Center for Open Access in Science ▪ https://www.centerprode.com/ojsh.html
Open Journal for Studies in History, 2022, *5*(1), 1-4.
ISSN (Online) 2620-066X ▪ https://doi.org/10.32591/coas.ojsh.0501.01001h

Coin Debasement and the "Great Divergence": A Research Note

Niv Horesh

University of Western Sydney, Sydney, AUSTRALIA
School of Humanities and Communication Arts

Received: 31 January 2022 ▪ Revised: 8 March 2022 ▪ Accepted: 9 April 2022

Abstract

Coin debasement as an omnipresent premodern monetary phenomenon has long been recognized. Yet, until recently, debasement was dealt with on a national or at-best continental level. To be precise, it was not sufficiently understood what role seigniorage played in financing early modern polities in comparative terms across Eurasia. Centering on China, particularly at times of war, this research note is the first step toward such an endeavor. It finds that seigniorage was generally lower in China than in early-modern Europe. It also finds greater tolerance for the concurrent circulation of old and new coinage in China. In China, coinage was conceived of in imperial nomenclature as a "public good" of sorts; one that the central government must provide largely at its own expense and even at a net loss in order to facilitate commoners' livelihood.

Keywords: China, seigniorage, debasement, Europe, great divergence, coinage.

1. Introduction

Since the invention of coinage in the 7th Century BCE, seigniorage has played an important – though not always central role – in funding principalities, kingdoms and empires. This was particularly true in times of war.

Seigniorage was the charge deducted from the bullion brought to the royal mint, or in other words – the difference between the intrinsic and metallic value of the coins disbursed, minus labor and production costs. The deduction was often supplemented by replacing part of the bullion with base metal, resulting in debased coinage.

For this reason, seigniorage can be seen as tax on the populace deriving from the difference between the value of money – itself a prerogative of the ruler – and the cost to produce and distribute it. To be sure, modern banknotes constitute a more indirect from of seigniorage, i.e., the difference between interest earned on securities acquired in exchange for banknotes, and the cost of producing the notes. However, the present research note focuses on the coinage dimension of seigniorage rather than the modern ones.

Correspondence: Niv Horesh, University of Western Sydney, School of Humanities and Communication Arts, Sydney, AUSTRALIA. E-mail: niv.horesh@gmail.com.

2. Discussion

Coin debasement as an omnipresent premodern monetary phenomenon has long been recognized. Yet, until recently, debasement was dealt with on a national or at-best continental level. In recent years, scholars have offered an increasingly sophisticated understanding of the consequences of debasement, namely, seigniorage revenue on the one hand, and inflation on the other. The scholarly literature on premodern European seigniorage reveals in turn two key modes of attendant debasement or rebasement: post factum increased mintage, or *renovatio monetae* (recall of older coins and recoinage). Another form of increased seigniorage revenue, which is not linked to debasement *per se,* follows the discovery of metal ore deposits and subsequent invigorated coining.

China partly departed from these patterns in that *renovatio monetae* was rarer there. Namely, there was usually greater tolerance for the concurrent circulation of old coinage, and previous imperial reign inscriptions did not affect assaying. However, under the Qianlong emperor (r. 1711-1799), the other two modes observable in Europe obtained in China too. That is to say, older (alongside forged smaller and Japanese) coins were sought out for recoinage. As well, copper ore was tapped in Yunnan so as to increase coin output. Debasement by contrast was by and large rejected for rebasement (Zheng Yongchang, 1997).

This brief research note is designed to draw more attention to the differences between Europe and China along what I have termed "The Great Money Divergence" (Horesh, 2014, Chap. 3). I shall next present secondary data on respective seigniorage levels, and touch on the monetary particularities of the Qianlong era.

It has been contended that China had fallen behind the West because of – amongst other factors – an outdated fiscal system that was based on land tax rather than on commercial taxes (Feuerwerker, 1958: 44). But a detailed comparison is yet to be adduced. What can be established at this point in time is that seigniorage as one form of commercial tax was much more prominent in Europe than in China.

Ji Zhaojin estimated Qing government revenue from both land and commercial taxes in 1895 at the "cash" equivalent of 89 million strings, or 89 million silver taels notionally (Ji Zhaojin, 2002: 69). Li Bingzhen and Qu Weiping estimated the all-China mint revenue in 1842 at 126,000 taels only (Li & Qu, 2013: 83). This renders a meagre 0.14% share for seigniorage in overall government revenue. To assess the reliability of Li and Qu's figure we might also want to turn to Von Glahn's magisterial volume on Chinese monetary history. Here, total seigniorage revenue for 1652 is 107,000 taels, sufficiently close by even if the period is more distant (Von Glahn 1996: 210, Table 20).

After all, annual coin output was similar across both periods, and only the Qianlong era reached higher output during the Qing dynasty. The Beijing mint mean alone for the Qianlong era is given at 200,000 taels by Dai Jianbing and Xu Ke (Dai & Xu, 2013). Based on the existence of 5 key mints for the period including Beijing, we might assume a much higher all-China total of up to 1 million taels annually – only around 1-2 % of government revenue. This would befit the Qianlong era, which saw coin output peak at 4 billion annually, relying on more intense copper mining in Yunnan in the main (Yang Yuda, 2018: 146). The Qianlong era was also one of frequent military campaigns. In other words, the Qianlong era was not normative in monetary terms.

How does this figure compare with Western Europe? Pioneering work by Arthur J. Rolnick, François R. Velde and Warren E. Weber has shown that normative seigniorage revenue in England and France during the late medieval period was between 2-5% of all government revenue. But in years of debasement usually connected with the outbreak of war, seigniorage revenue could form up to 50% of all government revenue (Rolnick, Velde & Weber, 1997).

The European normative rate by Rolnick et al. is broadly congruent with seigniorage revenue forming 1-2% of royal spending in pre-1625 Spain, presented by Motomura (1994: 133). By contrast, Sussman found that debasement yielded some principalities in France around 1418 revenue on par with their total direct land taxes (*grandes tailles*) of the entire previous decade (Sussman, 1993: 48). At any rate, it seems evident that Chinese debasement was less extensive even in times of war.

In China, copper "cash" was conceived of in imperial nomenclature as a "public good" of sorts; one that the central government must provide largely at its own expense and even at a net loss in order to facilitate commoners' livelihood (*bianmin*). More vigorous production of "cash" was envisioned, in turn, as the ideal stratagem for bringing down the price of grain, especially over the annual *soudure* period or at times of severe famine. In China therefore, somewhat contrary to conventional wisdom, the price of "cash" relative to silver ingots could at times rise even when more of it was produced because silver coinage was not minted, and silver ingots were too dear to be customarily used in rural areas to buy grain. Consequently, the silver-ingot weight and fineness preferred by the imperial bureaucracy increasingly came to be used as an intangible "money of account" against which tangible bronze coins (that is, copper "cash") of uneven size and provenance were tallied. To keep the price of "cash" at bay, the Chinese government did not just produce more of it but aimed to release more grain for sale from its many granaries at the same time, particularly in restive famine-stricken localities.

Thus, perhaps because of the imperative to finance more frequent warfare, metallic debasement was probably much more pervasive in early modern European polities than in China as means of raising revenue. At any rate, English theorists and policy makers seem to have internalized first – well before the Industrial Revolution – the fiscal and monetary limits of debasement in a bimetallic setting. They knew that manipulation of the decreed exchange rate between coins made of gold and those made of silver – namely, "crying up" or "crying down" certain coins in a way that could cause a dramatic departure from their intrinsic metallic worth – could lead to the outflow of either overseas. For these reasons, they ensured that monarchs debased coinage relatively infrequently in the early modern era; debasements that proved too drastic were tempered with "rebasements"; at the same time, they enhanced the efficacy of debasement and shored up trust in domestic coinage by minimizing the availability of competing precious metal foreign coinage and curbing bullion exports.

3. Conclusions

Seigniorage was ordinarily a meagre source of supply for the Qing – around 0.14% share in overall government revenue at times of peace. The Qianlong era was an exception but even then we might assume a share of only around 1-2 % of government revenue. This would befit the Qianlong era, which saw coin output peak at 4 billion annually, relying on more intense copper mining in Yunnan in the main. The Qianlong era was also one of frequent military campaigns.

By contrast, normative seigniorage revenue in England and France during the late medieval period was between 2-5% of all government revenue. But in years of debasement usually connected with the outbreak of war, seigniorage revenue could form up to 50% of all government revenue. At any rate, it seems evident that Chinese debasement was less extensive even in times of war. This is a monetary facet of the Great Divergence across Eurasia that cannot be written off accounts of why standards of living differed considerably across space, and precisely when that occurred. The findings here possibly suggest taxation in early modern Europe was generally higher than in China, and this is perhaps an apt point from which to begin telling the Great Divergence story.

Acknowledgements

This research did not receive any specific grant from funding agencies in the public commercial, or not-for-profit sectors.

The author declares no competing interests.

References

[Dai Jianbin & Xu Ke] 戴建兵，许可 (2013). "乾隆朝铸币与GDP 的估算——清代GDP 研究的一种路径探索, 清史研究 [Assessments of GDP and coin casting in the Qianlong Ear – Exploration in Qing GDP] available at: http://iqh.ruc.edu.cn/qdshsyj/shyjj/2f22f8298ff1416d9a34be0265f91192.htm

Feuerwerker, A. (1958). *China's early industrialization* (Cambridge, Mas.: Harvard University Press).

Horesh, N. (2014). *Chinese money in global context* (Stanford, CA: Stanford University Press).

Ji Zhaojin (2002). *A history of modern Shanghai banking*. (Armonk, NY: M. E. Sharpe).

[Li Bingzhen & Qu Weping] 李炳震, 曲尉坪 (2013). 湖南清代货币 [Hunan coinage in the Qing era] (Beijing Books).

Motomura, A. (1994). The best and worst of currencies: Seigniorage and currency policy in Spain, 1597-1650. *The Journal of Economic History*, *54*(1), 104-127.

Rolnick, A. J., Velde, F. R., & Weber, W. E. (1997). The debasement puzzle: An essay on medieval monetary history. *Federal Reserve Bank of Minneapolis Quarterly Review*, *21*(4), 8-20.

Sussman, Nathan (1993). Debasements, royal revenues, and inflation in France during the Hundred Years' War, 1415-1422. *The Journal of Economic History*, *53*(1), 44-70.

Von Glahn, R. (1996). *Fountain of fortune* (Stanford, CA: University of California Press).

Yang Yuda (2018). The copper market of Hankou and the illegal trade of Yunnan copper during the Mid-Qing period. In U. Theobald & J. Cao (Eds.), *Southwest China in a regional and global perspective (c. 1600-1911)* (pp. 145-183).

[Zheng Yongchang] 鄭永昌 (1997). "清代乾隆年間的私錢流通與官方因應政策之分析 — 以私錢收買政策為中心" [Analysis of the circulation of fake coins in the Qianlong era of the Qing dynasty and the official countermeasures – Absorbing fake coins at the center]. 國立臺灣師範大學學歷史學報 *25*, 235-286.