Conclusion

Although a conclusion is mostly thought of as a recapitulation of findings in the preceding chapters, and an indication of the legitimation with regards to the way in which these findings build on one another, this is not my intention here. Instead, I am inclined to expatiate on what has been an encompassing interest that preoccupied many of the above findings, yet which I was not able to include because of the difficulty of proof. It concerns the question whether the 'even keel' —a hedging strategy pertaining to the bank branch network level of analysis— can believed to have been conducive to strengthening trade ties between the gold standard Western countries and East, either through a) decelerating, halting, or ultimately reverting the course of the gold price of silver in the mid-term to long-term, and/or b) flattening out the disturbing volatility that had become so typical since the late 1880s.

Contrary to what an uninformed first analysis might lead us to believe, one should be very careful to draw any rash conclusions. With regard to the first question, this is more or less obvious. As is well known, the silver price did continue its free-fall roughly until 1903, after which the tide seemed to reverse in the white metal's favor, at least temporarily (until 1907).[1] Yet the reason behind this course of events do not warrant a correlation with exchange banking practice. What mattered was the worldwide surge in demand of silver for subsidiary coinage,[2] including for a country like Germany, which had once been famously looking for outlets for its surplus silver holdings.[3] Admittedly, the largest single factor in the increased demand for silver during the years 1904-07 was the monetary demand of gold-exchange standard India, which was at least partly a function of the country's increased trade volume (and hence,

---

[1] Kemmerer, E. W. 1912. "The Recent Rise in the Price of Silver and Some of Its Monetary Consequences." *The Quarterly Journal of Economics* 26 (2): 215–74. doi:10.2307/1884764.
[2] Kemmerer, E. W. 1912. "The Recent Rise in the Price of Silver and Some of Its Monetary Consequences." *The Quarterly Journal of Economics* 26 (2): 215–74. doi:10.2307/1884764. Pp. 227 ff.
[3] *Bulletin de statistique et de législation comparée*, April, 1877, pp. 235-238. Compare as well chapter ???? in this book.

indirectly, related to the exchange banks' proficiency in hedging exchange risk). As Kemmerer points out, however, India's commercial success was largely an effect of the rise of prices in gold standard countries, which was in itself caused by the large and increasing gold production over the period: "[t]he unit of value in India is the rupee adjusted to a 16d. gold par, and when that gold par depreciated in value the world over, Indian prices naturally rose".[4]

I approach the second question with much more trepidation, if only because the timing of the coincidence between the rise of new types of financial instruments (especially the *interest bill*) and the expansion of worldwide trade from the late 19th century onwards seems so flawless. This has not escaped the attention of several Japanese scholars. Kojima, in a thought-provoking paper from 1978, regards the (gold-currency denominated) interest bill as the obvious driver behind the end of the Long Depression (1872-1896).[5] As the exchange banks did not have to worry about losses incurred through a flailing silver price, the argument goes, they were more willing to expand their portfolios, thus "ending 4 centuries of dormant East-West trade".[6] At the same time, as also China saw itself surrounded by an increasing number of trading partners on the gold or on the gold exchange standard, gold started to find its way into China in a steady pace.[7] Newly arising arbitrage opportunities in the Shanghai market[8]

---

[4] Kemmerer, E. W. 1912. "The Recent Rise in the Price of Silver and Some of Its Monetary Consequences." *The Quarterly Journal of Economics* 26 (2): 215–74. doi:10.2307/1884764. P. 231. For a firsthand contemporary account in Japanese, see: 堀江歸一. 1907. "銀價騰貴ノ原因竝ニ其影響." 經濟學商業學國民經濟雜誌 2 (1): 33–49. http://ci.nii.ac.jp/naid/110000573590. Compare, furthermore, the early work by Atkinson: Atkinson, Fred J. 1898. "Silver Prices in India for 1897." *Journal of the Royal Statistical Society* 61 (2): 387–403. http://www.jstor.org/stable/2979739; Atkinson, Fred J. 1903. "Rupee Prices in India, 1898-1901." *Journal of the Royal Statistical Society* 66 (1): 103–18. http://www.jstor.org/stable/2339482; Atkinson, Fred J. 1909. "Rupee Prices in India, 1870 to 1908; with an Examination of the Causes Leading to the Present High Level of Prices." *Journal of the Royal Statistical Society* 72 (3): 496–573. doi:10.2307/2340357.

[5] 小島仁. 1978. "第一次大戦以前 (一八九五〜一九一四年) の東洋為替と植民地銀行が果たした役割: 東洋の銀本位制が国際金本位制に包摂されたしくみ、特に中国について." 国際経済 1978 (29): 135–44. doi:10.5652/kokusaikeizai.1978.135.

[6] 小島仁. 1978. "第一次大戦以前 (一八九五〜一九一四年) の東洋為替と植民地銀行が果たした役割: 東洋の銀本位制が国際金本位制に包摂されたしくみ、特に中国について." 国際経済 1978 (29): 135–44. doi:10.5652/kokusaikeizai.1978.135. P.

[7] 水津彌吉. 1911. 上海ニ於ケル金ニ就テ. 横濱正金銀行. http://ci.nii.ac.jp/ncid/BA65550306.

were bound to compress the limits between which exchange rate fluctuations were to occur. In other words, financial innovation had successfully subsumed (*hōsetsu* 包摂) the silver using Asian countries to the gold standard world center. Kitabayashi reckons that this process was furthermore bolstered through the introduction (roughly from about 1893) of forward exchange contracts to Chinese importers,[9] as the latter fed back into expectations with regard to the future spot rate of the GBP in the Shanghai market.[10] Nowadays, even the most acknowledged Japanese observers credit interest bills with having smoothened exchange banking operations around the turn of the century.[11]

And yet, although financial innovation played an undeniable role as a tool through which exchange risks were alleviated, it would be a mistake to isolate them from a shift in the *structure* of the London silver market that had been fermenting since the early 1890s, and that culminated in the fixing of the silver price from 1897 onwards (the practice would notoriously continue until August 14 2014). One observer has suggested that the the origin of the latter sprang from "the interest of the London market as a whole [to eradicate] competition and [to end] the erosion in commission rates by the four brokers",[12] but, as we shall discuss in a minute, I suspect that it is more plausible to suggest that it arose out of a demand from silver market participants, however contradictory this looks at first sight.

Why London was and remained the world's silver market at the time has been convincingly argued by Spalding, and thus needs no extensive repetition here.[13] It

---

[8] 上海ニ於ケル金ノ投機取引. 19--. [出版者不明]. http://ci.nii.ac.jp/ncid/BA74940210.
[9] The reader may remember that forward exchange business with China did not exist in the 1880s. See the testimony of Mr. Provand in chapter ???.
[10] 北林雅志. 1987. "十九世紀末におけるイギリス植民地銀行の為替業務とポンド利付為替手形." 経営史学 21 (4): 1–28,1. http://ci.nii.ac.jp/naid/110000180968. P. 16ff.
[11] 石井寛治. 1999. 近代日本金融史序説. 東京大学出版会. http://ci.nii.ac.jp/ncid/BA41843751. For an earlier analysis, see: 石井寛治. 1979. "イギリス植民地銀行群の再編–1870・80年代の日本・中国を中心に." 経済学論集 45 (1): p19–60. http://ci.nii.ac.jp/naid/40000858867; 石井寛治. 1979. "イギリス植民地銀行群の再編–1870・80年代の日本・中国を中心に-2完-." 経済学論集 45 (3): p17–46. http://ci.nii.ac.jp/naid/40000859016.
[12] Blagg, Michele. 2014. "1897 - 1939, A New Era for the London Silver Price." *Alchemist: London Bullion Market Association*, October. P. 19.
[13] Spalding, William Frederick. 1922. *The London Money Market: A Practical Guide to What It Is, Where It Is, and the Operations Conducted in It*. London, New York [etc.]: Sir I. Pitman &

suffices to note that London occupied the lion's share of the West's trade with East-Asia, a reality that was further reinforced by the fact that all exchange banks, notwithstanding the location of their headquarters or their nationality, had a presence in London in order to tap into the depths of the world's financial center. And second, although the world's largest silver producers were located in Mexico, the U.S., and to a lesser degree, Australia, their share of silver dealings with the Eastern countries remained relatively trifle when compared to the amounts shipped from London.[14]

By the end of the 1890s, the London silver market faced a curious mismatch between the expectations of the main market participants (both on the supply and the demand side), on the one hand, and the incentivization of speculation born out by silver price evolution, on the other. As pointed out by Spalding long ago, none of the market participants had a remote interest in fluctuations in the price of the metal.[15] The principal first sellers being the smelters,[16]

> "whose custom it is to sell their silver at the London market price and to buy at once a similar amount of ore at a corresponding price. The smelters obtain from the silver miners, or, rather, the mine-owners, a certain fixed sum in gold for each ton of ore to meet the charges incidental to smelting and selling. It is obvious, therefore, that the price of silver in reality determines the price of the ore, and, consequently, the profits of the

---

sons, ltd. Pp. 179-180. A YSB internal report discussing the London money market is drawn along the lines of Spalding's seminal publication. See: 横浜正金銀行頭取席調査課. 1934. 倫敦マネマーケット. 横濱正金銀行頭取席調査課. http://ci.nii.ac.jp/ncid/BN14786577. Esp. pp. 181-197.

[14] It is possible to construct a reliable time series of bar silver movement from and to the United Kingdom by means of the annual circulars or bullion letters distributed by the London bullion brokers. See, for instance: Montagu (Samuel) and Company, ltd. [from old catalog, ed. n.d. *Annual Bullion Review*. London.

[15] Spalding, William Frederick. 1917. *Eastern Exchange, Currency and Finance*. London, New York [etc.]: Sir I. Pitman & Sons, ltd. Pp. 254 Ff.

[16] Since the 1850s, only a handful of bullion refiners were approved by the Bank of England. These were: Johnson & Matthey, Browne & Wingrove, Rothschild's Royal Mint Refinery, and H. L. Raphael's Refinery. For a history of the Royal Mint Refinery (RMR), see: Blagg, Michele. 2013. "The Royal Mint Refinery : A Business Adapting to Change, 1919-1968." Ph.D., King's College London (University of London). https://kclpure.kcl.ac.uk/portal/en/theses/the-royal-mint-refinery-a-business-adapting-to-change-19191968(e93f8ecd-3459-4788-a64b-e7eaf9e6edbd).html.

first sellers are not materially decreased when the price of silver falls nor increased much if it rises."[17]

Perhaps surprisingly, an increase or decrease in the price of silver was also largely irrelevant to the demand side. The reason therefore was that the overwhelmingly large proportion of silver consumption was for subsidiary coinage, i.e. it corresponded to a demand from governments.[18] And whereas it was admittedly in the interest of countries to obtain silver as cheap as possible, their real source of profit was derived from seigniorage. Still, the "spasmodic and irregular"[19] nature of the demand for subsidiary silver made the market unpredictable and liable to speculation.

Given the very existence of a spot and forward market for silver (contrary to the gold market, for which there existed only a spot market),[20] speculation must certainly

---

[17] Spalding, William Frederick. 1917. *Eastern Exchange, Currency and Finance*. London, New York [etc.]: Sir I. Pitman & Sons, ltd. P. 254. To this one must add 1) improvements in metallurgic technology, which made processing silver much cheaper; and 2) a shift in the nature of mine-owners producing silver. As argued by the Commission for International Exchange in 1903, "[t]he largest single producer of silver in the United States is a distinctively copper mine. The cheapening of metallurgical processes has permitted of the working of ores, particularly those containing lead and gold in small quantities, to such an extent that from this source also a large proportion of the silver production of the world is obtained. The Broken Hills Proprietary Mine of Australia, a distinctively lead mine, is not only the largest producer of lead in the world, but also probably the largest producer of silver. At least 90 per cent, and probably 95 per cent, of all the silver produced in the United States is the product of lead and copper smelting, and the great increase in the production of silver in Mexico is entirely due to lead and copper smelting." United States. 1903. *Stability of International Exchange. Report on the Introduction of the Gold-Exchange Standard into China and Other Silver-Using Countries*. Washington: Govt. print. Off. P. 181.

[18] "[T]he amount taken for industrial uses is always a factor with which the market must reckon, since it is the industrial consumption which ultimately absorbs all surplus silver. Curiously enough, however, this consumption has little effect on prices, probably because buyers of silver for the arts and manufactures know that they are generally able to obtain the balance remaining after other demands have been satisfied." Spalding, William Frederick. 1917. *Eastern Exchange, Currency and Finance*. London, New York [etc.]: Sir I. Pitman & Sons, ltd. P. 252.

[19] United States. 1903. *Stability of International Exchange. Report on the Introduction of the Gold-Exchange Standard into China and Other Silver-Using Countries*. Washington: Govt. print. Off. P. 182.

[20] For an explanation of the London gold market, see: Spalding, William Frederick. 1922. *The London Money Market: A Practical Guide to What It Is, Where It Is, and the Operations Conducted in It*. London, New York [etc.]: Sir I. Pitman & sons, ltd. Pp. 170ff.

have been rife. Spalding mentions *Budla* or *Budlee* operations in Bombay —after the Punjabi word for 'exchange'—[21], or, as it turns out, an option business in which speculators would carry over selling-contracts from one date to the next, through buying 'ready' (spot) to meet deliveries for the first settlement and simultaneously selling 'forward' for delivery at the next settlement.[22] The aim was to 'corner'[23] or squeeze the market (including, I surmise, through something as a nineteenth century equivalent of 'spoofing') at times government buyers were in open competition for the limited stocks of the sellers.[24]

Even in the absence of remaining archival evidence, it seems to me that silver-fixing was called into existence as a way of countering artificial silver shortages by means of excluding information access to everybody except for a handful of London-based licensed bullion brokers.[25] As *The Times* put it much later, it "is [in times of speculation] that the brokers who generally have orders of a discretionary nature use

---

[21] Starkey, Samuel Cross. 1849. *A Dictionary, English and Punjabee, Outlines of Grammar, Also Dialogues, English and Punjabee*. Calcutta : Printed by D'Rozario. These operations are explained in, for instance: Bratter, Herbert Max. 1933. *Silver Market Dictionary,*. New York: Commodity Exchange Inc. http://hdl.handle.net/2027/uc1.$b102112. P. 14

[22] We know from bullion speculation in Shanghai thanks to a few contemporary reports: 水津彌吉. 1911. 上海ニ於ケル金ニ就テ. 横濱正金銀行. http://ci.nii.ac.jp/ncid/BA65550306; 井村薫雄, and 上海出版協會調査部. 1925. 支那の金塊投機と銀相場. 第5版 ed. 上海出版協會 , 大阪屋號書店(発兌). http://ci.nii.ac.jp/ncid/BA76465956.

[23] For a description of cornering in the context of the London copper market, see: "London Metals." *Financial Times* [London, England] 25 Nov. 1899: 3. Others described how the market reacted to a cornering operation breaking down: Correspondent. "Silver and Its Prospects." *Financial Times* [London, England] 17 Nov. 1908: n.p.; "A Swadeshi Corner in Silver." *Economist* [London, England] 16 July 1910: 115.

[24] "[I]t is known as 'calling' and 'putting', the charge for which is about 2 per cent on the value of the silver for which the option is taken, and, in addition, the buyer is charged the usual ⅛ per cent brokerage on the option." Spalding, William Frederick. 1922. *The London Money Market: A Practical Guide to What It Is, Where It Is, and the Operations Conducted in It*. London, New York [etc.]: Sir I. Pitman & sons, ltd. P. 182. One finds a reference to budlee operations in the *North China Daily News*, vol. 133, Issue 1935-12-03.

[25] Between 1720 and 1840, bullion brokering was a monopoly held by Mocatta, but in the mid-nineteenth century, this monopoly was broken to include Sharps & Wilkins, Pixley & Haggard (later Abell) and Samuel Montague & Co. For a description of the fixing process, see: Special Correspondent. "London Bullion Market." *Times* [London, England] 20 June 1933: 39. *The Times Digital Archive*. Web. 8 Dec. 2016.

their powers to keep the movements within reasonable limits."[26] In the vocabulary of Akerlof's famous thought experiment,[27] their *reputation* or *reputability* —and there is no shortage of references to the latter, in particular when describing their disengagement from / disdain for speculative practices— was the price the market paid for a price level "keeping with the statistical position of the metal. By statistical position, we mean the actual, visible, and potential stocks of silver within reach of the market."[28]

If the above conjecture is true, it not only demonstrates that, when attempting to explain Asia's escape from the Long Depression, one may have to consider how hedging technologies, largely independent of governments' predilections for a certain monetary standard, conspired with, among others, the spread of the gold-exchange standard *and* a shift in the London silver market to produce new, viable conditions for trade with the West. As in the epitaph to this monograph, it thus adds yet another 'little world' to account for this most fascinating episode in modern financial history.

---

[26] Special Correspondent. "London Bullion Market." *Times* [London, England] 20 June 1933: 39. *The Times Digital Archive*. Web. 8 Dec. 2016.
[27] Akerlof, George A. 1970. "The Market for 'Lemons': Quality Uncertainty and the Market Mechanism." *The Quarterly Journal of Economics* 84 (3): 488–500. doi:10.2307/1879431.
[28] Spalding, William Frederick. 1917. *Eastern Exchange, Currency and Finance*. London, New York [etc.]: Sir I. Pitman & Sons, ltd. P. 257.