the shield of their patrons the banks circumvented the rules by issuing overdrafts and credits well beyond their cash reserves (precipitating a crisis, if not a mortal blow, when Neapolitan coin was devalued in 1622). These banks continued to issue *fedi* bills for centuries, until they were merged into the Banco Nazionale di Napoli in 1794. The *fedi* bills were fiduciary money, not backed by any state authority, although their circulation was largely limited to Naples—but, it should be noted, Naples was one of early modern Europe's most important financial centers.[31]

The Neapolitan *fedi* were not widely imitated, however.[32] Nor did they challenge the principle of sovereign authority over money. (The Kingdom of Naples was, after all, a distant appendage of the Habsburg monarchy in Spain.) Ultimately, it was the political and economic turmoil of the seventeenth-century English civil wars that eroded long-standing convictions about sovereign authority to make money and set its value by decree. The transformation of public finance during the civil wars, the restoration, and the onset of the Hanoverian monarchy engendered a constitutional shift in economic as well as political theory. The creation of public debt under parliamentary sanction not only remade state finance and radically increased the scale of taxation, but also reinvented the concept of money. Paper money, understood as a loan by the state to the public that would be acceptable for payment of taxes and other obligations, emerged as an alternative to short-term tax levies for purposes such as waging war. The creation of the Bank of England in 1694 joined the private interests of investors to the public interest in

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[31] Lilia Costabile and Eduardo Nappi, "The Public Banks of Naples Between Financial Innovation and Crisis," in Lilia Costabile and Larry Neal (eds), *Financial Innovation and Resilience: A Comparative Perspective on the Public Banks of Naples (1462-1608)* (Cham, Switzerland: Springer International Publishing, 2018), pp. 17-53.

[32] In 1661 the royally-chartered Bank of Stockholm began to issue banknotes as a substitute for Sweden's cumbersome copper currency, but overissue of notes led to insolvency and dissolution of the bank two years later. The French royal mint inaugurated the issue of paper *billets de monnaie* in 1701 as a wartime expedient; these bills later were superseded by those issued by John Law's ill-fated Banque Générale, which failed spectacularly in 1720. The Bank of England established the first viable paper currency in Europe. See François R. Velde, "Experiments with Paper Money," in Stefano Battilossi, Youssef Cassis, and Kazuhiko Yago (eds), *Handbook of the History of Money and Currency* (Singapore: Springer Nature Singapore, 2020).

promoting fiscal stability at home and foreign commerce abroad. The bank issued both bonds and "cash notes," which could be redeemed in specie on demand. Through a series of legislative actions—allowing them to be assigned to third parties, accepting them in public payments, and granting the Bank of England a monopoly on the issue of such bills—these banknotes gradually began to circulate as general currency. Over the course of the eighteenth century the Bank of England's banknotes—denominated in a new unit of account (the gold guinea, in place of the silver penny) and supplemented by notes issued by country banks—largely replaced specie in the marketplace, enabling the government to increase the money supply without minting new gold and silver coins.[33] Yet banknotes remained a creature of the British state; their validity rested on state's obligation to honor its commitments to its creditors.

At the same time the theoretical foundations of money were transformed. With the advent of paper currency, the value of money depended not on its intrinsic metallic content but rather on the obligation of the government to accept it in payment of public debts. Moreover, political theorists—beginning most famously with John Locke—repudiated the sovereign's arbitrary authority over money. Although Locke remained wedded to the idea that silver was the true form of wealth (with the mercantilist corollary that increasing the domestic stock of silver increased the nation's wealth), he enunciated the principle that the purpose of money was to enable trade among private individuals. Like Davanzati (see the introduction of this book), Locke restricted the role of the sovereign to guaranteeing the quality of coin in circulation, sternly rejecting any political intervention to change its value (i.e., through debasement or devaluation).[34] Locke's full-throated commitment to metallism was catalyzed by the dynamic growth of international trade in his day and the ready outflow of bullion in the wake of debasements that it facilitated.[35] The proliferation of banknotes in the eighteenth century

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[33] Desan, *Making Money*, pp. 231-329.

[34] Desan, *Making Money*, pp. 345-59. The English translation of Davanzati's treatise published in 1696 figured significantly in debates over money in the wake of England's Great Debasement of 1694; the translation itself was undertaken to support Locke's position. See Stefano Adamo, "Recovering Unnoticed Ideas: On the English Translation of Bernardo Davanzati's 'Lezione delle monete,'" in Lidia de Michelis, Lia Guerra, and Frank O'Gorman (eds), *Entangled Histories: Politics and Culture in 18th-Century Anglo-Italian Encounters* (Newcastle: Cambridge Scholars Publishing, 2019), pp. 47-75.

[35] Andrew Sartori, "Silver and the Social in Locke's Monetary Thought," *Journal of Modern History* 93.3 (2021): 501-32.

contradicted Locke's identification of money with silver but vindicated his larger point that money served private, not sovereign, interests. Understood as a substitute for specie, not a form of credit, banknotes enjoyed full confidence among merchants and landed elites. The financial revolution of eighteenth-century England was rooted, as Christine Desan has put it, in this "credibility of money."[36] The credibility of banknotes also enabled the practice of fractional lending, expanding the role of banks in trade and investment. At the same time the government's future revenues secured the Bank of England's nominal promise to redeem its banknotes with specie without requiring it to dispense gold and silver coin. Nonetheless, the government's role in making money was veiled by the idea (later the theoretical foundation of the gold standard) that it is the private economy which creates and validates money. The emergence of exclusive national fiat currencies in the nineteenth century coincided with rising ideas of popular sovereignty asserting that money belonged to and served the interests of the people.[37]

In Britain as in China, the acceptability of paper money in state payments was crucial to its credibility in the eyes of the people. The conceptualization of money in eighteenth-century Europe veered in different directions than the chartalist tradition that prevailed in China down to the Ming era, but in both cases public finance was the underlying foundation of fiat currency. During the Song-Yuan era, the state's commitment to accepting its paper money in public payments sustained its viability, even when fiscal exigencies compelled excessive issue of bills that weakened their exchange value. Under Ming rule, however, the circular flow of paper money between state and society was sundered, fatally compromising its credibility. Sovereign money receded from market exchange, its place usurped by uncoined silver. The massive infusions of foreign silver from the sixteenth century onward cemented the primacy of silver in both private and public payments.

Christine Desan has noted that medieval and early modern European writers frequently spoke of money using metaphors of blood and bodily fluids to define money as a substance essential to the vitality and organic unity of the polity. As we have seen, Davanzati invoked this metaphor when he alluded to money as the "second blood," which by analogy with the blood of

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[36] Desan, *Making Money*, p. 386.

[37] Eric Helleiner, *The Making of National Money: Territorial Currencies in Historical Perspective* (Ithaca: Cornell University Press, 2003).

the human body "preserves alive the civil body of the commonwealth."[38] The blood metaphor and the assertion that monetary circulation animated the national economy found favor among both mercantilists in the seventeenth century and physiocrats in the eighteenth century. But in the liberal economic philosophy that arose in eighteenth-century England the blood metaphor was eclipsed by the new metaphor of water, as in David Hume's famous formulation that money, like water, seeks equilibrium: money will flow from nation to nation, following the gravitational pull of price-setting demand, overriding the artificial barriers that states erect to restrict its movement. The analogy to water as a natural and irresistible force beyond human capacity for control complemented the newly ascendant idea that the circulation of money responded to the autonomous workings of the private market rather than the arbitrary will of the sovereign.[39]

We also find the metaphors of blood and water widely applied to money and trade in Chinese political economy. Strikingly, the analogy to blood was most prominently invoked in the context of paper money, for example by the Southern Song statesmen Wu Yong, Wu Qian, and Xu Luqing, who spoke of *huizi* as the "blood" or "lifeblood" (*mingmai*) of the polity.[40] The metaphor of money as water had a more ancient lineage in China, applied to the circulation (*liutong* 流通) of both money and commodities. The word "circulation" itself referred to the flow (*liu*) of water, but not its free dispersal. Instead, *tong* denoted conduits whereby water is channeled to its proper place. Indeed, early references to the circulation of money and goods evoked the crucial intervention of the sage-ruler who creates the channels by which money and trade can nourish the economic welfare of the people.[41] It is hardly surprising that in China, where control of water for irrigation was essential to agricultural livelihood, water would be understood not simply as a free-flowing natural resource but one whose benefits can be realized only through wise human intervention. The analogies to bodily fluids and water often fused

[38] See Introduction, p. xx.

[39] Desan, *Making Money*, pp. 422-27.

[40] See chapter 6, pp. xxx, xxx.

[41] For example, Xun Zi wrote that the enlightened ruler "regulates the flow of goods and opens up their fount, pouring forth from it only at the proper times" (節其流，開其源，而時斟酌焉), followed up by the statement that the sage-kings Yu (immortalized as the conqueror of the primeval flood by digging river channels) and Tang (who along with Yu was credited with creating money) "understood the primary and the secondary [sources of wealth], the fount and flow of goods" (知本末源流之謂也). See chapter 10, "Fuguo" 富國, in *XZ*, p. 220.

together, since Chinese medicine defined the healthy body as one in which vital energies flowed unimpeded. But here, too, proper circulation required vigilance and human remedy. We see this in *The Salt and Iron Debates*, for example, where Sang Hongyang declares that when Emperor Wu charged him with overseeing the state's fiscal policies "it was to use moxibustion and acupuncture to treat the stagnant humors, to open the hundred arteries of profit and thereby stimulate the circulation (*liutong*) of the myriad goods and fill the coffers of the state."[42] Borrowing metaphors ubiquitously employed in Chinese medicine, in Chinese political economy it is the sovereign who ensures the proper circulation necessary to the health of the body politic.

In the opinion of William Rowe, the concept of *liutong* "achieved a new legitimacy and urgency" in the mid-Qing period "when it became a central goal of imperial economic policy."[43] But *liutong* was no longer orchestrated by the state. Instead, statesmen and writers on political economy championed the unfettered circulation of goods—notably grain and other foodstuffs—through private market exchange as the most efficient way to relieve scarcities and modulate prices. Merchants were recognized for their positive contributions to public welfare, and commerce was seen not merely as enabling the circulation of necessities but also as generating wealth in its own right. By contrast, state actors—misguided officials and predatory clerks—often were vilified for impeding the free circulation of goods. The political economy of the eighteenth century not only endorsed the idea that commercial exchange should "follow its own course" (*ziran*) but validated the pursuit of private profit as a proper incentive for engaging in commercial activities that benefited the state (through enhanced revenues) as well as "the livelihood of the people" (*minsheng* 民生).[44] In the monetary sphere, as we have seen, the tide turned decisively in a metallist direction that abjured the chartalist doctrines underpinning the issue of paper money in earlier times. Wei Yuan, one of the most influential statecraft scholars in the first half of the nineteenth century, embraced this metallist conception of money, which he defined as "treasure created naturally by Heaven and Earth" (*tiandi ziran zhi zhen* 天地自然之珍

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[42] 灸刺稽滯，開利百脈，是以萬物流通，而縣官富實. Chapter 14, "Qingzhong," in *YTL*, 1, p. 180.

[43] William T. Rowe, *Saving the World: Chen Hongmou and Elite Consciousness in Eighteenth-Century China* (Stanford: Stanford University Press, 2001), p. 198.

[44] Rowe, *Saving the World*, pp. 197-214. Rowe emphasizes, however, that Chinese political economy always envisioned that governance required moral leadership and never countenanced the sanctity of the individual at the core of Lockean and subsequent liberal thought in the West. On *ziran*, see above, p. xxx.

).[45] In his vehement rejection of Wang Liu's proposal to revive paper currency Wei reiterated the failures of paper money in the past, concluding—in an unwitting echo of Hume—that imposing fiat currencies would only cause sound metallic money to flow abroad, as was happening with silver in the present day. Wei devoted most of his treatise on provisioning the military (written on the eve of the Opium War) to strategies for increasing the domestic supply of silver and thereby "open up the benefits of the fount of money" (*kai huoyuan zhi li* 開貨源之利).[46] Following the triumph of the silver economy, historical memory consigned the paper money of the Song-Yuan era to the dustbin.

[45] Wei Yuan 魏源, "Junchu pian (san)" 軍儲篇 (三), in *Wei Yuan ji* 魏源集 ([hereafter *WYJ*]; Beijing: Zhonghua shuju, 1976), 2, p. 484.

[46] "Junchu pian," in *WYJ*, 2, pp. 468-89. The quoted phrase appears on p. 471.