Draft, 15 January 2004
Please do not quote without prior permission

HONG KONG'S EXCHANGE RATE REGIMES IN THE TWENTIETH CENTURY

The story of three regime changes

Tony Latter

The University of Hong Kong
and
Hong Kong Institute for Monetary Research

[Abstract to follow. For the moment see opening and closing sections.]

I am grateful to the Hong Kong Institute for Monetary Research for sponsoring this project and to the University of Hong Kong for facilitating the work during my appointment as Visiting Professor.

Thanks are due to Y C Jao for helpful insights on an earlier draft, to Sarah Millard, archivist at the Bank of England, for guiding me to relevant sources there, and to Steven Chan Wai Wah for tracking down and assembling historical data.

Except for instances where the paper merely reports what earlier researchers or historians have written, I am solely responsible for the opinions expressed herein.

Introduction

This paper examines the history of the three major changes which took place in Hong Kong's monetary policy regime – more specifically its exchange rate regime – during the course of the twentieth century. It explores the background, both political and economic, to the decisions, the options which were considered, and the reasons for the eventual decisions, together with brief assessments of the outcomes.

The first episode is the switch from the silver standard to the sterling-based currency board in 1935. The story revolves significantly around fluctuations in the silver market, the problems which this created for China, the strong links between the Hong Kong and Chinese economies, and the international political tensions and rivalries at the time. A number of historical sources have been consulted, despite a paucity of primary material locally.

The second episode is the abandonment in 1972 of the 1935 sterling link in favour of, effectively, a free banking environment. That decision, which took place against the background of the final throes of the Bretton Woods system, is considerably less well documented than the 1935 one, since the regime change appears to have been implemented without any recognition of its true monetary implications.

The third episode is the revival of the currency board, this time based on the US dollar, in 1983. The story here centres around the currency crisis sparked by the opening of the Sino-British negotiations on the future of Hong Kong and the urgent need for some remedial action.[1]

The paper contains three main sections, each devoted to one episode as a largely self-contained narrative. These are followed by a summary assessment.

1935 – from silver to sterling

Overview

As Hong Kong entered the 1930s, it was already clear that the monetary system was under some strain and that changes might need to be enacted before long. Hong Kong was, like China, operating a silver standard, long after leading economies had abandoned it. As regards China, the Kemmerer Commission[2] had already suggested in 1930 that the country should move to the gold standard. Prompted by that, the British authorities asked the Hong Kong government to review the situation. This led to the 1930 Report of the Currency Committee. Subsequently in London the Secretary of State for the Colonies appointed a Commission to follow up the matter further. The Commission, reporting in May 1931, advocated various changes to the monetary regime. But action was deferred. It was not until China formally abandoned the silver standard in November 1935 that Hong Kong took quick and decisive action to implement a currency board arrangement based on sterling.

Silver

[1] This part draws on the author's personal involvement as Deputy Secretary for Monetary Affairs in the Hong Kong Government, 1982-85.

[2] Edwin Kemmerer was a professor at Princeton University who was much involved in advising on currency regimes around the world and had acquired the nickname of 'the money doctor'. It has not been possible to access a copy of his report on China, but references to it can be found in various sources – eg King 1968 and the Report of Currency Committee 1930.

By 1930 China and Hong Kong were among very few economies still operating a silver standard. Leading economies had long since moved from either a silver standard or some form of combined silver and gold standard, to the gold standard (eg Germany in 1871 and Japan in 1897), and, although many had abandoned gold because of the first world war, most had returned to it – notably Britain in 1925. The United States (among others) continued to have a role for silver in its coinage, and had a powerful lobby intent on retaining or enhancing silver's role (of which more below).[3] But the price of silver had been on the decline since 1925 as a result of expanded production, sales by European nations in settlement of war debts, India's decision in 1926 to leave the silver standard and assumed sales[4] by French Indo-China in 1929. This left China, with Hong Kong in its wake, as the main remaining practitioner of the silver standard. By 1932 the price had fallen to an average 28 cents (US) per troy ounce, as against 69 cents in 1925.[5]

Already by then there was strong pressure on the US government from its seven, electorally important, western silver-producing states for something to be done to arrest this decline. Senator Pittman of Nevada led the charge.[6] He visited China in 1931 and endeavoured – not without some apparent success – to persuade the Chinese that a higher silver price would be in their interests (presumably on the grounds that it would raise the purchasing power of their reserves),[7] even though it was clear at the time that the declining price was being instrumental in helpfully insulating China from the full impact of the Great Depression.[8]

The World Economic and Monetary Conference took place in London in June 1933 in an attempt to rebuild the monetary order following the Great Depression. Virtually its only significant achievement was the London Silver Agreement, between the main producing countries and the chief holders or users. Its aim was to stabilise the price by limiting sales and imposing quotas on producers, while the US undertook to purchase up to 35 million ounces yearly. In fact the US administration, under pressure from its silver-producing states, hoped or intended that the agreement would not simply steady the price but move it upwards. China wanted stability, but was not thought to be averse to a modest price increase.[9]

In June 1934 the US silver lobby scored another victory in pushing the Silver Purchase Act through Congress. Pittman regarded a higher price as a cure-all for both national and regional woes. The Act provided for the nationalisation of silver holdings (in exchange for silver certificates) until the price reached a particular level, and obliged the Treasury to hold 25% of

---

[3] In fact, amendments to the Farm Relief Act in May 1933 had already introduced an element of bimetallism, by authorising the President to accept silver at a price not exceeding 50 cents an ounce in settlement of war debts – as recounted by Lin, p13.

[4] According to King (1988), p171.

[5] Figures from Henry E Hilliard, US Geological Survey, at http://minerals.usgs.gov/minerals/pubs/commodity/silver/880798.pdf.

[6] Further background can be found *inter alia* in Hu, pp 172 and 194.

[7] Hu, p176, states that contemporary economists, including Keynes, criticised the economic theory of the so-called 'silverites' as simplistic and erroneous.

[8] For instance, as recorded in Lai and Gau, Irving Fisher wrote in 1934 that during 1930 and the first half of 1931 "China is having something like a boom with rising prices" and Friedman and Schwartz (1963) pp134, 361-2, noted that China "avoided almost entirely the adverse consequences of the first two years of the worldwide depression which began in 1929". Cain and Hopkins, p609, also refer to China not being seriously damaged by the depression starting in 1929.

[9] Lin, p13, records that at the same time China appears to have been alert to the possibility of adverse consequences, since it signed the Agreement only with the reservation that it would take such measures as its own economic interests might require.

monetary reserves in silver. The underlying intention was to increase the price of silver by inflating the currency, but in the event this objective was not realised beyond the short term.

Silver and China's currency reform

Soon, however, Chinese bankers and the Chinese government became alarmed at the possibility of silver being drained out of China by the higher price. US Treasury Secretary Morgenthau warned President Roosevelt about the implications of the crippling of China for Japanese militarism, with the result that for a couple of weeks in December 1934 the US agreed not to buy at a price above 55 cents per ounce, but this undertaking was soon rescinded in response to pressure from the silver lobby.[10] The price soared, reaching a peak of 80 cents by April 1935. The impact on China was devastating. Any benefit that might have accrued from the increased international purchasing power of its silver holdings was swamped by the severely deflationary impact – a decline of perhaps 30% in internal commodity prices within a couple of years, declining GDP and rising business failures – and substantial losses of silver reserves.[11]

Behind the scenes there was considerable diplomatic activity involving the US and Britain. Britain was keen to protect and promote its commercial interests in China, and, seemingly for political as much as for financial reasons, was anxious that China should come into the sterling fold if it ditched silver. In 1935 Britain sent its chief government economic adviser, Sir Frederick Leith-Ross, to China to advise the nationalist government on the currency and to secure British interests more generally.[12] He arrived in September and, foreseeing the coming break from silver, tried to persuade the finance minister, H H Kung, that the government should adopt a sterling standard, but the government would make no commitment. The possibility of a British loan was discussed but came to nothing, probably because there were too many strings attached to the offer.[13]

Meanwhile, T V Soong (the Nationalist government's finance minister until 1933 and still principal international negotiator thereafter, and subsequently prime minister) had been in the US in January 1935, warning of an impending financial crisis in China. There followed a protracted series of negotiations variously involving suggestions of US loans or US purchases of silver, linked at times to the idea of China fixing its currency to the US dollar.

China was by now not only losing silver through both legal and illegal channels, but was also concerned lest the advancing Japanese should grab all available silver. Thus the government saw some urgency in the need not only to resolve the economic problem of the currency crisis but also to halt the haemorrhage of the nation's silver, prospectively by nationalising all holdings and shipping the silver to a third country.[14] The US and Britain were keen to woo China into their respective currency folds. However, the British, though keen for a sterling link, were concerned not to offend the Americans or provoke the Japanese by appearing to extend British hegemony in the region. The Chinese were also concerned not to aggravate Japan by explicitly opting for

[10] Hu, p200-201.
[11] Hu, p198.
[12] See, for instance, Endicott and Trotter for fuller accounts of the Leith-Ross mission. Wider issues relating to British trading interests and the regional ambitions of Japan were involved, but are beyond the scope of this paper.
[13] As early as 1933, T V Soong had discussed the possibility of a British loan, but nothing transpired.
[14] According to Lin, p81, the Annual Report of the Bank of China for 1935 noted that 50 million ounces were sold to the US government at 65 cents per ounce – seemingly at about the time that the new currency system came into effect. This appears to have been in response to China's request to the US to buy as much as 200 million ounces (Dayer, p294). According to Hu, Morgenthau offered to take 100 million ounces if China would link to the US dollar, but, as events transpired, by July 1937 the US had bought a total of 188 million ounces for $94.4 million.

sterling, even though they had initially indicated to Leith-Ross that they favoured the idea. Meanwhile, Morgenthau was pressing hard for a link to the US dollar.[15] The Chinese appeared content to play one suitor against the other. Eventually it seems that neither could claim victory. China declared that it would operate a managed currency and establish a central bank to manage it. The Bank of China Annual Report, 1935, noted: "… the government did not at the outset fix the rate of the Chinese dollar in terms of any particular foreign currency, though it was realised that such a choice might in the long run prove unavoidable. The relative stability of the principal foreign currencies has, however, so far made this largely a question of theoretical importance".[16] In practical terms the Bank of China posted official rates against both the US dollar and sterling.

Background – Hong Kong

Taking 1930 as the starting point, Hong Kong currency in issue comprised roughly 75% notes of the note-issuing banks (at that time the Hongkong and Shanghai Banking Corporation, the Chartered Bank and the Mercantile Bank) and 25% silver. This split was no coincidence, since at that time the Hong Kong authorities required that the note circulation should not exceed three times the value of coined dollars. However, the only legal tender in Hong Kong was silver coins (Mexican dollar and British dollar).[17] A significant proportion of the currency was believed to circulate in southern China; as early as 1926 the Hongkong Bank had estimated that 70% of its note issue was held across the border,[18] where these notes were preferred to the British silver dollar.

Paradoxically perhaps, in apparent contravention of Gresham's Law, although notes had for a long time commanded a premium over silver, in practice very little silver circulated. The premium, which fluctuated considerably and had peaked at 20% in September 1929, was partly a reflection of the greater convenience of the paper currency, especially in terms of weight and not least for those in southern China who hoarded Hong Kong currency – and who, by implication, must also have had full confidence in the Hong Kong banks.

Another explanation of the premium was that the supply of notes was restrained. There were limits on each of the banks' issuance, although HSBC was allowed to exceed its limit so long as the excess was fully secured against silver. But with banking remittances flowing into Hong Kong without a counterpart flow of silver, the banks were constrained in how much new cash they could supply to meet deposit drawdowns. The banks were anyway under no formal obligation to meet the public's demand for notes. The costs of transporting, storing or smelting silver, and the levy of a tax on note issue at 1% pa, were forceful disincentives.[19] It also appears that the British authorities may have been somewhat ambivalent, for fear lest the inevitable expansion of circulation across the border which would accompany any rise in issuance might either displease the Chinese authorities, or make the issuing banks vulnerable to events there or to unfounded loss of confidence in them.[20]

[15] Hu, p209-210.
[16] Quotation reproduced in Lin, p81.
[17] The Hong Kong (Coinage) Order 1895 made the Mexican dollar the standard, to which other silver coins had to conform.
[18] King 1988, p575; and King in Jao & King.
[19] In the light of the soaring note premium in 1929 the tax on HSBC was thenceforth confined to the first $45mn of its issue.
[20] Certainly this had been the tone of a British Treasury memorandum, incorporating the views of its leading economist, R G Hawtrey, back in 1910 – as recorded by King 1985, p12.

Given the premium on notes, the banks were susceptible to arbitrage from customers depositing silver and then expecting to withdraw notes, but the banks were alert to this and either limited coin pay-ins or insisted on the customer taking back coin on withdrawals.[21]

In 1930 the world's major economies were on the gold standard, which was still regarded as the norm – despite some imminent departures. The silver standard was based on the same principles, though may have by then been regarded as somewhat idiosyncratic, given that others had foresaken it for gold. The problem facing China was that the world silver market was behaving less stably than that for gold,[22] and fluctuations in the price of silver relative to gold carried implications for both trade and the domestic price level. Hong Kong was similarly affected. As noted above, the price of silver halved between 1925 and 1931 – which helped keep internal deflation at bay in China in the early part of the Great Depression – but reversed all of that in the subsequent four years, after various countries abandoned the gold standard and as deliberate steps (see above) were taken internationally to support the silver price.

In view of the hardship caused in the colony by the fall in the silver price, essentially because of resulting inflation – food prices rose by about 40% between 1925 and 1930 – a Currency Committee was appointed in Hong Kong in 1930 under the chairmanship of the Colonial Treasurer.[23] Its terms of reference were to assess whether the prevailing currency regime based on the link to silver was the most advantageous for the Colony; to identify the satisfactory and unsatisfactory aspects of this arrangement; to consider whether the premium that existed for notes over silver coin was damaging and, if so, what should be done; and to advise on the desirability and available means of stabilising the Hong Kong dollar.[24]

The Committee held consultations locally and concluded that it would be best for Hong Kong to stick to the same monetary system as China, although one member (R H Kotewall), echoing views expressed in a submission from the Professor of Economics at the University of Hong Kong (Robertson), expressed some scepticism on this score and asked for the option to be explored of moving to gold even if China didn't; he felt that the Committee had focused too much on the mechanism of exchange and not enough on the underlying economic realities. The report noted that China might eventually switch from silver to gold, since this had been mooted by Kemmerer. Although this was not deemed imminent, the Committee recommended that Hong Kong ought to be prepared for any such move.

The Committee also noted, significantly, that the note issue ought not to be limited by the capital of the note-issuing banks but by the availability of acceptable collateral (at that time one third bullion and two thirds securities was deemed adequate).

Hot on the heels of the Committee's work and its recommendation that expert advice should be sought in preparing a feasible scheme for stabilisation onto gold if a sudden change was necessitated, the Secretary of State for the Colonies – the British government minister responsible for Hong Kong –appointed a Currency Commission in London, comprising W H Clegg and P H Ezekiel, with G L M Clauson as secretary. It was instructed "to enquire into and advise upon the

[21] King 1985, p13.
[22] Although in the Report on Hong Kong Currency it was suggested that over a period of 15-20 years silver may have been more stable than gold.
[23] The Colonial Treasurer was C. McI. Messer. The Committee was quaintly described a year later, in the Report on Hong Kong Currency, as having comprised "government officers, bankers and merchants, including three Chinese gentlemen".
[24] 'Stabilisation' was in this context understood to mean fixing to gold – which at that time would have been equivalent in effect to fixing against sterling since sterling was on the gold standard.

question of Hong Kong currency and to make such detailed recommendations as you may consider desirable". The Commission held discussions in Hong Kong and also visited Canton and Shanghai.

The Commission's report, released in May 1931, considered whether Hong Kong should switch to gold. But a forceful case was made for Hong Kong to continue to have the same monetary standard as China. The Report noted "…that Hong Kong is economically part of China and must remain on the silver standard for as long as China does". There were thought to be benefits for the entrepot trade (given that hedging instruments were not available to the extent they are today) and to Hong Kong's role as a refuge for Mainland savings. It was considered important to facilitate as free a flow as possible of capital between Hong Kong and China. Nevertheless, the silver standard, as functioning in Hong Kong, had developed some serious shortcomings. Use of physical silver had become impracticable, yet there was apparently insufficient incentive for the banks to meet the full demand for notes as an alternative, although this view of shortage may have been overly influenced by the events of 1929 when the premium hit 20%.

Thus the Commission recommended various reforms to ensure that notes would be in adequate supply and to make them legal tender. It proposed that silver coin would only be legal tender for sums up to $10, but that the silver standard would be preserved by providing two-way convertibility at the wholesale level between notes and silver bullion;[25] the government would help with the physical management of the backing; although it was presumed that this would be largely in silver, it was suggested that 20% might be in sterling securities, managed by a currency board, in anticipation of a possible switch to a sterling/gold standard at some future date. The Commission proposed that the earnings of the reserve fund which backed the currency would be retained in order to build up a reserve against possible exchange movements arising from such a switch.

The note-issuing banks were already empowered to continue issuing at least until 1939.[26] The Commission now recommended that their tax liability should be confined to the first (fiduciary) tranche of each bank's issue, and that the government should reimburse the banks for the costs of issuance. But the Commission seemed to presume that any major changes of this sort would eventually involve, and perhaps best be timed to coincide with, the government taking over the note issue. Yet the government had always been reluctant to burden itself with the logistical side of note issuance, and some officials were even concerned that government issued notes might not enjoy the same degree of public confidence as those from the long-established banks.[27]

A period of dithering

However, while the desirability of reform along the lines proposed by the Commission was generally acknowledged in both London and Hong Kong, no action was forthcoming. The urgency ebbed as HSBC expanded its note issue[28] and the premium eased, and as a consequence

[25] As noted by Tom (1964) p64, the proposal was effectively for a shift from a silver dollar/coin standard to a silver bullion standard.
[26] According to Section 10 of the Hongkong and Shanghai Bank Ordinance 1929, and the Mercantile Bank Note Issue Amendment Ordinance 1929.
[27] King 1988, p575, implies that the government had declined on more than one occasion to entertain the idea of taking over the issuance. The Colonial Office Currency Committee noted in 1931 that the Hong Kong government might face an uncertain reception if it took over that role (Bank of England archive OV44/103).
[28] Sources are inconclusive as to what extent HSBC may ever have been reluctant to supply sufficient notes to meet demand. King (1988) p243 recalls that the Acting Colonial Treasurer said in evidence to the Currency Commission

of sterling's departure from the gold standard in September 1931 which cast a mist of uncertainty over currency regimes more generally.

Nevertheless, the idea of tidying up and strengthening the silver–based system, in effect by establishing a formal silver-based currency board, was kept alive. The subject was raised at regular intervals in the Colonial Office Currency Committee in London during the period 1931-35,[29] but action continued to be deferred, seemingly for three main reasons. One was, as noted above, the decline in the premium to a more tolerable level. Second was concern over storage arrangements for the silver which the government would acquire. HSBC was willing to help, but its new premises with sufficient vault capacity were not expected to be ready until late-1935. The third reason was that the governor of Hong Kong considered local opinion not ready for change, in view of the uncertain global situation (April 1933), although it is unclear why that should have been thought to have a bearing on proposals to carry out some much-needed housekeeping to Hong Kong, which would not have materially affected the international relationships of the HK dollar.

China in difficulty…………

Quite apart from its unstable political and security situation, China was suffering deflation, recession and banking problems as a result of the rising price of silver. Aside from the largely inconsequential establishment of the 'customs gold unit' in 1931 and even issuance of some currency notes denominated in it,[30] no material progress was made on the Kemmerer Report's recommendation of a switch to gold. But as the silver price rose from 1933 (spurred by the London Agreement of 1933 and the US Silver Purchase Act of 1934) the illegal export of silver from China increased, with smuggling abetted by the Japanese occupying Manchukuo. In October 1934 the Nanking government suspended the cash redemption of notes and imposed an export duty on silver at a basic 10% with a further equalisation tax based on the forward price for silver in London. This amounted to a de facto devaluation and there was an immediate depreciation in the yuan by 2% relative to the HK dollar. In London the COCC decided against any immediate parallel action in Hong Kong. However, China's action threw all options open. It was no longer safe to presume that the Chinese authorities would be able or want to sustain a link between the yuan and silver at a fixed price. As noted above, at the Chinese government's request, a British treasury adviser, Sir Frederick Leith Ross, was in China. He advised that the silver standard be discarded in favour of a managed exchange-backed currency (which appeared to be diplomatic shorthand for his preference of a link to sterling) with an independent central bank.

…………spurs more intensive debate on Hong Kong[31]

---

that he had not discovered any instance of HSBC refusing to expand issuance when the Colony's trade so required. Yet the existence of a sometimes wide premium and the possible disincentives to issuance in terms of production cost, handling cost of silver backing, absence of seigniorage on specie backing, and tax, all lend circumstantial support to the belief that supply may often have fallen short of demand. A further factor was that a high proportion of any note issuance invariably went into China, in knowledge of which HSBC may understandably have held back, provided they were satisfied that the basic needs of trade in Hong Kong were, in their judgement, being satisfied.

[29] Bank of England archive.

[30] See, for example, King (1988) p364.

[31] The account which follows of the deliberations in London and exchanges between Hong Kong and London draw heavily on papers in the Bank of England archive.

Therefore, the presumption that the silver standard would remain the preferred regime for Hong Kong was no longer credible. Within a couple of months an ordinance was in preparation which would place the Hong Kong dollar on a sterling standard.

Indeed, by May 1935 it was plain that China was fragmenting and the economic situation deteriorating. Even so, the Governor of the Bank of England, Montagu Norman, felt that the objective should be for the HK dollar to maintain approximate parity to the yuan, and that it was better to follow China in any changes to the monetary regime than to precede it. The COCC discussed various options, including imposition of a silver export tax (to match China's action back in October 1934); suspension of convertibility into silver; formal adjustment of the exchange rate against silver; or adoption of a sterling-based currency board.

In the event, it was agreed that a variable export tax on silver should be imposed immediately and that plans for longer-term stabilisation should be drawn up. However, it was then decided that implementation of the tax proposal should be deferred until a currency adviser was in place in Hong Kong. This was to be an official from His Majesty's Treasury, Norman Young, who duly reported for duty in Hong Kong on 19 July.

………but still no action

However, Young reported back to London that there was little support among the business community for any action at all; in particular, a recent narrowing of the differential between the Hong Kong and Shanghai exchange rates, seemingly brought about by a combination of an easier world silver price (by about 10% from its peak in terms of US dollars) because of a slackening of US purchases, and adjustment within Hong Kong via reductions in local costs, diminished the case for the silver export tax. He argued that the best opportunity to introduce the tax would have been immediately after China had imposed theirs in the previous October, or in April, before the silver price began to ease, but that it wasn't now needed.

The Colonial Office initially rejected these points and insisted, in a despatch at the end of July, that the tax should be imposed, but subsequently acquiesced to the local Hong Kong view that nothing needed to be done until the Chinese policy became clearer, unless US buying started to drive up the silver price anew. One may surmise that by this stage a more serious breakdown in China was expected soon, so that a modest measure aimed merely at catching up with China's last step was considered otiose – or at least not worth a big argument between Hong Kong and London.

By October 1935 it indeed seemed to be presumed that China would soon decide to abandon silver altogether, and the Colonial Office appears then to have decided that in that event Hong Kong would shift immediately to a sterling peg. At one point in October the Hong Kong dollar reached a premium of 45% over the yuan.[32]

China leaves silver

Eventually, on 3 November, China formally abandoned silver. Payments in silver were prohibited. All silver was to be surrendered. Banknotes were declared legal tender. And the government stated its intention to maintain a stable exchange rate. The British believed this to mean stability against sterling, but thought that it was not formally announced as such for fear of offending political sensitivities in the US or Japan.

[32] King 1968.

Hong Kong moves too

There were also political sensitivities surrounding the proposed shift of Hong Kong to a sterling peg. To move before China had decided what regime to adopt might be interpreted as putting pressure on China to adopt a sterling standard too; or as signalling exasperation or lack of confidence in China's ability to enact any meaningful reform. [33]

Thus, by mid-November London had reached a firm decision that Hong Kong should switch to sterling, but political considerations dictated that no action should be taken for the moment. A further reason for deferral was that the British authorities had enquired of their US counterparts whether they would be interested to buy the silver presently backing the Hong Kong currency, since this would need to be switched substantially into sterling. The US silver lobby may be presumed to have been displeased at the abandonment of the silver standard in China and prospectively in Hong Kong, and towards the end of the month the British received a brief and somewhat frosty negative response.[34]

But Hong Kong could not defer indefinitely. Already on 9 November it had been necessary to impose a ban on the export of silver (other than remittance of silver coin to China) because of speculation against the Hong Kong dollar following China's break from silver a week earlier.

So Hong Kong legislation was enacted on 5 December which terminated the silver standard and effectively established a sterling-based currency board. All silver coin and the silver backing for the note issue held by the three banks was to be surrendered to the newly created government Exchange Fund within one month. The banks would receive certificates of indebtedness in exchange for their silver. The EF would hold its assets in foreign currency securities, mainly but not exclusively sterling.[35] In presenting the Bill to the Legislative Council, the Attorney General stated that the note-issuing banks were in full concurrence with the proposals.

Uncertainty over the future of the Chinese currency persisted. For instance, Young still believed in mid-December that there was a possibility of China returning to silver if the US stabilised the price. In March 1936 the Shanghai authorities declared that the Shanghai yuan was pegged to sterling. By September a Bank of England memo was of the opinion that China would

---

[33] In exchanges between the Bank of England and the British Treasury in early November, just after news broke that China had formally abandoned the silver standard, Governor Norman repeated that Hong Kong's destiny lay with China; if China was moving to a managed currency, couldn't Hong Kong follow suit? This is probably not a reflection of any difference of view between him and the Colonial Office but rather a confusion of words. China seemed to regard a sterling link as representing a managed currency regime, but with the rate held stable by discretionary monetary operations of the central bank rather than the silver standard equivalent currency board.

[34] From US Treasury Secretary Morgenthau. In fact, all the silver was sold on the market in the course of the following year without noticeable impact on the price.

[35] More precisely, the Ordinance permitted the assets to be held in gold, silver, or securities approved by the Secretary of State. Thus the arrangement was not precisely that of a formal currency board based on sterling. Indeed, it was presented as an exercise in stabilisation rather than 'sterlingisation', partly at least for political reasons – not wishing to draw the attention of any American audience to the preference for sterling over the dollar and the implied demotion of silver. Consistent with this view, King (1988), p198, refers to both China and Hong Kong as having moved to a 'managed currency standard'. In practice, the assets of the Exchange Fund were soon to be almost exclusively sterling and the exchange rate was held steady against sterling.

not revert to silver but might possibly fix to the US dollar.[36] In November 1936 the Colonial Office apparently revived the debate as to whether Hong Kong should try to keep its currency in step with China by operating a managed currency, but this idea was dismissed by the Bank of England – despite its previous advocacy of shadowing China. Anyway, Hong Kong had taken its decision and, realistically, no events on the Mainland were likely to cause that decision to be reviewed. By 1937 and the Japanese invasion, there was no longer any sense in thinking of keeping the two currencies in close alignment.

Operation of the sterling currency board

In the earlier years of the British colonial currency board model it appears to have been well understood that the note issue should not be secured against a colony's own securities, although it is not clear whether this was ever specified in any colony's legislation or was simply an unwritten rule. The Hong Kong Exchange Fund Ordinance of 1935 was not entirely clear on this point. Although the ordinance stipulated that the silver which backed the existing stock of notes must be transferred to the government in exchange for certificates of indebtedness, for the future it only stated that CIs, which were denominated in HK dollars, should be paid for by "transfer of face value". In addressing the Legislative Council, however, the Attorney General elaborated by stating that "Further certificates may be issued to the note-issuing banks in payment for any foreign exchange acquired from them by the Fund, and certificates in their possession will be accepted by the Treasurer in payment for any foreign exchange sold to them by the Fund".[37] King[38] recorded that "it is the policy of this Colony that certificates of indebtedness shall be sold only against a concurrent sale of sterling to the Exchange Fund". The Exchange Fund accounts for 1936 itemise certificates of indebtedness as being "issued against sterling purchases" and show the amounts outstanding as being "valued at the rate at which the Exchange Fund is prepared to redeem them – the Fund's selling rate in London".[39] The reference to London is perhaps a reflection of the fact that the Crown Agents in London managed the sterling investments of the Exchange Fund at that time, and the sterling transfers were effected between them and the note-issuing banks. Thus, in practice, the note-issuing banks effectively paid for the CIs in sterling, by making an immediate sale of sterling to the EF at the official rate.

There was a buy/sell spread of 1¼% for the transactions relating to CIs between the Exchange Fund and the note-issuing banks, with the EF buying the sterling from the banks at an agreed rate of 1s. 3d. per HK dollar and selling (in the event of a contraction in the note issue) at 1s. 2 $^{13}/_{16}$d. In due course concessions were made on this in connection with the ebb and flow of the issue at Chinese New Year, and eventually the spread was dropped altogether in the 1960s. The rate of 1s.3d. was approximately the market rate of exchange at the time the final decision was taken,[40] and was presumably selected for that reason, although there is no trace of any contemporary discussion on this point.

Thus the sterling link of CI transactions was well understood at the time and the system was practised thus, in accordance with the required theoretical precepts of a currency board, even though the relationship with sterling was not a statutory one.[41] However, the looseness of the

[36] The choice between the US dollar and sterling was more political than economic, since the sterling-dollar exchange rate was fairly stable at the time.
[37] Legislative Council Proceedings.
[38] King (1953) p43.
[39] The accounts are in the Bank of England archive.
[40] As evidenced by statistics in the Hong Kong Administration Report 1935.
[41] The absence of a statutory basis was frequently acknowledged in official documents; see for example Hong Kong Annual Report 1973.

Ordinance's wording was to provide an opening for the accidental abandonment of the monetary anchor in a later phase of Hong Kong's history.

Assessment

In the mid-1930s the world's leading economies were searching for renewed monetary stability after the Great Depression and after associated departures from gold, which were at the time generally regarded as temporary. Although major currencies were perforce floating, albeit in a managed context, there was no presumption, as there was to be in the early 1970s, that floating was in some sense a preferred system and that the days of the fixed exchange rate were over.

Against this background it is not surprising that neither London nor Hong Kong ever appear to have considered taking any actions in respect of the Hong Kong currency other than those which would either make the silver standard work more efficiently or would 'stabilise' the HK dollar against sterling or gold. Hong Kong had no central bank and the possibility of creating one does not appear to have been raised. Thus a commodity standard or a currency board were the only available options.

Stabilisation may have meant different things to different people. The merchant community in Hong Kong wanted stability vis-à -vis China, but China was itself ambivalent as to whether it should, once the decision was taken to abandon silver, target sterling or the US dollar. There were political reasons for prevarication by China, and the term 'managed currency' was conveniently imprecise. Of course, in the event China's new regime did not have much of an unimpeded run, since in July 1937 full-scale hostilities with Japan broke out, but Hong Kong did not have that benefit of hindsight when needing to address the future of its currency, still very much in the context of its relations with China, in the closing months of 1935.

The Currency Commission in 1931 had recommended retention of silver for the time being, in preference to moving to gold. But its recommendations were delivered while sterling was still on gold. Soon after, sterling left gold, and in 1935 it had not returned to gold. Although the US dollar was still defined in terms of gold, no serious consideration seems then to have been given to hitching Hong Kong to gold. Because Hong Kong was a British colony and sterling still a major world currency, there was seemingly an automatic presumption that the Hong Kong dollar should switch its allegiance from silver to sterling. Indeed, there is no trace of any other option having been seriously considered. The term 'managed currency', which crops up in accounts of official deliberations, and subsequently in official reports, appears to have been used to refer to stabilisation in some sort of currency board format (presumably because it would require some greater degree of management by the authorities – in respect of the backing assets and the issuance of CIs for example – than did the silver standard) and not to a managed currency system in the sense that one would understand it today (such as a managed float). And, given that the 1931 Commission had recommended procedural reforms which would bring more classical rigour to the operation of the silver standard, it was hardly surprising that the principles of those proposals should be applied to the pegging of the currency when it was apparent that sterling would take the place of silver. And so Hong Kong's sterling-based currency board was born.

Following its break from silver, and largely as a consequence, the Chinese economy enjoyed a period of relative prosperity as deflation reversed and activity recovered. Hong Kong was to a considerable extent pulled along in the wake.

Economic statistics for the period are sparse, but total Hong Kong trade, which had slumped from HK$ 1,280 mn in 1931 to $636mn in 1935, recovered to $1,084mn by 1937.

Currency circulation, which had declined by 14% in the two years preceding the currency reform, expanded by 54% in the ensuing two years. The food price index, which averaged one third lower in 1935 than 1932, recovered 10% by 1937 and a further 28% in 1938.[42]

With hindsight it may seem fairly obvious that a peg to one of the world's major reserve currencies was preferable to a peg to a commodity the price of which was strongly hostage to sectional interests in the US. One might then argue that it would have been better to have moved off silver some years earlier so as to avoid the deflationary impact of the rising silver price from 1931. But during that period the merchant lobby believed, and successfully persuaded the authorities of same, in the importance of sticking close to China. It appears that they continued to attach paramount importance to stability of the Hong Kong-China exchange rate right through to the eventual demise of the Chinese currency, despite the rocky ride which both the silver price and China's economy experienced in that period.

It is interesting to note that as soon as stability was established in the rate against sterling – and approximately against other western currencies – Hong Kong officials were extolling the advantages for trade of that particular brand of stability. Thus, for 1937, "The result has amply justified the abandonment of silver. …… The steadiness of exchange has promoted confidence in foreign exchange dealings and enabled merchants to take a longer view… ."[43] And for 1938, "… these advantages [steadiness of exchange and a managed currency] continued to be enjoyed. ….. It appeared to be the general desire of the business community that no attempt should be made to make the Hong Kong dollar follow the Chinese dollar".[44] Thus, despite not following the Chinese dollar, trade with China flourished, although this was in part explicable by the fact that, with China suffering from the Japanese invasion and civil hostilities, the southern region had gained share in trade at the expense of Shanghai.

All of this suggests that the merchant lobby was conservative. It endorsed whichever exchange regime was in place. Then as now, it probably wielded more influence than should have been allowed. In the event, the breaking of the link to the Chinese currency was not obviously damaging to the entrepot trade. Businessmen may not make very good economic policy makers, and it may be significant that the only economomist consulted in the preparation of the 1930 Committee Report recommended that the case for breaking away from China and silver should be more thoroughly considered. Although there might have been little advantage in switching to sterling at that moment – shortly before sterling left gold – it might, with hindsight, have been beneficial for Hong Kong to have made the switch in 1933, before the silver price rise gathered full momentum. However, this remains a matter of conjecture.[45]

On balance, the currency reform adopted by Hong Kong in 1935 may be judged to have been the correct one, but there are grounds, albeit not conclusive, for arguing that it might to advantage have been implemented a couple of years sooner.

1972 – discipline inadvertently abandoned

Chronology

---

[42] [source]
[43] Hong Kong Administration Report 1937.
[44] Hong Kong Administration Report 1938.
[45] Tom (1963 ch VI and 1964 ch VII) is of the opinion that Hong Kong's entrepot trade would have suffered if the exchange rate with China had not stayed fixed.

The sterling based currency board survived the interruption of the second world war. The HK dollar retained its peg against sterling unaltered when the Bretton Woods parities were set after the second world war and also when sterling devalued in 1949. When sterling was next devalued in November 1967, Hong Kong initially kept its rate against sterling unchanged, implying a 14.3% devaluation against other currencies, but within a week the decision was taken to revalue by 10%, leaving a residual devaluation of 5.7%.

The start of the 1970s was a period of considerable uncertainty and turmoil in the world's currency markets. The Bretton Woods system of the gold exchange standard was still theoretically in operation, although central banks had, since the two-tier gold market was established in 1968, effectively terminated the last vestiges of gold convertibility. In August 1971 the US ceased gold convertibility altogether, even for other central banks. The Smithsonian agreement of December 1971 was a desperate attempt to shore up the fixed-rate system. It involved a devaluation of the US dollar by some 8% - technically via an increase in the dollar price of gold from $35 to $38 an ounce. Hong Kong decided to maintain its rate against sterling, implying a revaluation of 8.6% against the US dollar. The respite was shortlived. In June 1972 the UK authorities decided to allow sterling to float. Two weeks later, on 6 July, the Hong Kong government announced that it would sever its fixed link to sterling and instead move to a US dollar link, aiming to keep the currency within a margin of 2% on either side of a rate of HK$5.65 to the US dollar – representing an immediate appreciation of 5.2% against sterling. Hong Kong left the sterling area and all exchange controls were lifted.

It was at this point that a significant alteration was made to the backing arrangements for banknotes. Henceforth the note-issuing banks would pay the government for certificates of indebtedness not in sterling but by merely posting a HK dollar credit to a government account on their own books, and debiting that account in the event of a CI redemption.

In February 1973 the United States formally devalued by a further 10% against gold – to $42. Hong Kong decided to leave its declared gold parity unchanged, so revaluing against the US dollar.

But by then the fixed rate system was in its final throes and the world moved to generalised floating. Eventually the Hong Kong authorities, too, opted to cut loose from other currencies altogether. From 24 November 1974 the HK dollar was allowed to float without any official undertaking to hold it at a particular rate or within a particular range.

Hong Kong's most crucial decision

From Hong Kong's monetary perspective the key event in this episode was the decision in July 1972 to alter the method of payment for certificates of indebtedness, since this propelled Hong Kong into a 'free banking' or 'free issue' era.[46] In the absence of a central bank there was no anchor for the currency and no effective means whereby the authorities could operate in the money market to regulate the volume of liquidity of the banking system or to control the level of short-term interest rates. The amount of money created was in practice determined by the banks,

---

[46] Some observers have maintained that the regime change occurred only in November 1974 when the Hong Kong dollar was allowed to float. However, while it is true that the currency was held within a narrow band around a fixed rate until November 1974, through official intervention when necessary, the crucial change in the operational monetary framework had already been effected in July 1972.

free of any obligation to maintain a particular exchange rate or of any mechanism inclining them towards one. Monetary policy was largely rudderless and impotent.

Why was this decision taken? Whether and to what depth the question may have been analysed or its consequences evaluated is something of a mystery. There is no trace of any such discussion in available archive material, at least to the extent that it is accessible.[47] One is therefore obliged to piece together the story with a measure of surmise.

The most obvious reason which may be adduced for changing the backing arrangement was that sterling was perceived as a weak currency at the time, and the HK dollar as relatively strong. By taking local currency in payment for CIs the authorities gave themselves scope to diversify their reserves into third currencies without going through sterling first. They saw the decision as affirmation of the strength of the economy and the currency.[48] Yet if just one monetary economist had been consulted the step might never have been taken. It appears, however, that this was regarded as a fund management and operational issue, not an economic one. There is no evidence of London even having been consulted. And the event was considered so inconsequential locally that it does not appear to have been formally announced, let alone reported in the press. The main concerns reported in the press in early July were a certain resentment about the HK dollar being dragged down with sterling against other currencies in the two weeks between sterling's float and Hong Kong's decision to break away from sterling, and a query as to whether Hong Kong had moved quickly enough before sterling's drop to diversify its reserves out of sterling to the full 10% which was then permitted under agreements with the UK authorities.[49]

Substitute policies

The Hong Kong dollar remained firm for some time. Its trade-weighted index rose by some 10% between July 1972 and November 1974, and was a further 7% higher by the first quarter of 1977.[50] Thereafter, however, the exchange rate weakened and the growth of money and credit accelerated. Whether or not the Exchange Fund was buying foreign currencies promptly with HK dollars received against issuance of CIs, these transactions would not have been at a fixed rate, and there was no mechanism for anchoring the rate of exchange. As its inability to exert effective monetary control became apparent, the government was driven to practise a number of second-best measures in an attempt to exert some influence on monetary developments. These covered four main areas: interest rate control; liquidity ratios; foreign exchange market intervention; and money market operations.

Interest rates

Cartel-like determination of interest rates on bank deposits – via the setting of ceilings for particular classes of deposit – had been operational de facto since 1964 as a means of avoiding an interest rate war which might have proved damaging to the stability of the banking sector, although it was not until 1981 that the cartel received statutory backing under the Hong Kong Association of Banks Ordinance. The interest rate rules set the maximum payable on deposits

---

[47] It may be of significance that the Hong Kong Executive Council papers for 1972 covering currency questions have been withheld from release (by means of an exemption from the 30-year rule which would otherwise make them publicly available). But, even if the matter was raised in that forum, it does not appear to have been discussed more widely.

[48] For a discussion of the possible motivations, see Jao, p60, in Jao & King 1990.

[49] Reports in South China Morning Post.

[50] Hong Kong Monthly Digest of Statistics.

taken by banks for sums smaller than $500,000, but did not apply to the emerging deposit taking companies which could bid competitively for deposits of a minimum $50,000, nor to swap deposits.[51] Banks themselves established DTC subsidiaries. The controlled interest rates were scarcely relevant to the wholesale markets where the exchange rate was determined. For the sake of the smaller banks in particular, the controlled rates could not be allowed to become too misaligned relative to the wholesale rates.

As the years passed, the rules began to assume an increasingly important profile as a presumed monetary policy instrument. Yet, although they may have remained an effective means of preventing cut-throat competition among the banks, the extent to which they were actually able to play a meaningful role in the macro-monetary context is open to debate. HKAB was under a continuing obligation to consult the administration – in the person of the Secretary for Monetary Affairs or equivalent forerunners – each week on the appropriate level of interest rates, but the extent of the government's influence appeared to be little more than perhaps to delay or accelerate a change in the controlled rates, and consequently, in practice, in the banks' benchmark lending rate (the best lending rate), by a week or so. Indirectly, however, the influence may have been greater. Having struck a consensus with government as to the desired level of rates, the banks – more particularly HSBC as the dominant player – could usually be relied upon to conduct their own operations so as to validate those rates. The weakness of a system dependent on this arrangement was that while HSBC might be willing and able to fashion the market in reasonably quiet conditions, it could not outweigh the will of the market in more disturbed circumstances – in which case, whatever the government's preference, the HKAB decisions had to bow to market pressures rather than steer the market.

Liquidity requirements

Liquid asset requirements, which were anyway primarily in place for prudential reasons, were an even less effective mechanism from the monetary policy standpoint. The banks generally possessed liquidity far in excess of the minimum requirements, and many of them could anyway manufacture as much additional liquid assets as they might need by borrowing from overseas offices. Moreover, much of the system's liquidity was held in foreign currencies, as a result of which a call for additional liquidity might have the effect of weakening the exchange rate. Measures introduced in 1978 to extend comparable liquidity requirements to DTCs and to require 100% liquidity against short-term deposits from the Exchange Fund underlined the government's commendable concern at its shortage of monetary armoury, but did little in practice to strengthen it.

Foreign exchange market

In the absence of a central bank, foreign exchange market intervention (eg to support the HK dollar) could never result in a drain of liquidity from the banking system, since any HK dollars purchased by the government against US dollars were held as balances within the banking system. It was HSBC that performed the central banking function of determining the ultimate HK dollar liquidity of the system.

The main role of such intervention was to signal to the banks, and in particular to HSBC, the government's belief in and commitment to a particular exchange rate, pursuant to which the

[51] The practice developed of banks offering US dollar denominated term deposits linked to foreign exchange swap contracts (spot purchase and forward sale of US dollars by depositing customers); the interest rate on foreign currency deposits was not covered by the HKAB rules.

bank would probably be willing to conduct supportive operations for its own account in the market, possibly on a much greater scale than the Exchange Fund. In this way foreign exchange intervention could be an effective instrument.

Money market scheme

Early in 1982 a rather elaborate money market intervention scheme was hatched in collaboration with HSBC, whereby HSBC would withdraw funds from the money market on behalf of the government and at the government's expense (in terms of interest), and then refrain from re-lending them into the market. This was supposed to have the effect of tightening interest rates, as a result of the withdrawal of liquidity.

Although this mechanism could prop up interbank rates on a particular day, the impact faded thereafter, since banks and others could draw on facilities with HSBC to replenish liquidity and the government's presence as a ready bidder would merely encourage round-tripping. The effect could only be sustained by borrowing ever-cumulating amounts, at rising cost. There was nothing in the agreement to limit the overall size of HSBC's position vis-à-vis the remainder of the banking sector, and although HSBC played to the spirit of the agreement by refraining from any deliberate recycling of liquidity, there was little that they could do, or would have wanted to do, to deny others access to facilities with them.

Despite its shortcomings, the scheme could be effective in the short term and continued to be employed even after the 1983 regime change, notably in the early days of the 7.80 peg in order to assist the convergence of the market exchange rate.[52]

Survival

What is perhaps surprising about the period 1972-83 is not that it ended in crisis but that it lasted so long before a lethal crisis struck. If it had not been for the exceptional political developments of 1983, Hong Kong's free-banking era might have continued much longer.

Monetary survival from 1972 to 1983 owes much to the co-operation between government and HSBC, which was the overwhelmingly dominant bank in Hong Kong. It was often said that what was good for HSBC was good for Hong Kong and vice versa. Certainly, to the extent that HSBC's profitability was linked to the overall economic performance of the Hong Kong economy there was a clear coincidence of interest, and, although it may have been positioned to make short-term exchange gains from any depreciation of the Hong Kong dollar, or at least be well enough covered to avoid losses, the longer-term goal of a stable economy and avoidance of excessive inflation is likely to have prevailed as a more important consideration. HSBC was also a major provider of banking services to government.

If co-operation was the main feature of this period, what did it achieve in substance? Anecdotal evidence[53] indicates that the chairman of HKAB and the Secretary for Monetary Affairs reviewed the latest state of the markets and economic indicators at their weekly meeting before reaching a judgement as to whether prevailing cartel interest rates were appropriate or needed to be adjusted. No adjustment could be made which would be much in defiance of market rates. Where the parties identified the direction in which rates should desirably move in the near

[52] The scheme became formally redundant only when the Accounting Arrangements were introduced in 1988.
[53] Coupled with the author's personal experience in the final phase of this period. Public records are not accessible until 30 years have elapsed.

future, this message was communicated back to the banks with the implication that the major players should seek to steer markets in that direction. For reasons explained above, there were often good reasons for the banks to be willing to co-operate, but equally there were acknowledged limits to that cooperation.

As regards intervention in the foreign exchange market, government and HSBC (effectively the two crucial players) would usually each want to know that the other was sharing, for its own account, in any intervention, as evidence of a joint commitment and a shared vision about where the exchange rate should be.

Surprisingly little empirical research has been carried out on that period. One study[54] found that money (M1) tended to adjust passively to inflation over that period and that there was no evidence of banks creating any instability by expanding deposits or credit. This tends to support to the thesis of benign co-operation.

On the other hand, banks – most importantly HSBC - could not disregard the interests of shareholders on those occasions when a clear gulf appeared between government and shareholder interest. In a confidence crisis such as 1983's, when the currency was depreciating and there was little prospect of an early resolution of the political uncertainties that were unsettling markets, HSBC had little choice but to draw a line in the sand to limit its support to the exchange rate. Although HSBC may have been large enough to impose its will on a closed Hong Kong market, it was small in relation to the open world to which Hong Kong, through its free market philosophy, was in practice exposed.

The Hong Kong economy performed well enough in this era, with per capita GDP growth averaging 5½% pa. Although inflation was a problem, notably in the period 1978-1982 when it averaged 13%, this was a comparable rate to many other emerging economies and not greatly worse than industrial countries (averaging 10%).[55] But the 1972 regime was probably doomed to collapse as soon as a big enough shock hit it, and this is what eventually happened in 1983.

1983 – back to basics

The case for restoring the pre-1972 system

Up until 1983 there does not appear to have been any clear acceptance within government circles of any need for monetary reform. As noted above, the economy was generally doing well. Outside government there had been a few papers exposing the fundamental weakness of the monetary system and suggesting restoration of the formal currency board mechanism as one of the available options, but these engendered pique more than interest among officials.[56]

As the confidence crisis relating to the Sino-British negotiations on the future of Hong Kong unfolded in the spring and summer of 1983 officials began to explore options. An internal

---

[54] See Luk.

[55] Schuler (1989) inclines to the view the lack of monetary control was responsible for Hong Kong's high inflation, but the figures which he quotes – cumulative inflation over the period 1974-83 of 128% in Hong Kong, 102% in the US, 209% in the UK and 95% in Japan – do not seem conclusive.

[56] The most persistent and cogently argued critiques and proposals came in the pages of Asian Monetary Monitor (July-Aug 1981, Nov-Dec 1981, Nov-Dec 1982 and Sept-Oct !983), essentially from John Greenwood. At one point it seemed that officials were more intent on exposing minor factual errors in Greenwood's texts than in absorbing the monetary diagnosis or heeding the warnings therein.

memorandum analysed the existing system's weaknesses and set out the steps which would need to be followed if Hong Kong were to move to a more conventional managed floating rate regime.[57] Essentially this would have required central banking mechanisms for market intervention to be put in place, either by institutional reform or through a fairly tight agency agreement with HSBC, which was the settlement bank and provider of ultimate liquidity to the banking system and was therefore in complete control of the system's liquidity position. But it would probably not have been enough simply to set up a central bank or strike an agency deal. The necessary financial instruments and markets for open market operations would also have to be developed. The prospect of first reaching consensus on such reforms and then executing all the necessary institutional groundwork seemed too daunting. The idea was not pursued.

Meanwhile the exchange rate slipped further, from 7.20-30 to the US dollar for much of July (already some 20% weaker than a year earlier) to a low of 9.60 on 24 September (closing quotation – there were reports of trades at beyond 10.0). During this period it became apparent that doing nothing was no longer an option. But without a central bank and without any of the conventional instruments of monetary control, the only available course of action was to restore the currency board mechanism by requiring the note-issuing banks to submit foreign currency as backing for any expansion of their note issue. When this was eventually announced to the public on 15 October, for implementation on 17 October, many observers and much of the media greeted it as if it was some revolutionary new invention. In fact it was merely the reversion to a mechanism which had been in place until eleven years previously.

Possible flaws

Athough monetary officials reached agreement that this seemed to be the right solution, it would be an exaggeration to say that they were fully confident that stability could thereby be restored. There were two areas of concern regarding the mechanism itself. First, because the adjustment mechanism to pressure of inflows or outflows would have to operate ultimately via interest rates, the possibility was acknowledged that interest rates could in exceptional circumstances be driven to exceptionally high levels which, if sustained for anything beyond a short period of time, could be so damaging to the economy and to the banks as to force abandonment of the peg.

Second, although success could be assisted by maximising the psychological impact – through persuasive presentation and supporting assurances from the banking community – in the final analysis it might depend on how successful a transmission mechanism existed from the fixed rate for banknotes to other parts of the market.[58] There was no evidence to suggest that the demand for currency was particularly interest-elastic, so the presumed mechanism of banks raising interest rates when the exchange rate was significantly weaker than 7.80 in order to reduce the demand for banknotes seemed somewhat tenuous. Moreover, banks were under no legal obligation to supply banknotes to customers and it was possible to envisage a scenario where the note issuing banks rationed note supplies rather than either raising interest rates or suffering the costs of buying US dollars in the market at, say, 7.90 in order to purchase certificates of indebtedness at 7.80.

[57] Author's personal records.
[58] It was only much later in 1998, after the Monetary Authority had been established, that an equivalent formal convertibility promise was extended to banks' balances.

Some comfort could be derived from the fact that currency boards had functioned very smoothly in the past, including in Hong Kong, on the proposed basis. But could the traditional mechanism work effectively in the 1980s' world of large and open international capital markets?

Apart from that uncertainty over the fundamental viability of the scheme, a number of other hurdles had to be cleared. The banks had to be brought on side; the legal basis had to be clarified; the reference currency and exchange rate had to be decided; operational details had to be settled; and the entire plan had to be cleared at the highest level in government.

The banks' concerns

The note-issuing banks (two at that time, HSBC and Standard Chartered) were generally supportive of the proposal, being as anxious as anyone to see stability restored to the financial markets. Though not convinced that the move would necessarily deliver all that was hoped of it, they realised that almost anything would be better than just leaving things to drift. But they raised concerns in two areas.

One concern was that, if there was a surge in note requirements from other banks, the note-issuers alone would be left with the task of submitting the equivalent foreign currency to the Exchange Fund. Given the climate of crisis at the time of these discussions and absence of absolute faith in the proposed system, the negotiators could be excused for presuming that the market rate might typically be weaker than the chosen peg. In that case the note issuing banks would indeed face a loss when the note issue expanded if they had to purchase US dollars in the market at, say, 7.90 in order to purchase certificates of indebtedness valued at 7.80.

A deal was therefore struck that, when other banks drew notes from (or returned them to) the note-issuers, they would pay/receive US dollars to/from the note-issuers calculated at 7.80. This arrangement would apply only to banks – not to their customers in turn. Officials did not initially believe that this arrangement was particularly desirable since it tacitly acknowledged the possibility – still worse the expectation – that the market rate might not converge to 7.80, but they were willing to endorse it in order to secure the note-issuers' support.

In fact, this move had more profound consequences than were anticipated at the time of its negotiation. It opened the way for arbitrage between notes and bank deposits. Thus, hypothetically at least, if the market rate was at 7.90, a bank which was not a note issuer might collude with one of its customers so that the customer transferred deposit money to an account with a note-issuer, withdrew the sum in notes, deposited the notes with the non-note issuer, which would then redeem them via the note issuer and receive US dollars at 7.80, which it could then sell in the market for HK dollars at 7.90 – making a profit on the round trip. An opposite process could be followed, equally profitably, if the rate was stronger than 7.80.

This type of institutional round-tripping would not of itself have helped the exchange rate to converge on 7.80, since it gave rise to a balanced purchase (by the note issuer) and sale (by the non-note issuer) of US dollars. However, the potential for such a process, at the expense of the note issuers, whenever the rate was sufficiently distant from 7.80, came to be regarded by officials as a potentially useful source of pressure on the note issuers (more especially on HSBC as the bank which controlled the money market) to act upon interest rates and liquidity in a manner which would serve to move the market exchange rate towards 7.80. And some attention was given to this potential transmission route in official briefings about the currency board mechanism.

In the ensuing months and years, however, the note-issuing banks made it perfectly clear that they regarded any such round-tripping, or the threat of it, by other banks, not as part of the adjustment mechanism within the currency board system but as unfair exploitation of their note-issuing role. They would therefore impose handling charges on any customers who appeared as large drawers or depositors of notes ostensibly for that purpose. Of course, it was the note-issuers who had originally pressed for this particular arrangement. Many years later the arrangement was abandoned and non-note issuers subsequently conducted all their note transactions with the note-issuers against Hong Kong dollar transfers.

The banks' other concern was over the status of CIs and the US dollar backing in the event of any subsequent change in the rate at which the HK dollar was pegged. In particular – with visions only of HK dollar weakness – they enquired whether CIs acquired prior to such a change would be redeemable at their original purchase rate. This enquiry was perhaps something of a throwback to the late-1960s when, following sterling's devaluation, the Bank of England, as part of an exercise to discourage central banks from diversifying official reserves out of sterling, exceptionally gave some partial guarantees for the sterling balances of commercial banks in Hong Kong, in recognition of the fact that, without a central bank, Hong Kong's *de facto* foreign reserves were partly held by the banks. But that had been an altogether different circumstance. The answer to the enquiry in the present case was clearly negative. CIs, though paid for in US dollars, were denominated in HK dollars and they served as backing for notes which were denominated also in HK dollars. Note-issuing status did not expose the balance sheet to any special exchange risk. Assuming that any change in the pegged rate would be reflected equally in the market rate, application of the new rate to all subsequent purchases or sales of CIs would ensure that banks made neither windfall gains nor losses. The banks quickly agreed that the official analysis represented the appropriate neutral treatment.

Administrative basis

In much the same way as the note-issuing banks had transferred sterling in exchange for their CIs up until 1972 without any explicit statutory obligation to do so (the Exchange Fund Ordinance referred only to "transfer of face value"), the change to US dollars in 1983 was initially just a consensual agreement between the government and the note-issuing banks. In due course - in May 1984 – the EFO was amended to empower the financial secretary to determine the currency of payment and the rate of exchange. Meanwhile the arrangement for the non-note issuing banks to settle for notes in US dollars with the note issuers was effectively just a contractual arrangement between the banks, albeit one which was known to have official blessing at that time.

Reference currency and rate

There was unanimity among officials and others consulted that the reference currency should be the US dollar. Already in 1972 Hong Kong had dropped its link to sterling and for two years thereafter kept a steady rate to the dollar. Sterling was no longer a major international currency. Only 5% of Hong Kong's trade was still with the United Kingdom, whereas 21% was directly with the United States[59] and still more of it denominated in US dollars. The idea of a basket of more than one currency was raised but quickly dismissed. Despite the advantages which this might have brought in terms of minimising fluctuations against trading partners on average, officials decided that Hong Kong needed a simple and transparent system, which could

[59] Census and Statistics Department website.

be operated very directly, and could be monitored and understood as readily by the man in the street as by a banker or economist.

Anyway, considerations about trade and payments are only of secondary importance in selecting a reference currency for a currency board. The crucial factor is that the there should be confidence that the anchor currency will be managed responsibly by its central bank. Monetary stability in the anchor economy should, other things being equal, promote monetary stability in the pegging economy. Of course, other things cannot be counted upon to be equal, and difficulties have subsequently arisen when the two economies have been at different phases of the economic cycle and because of the implications of structural differences for the comparative rates of inflation. Divergences of that sort were to be expected, though their precise nature may not have been predicted. They did not alter the conclusion that the dollar was the most suitable anchor.

With regard to the choice of rate, the rate against the US dollar had been around 6.60 at the beginning of 1983, before the political jitters began. It had hit an end-of-day low of 9.60 on 24 September and settled back in the range 8.10-8.40 after the government announced that it was contemplating a structural alteration. An internal assessment suggested that the equilibrium pre-crisis rate was in the range 6.50-7.00. Already, however, the additional inflation resulting from several months of weakness would have caused that figure to drift a bit higher. Early in September a rate of 7.25-7.50 was mooted as a reasonable position in macroeconomic terms. But it was acknowledged that too ambitious a rate might test credibility in the markets and result in a prolonged period of high interest rates which could even enforce abandonment. At the other extreme, too weak a rate would threaten inflation and could attract international accusations of deliberate action to secure a competitive advantage. It was also felt that, psychologically, the figure should be below 8.00 in order to demonstrate that the situation was being positively stabilised rather than caving in to the whim of the market. The chosen rate could afford to be stronger than the prevailing market rate to the extent that convergence could be seen to be reasonably achievable.

The range was thus narrowed to 7.60-7.95. Finally 7.80 was selected. The figure sequence 7-8 sounds auspicious when spoken in cantonese;[60] this was not a significant factor in selecting the rate, although it may have played a small part in confirming the selection. In macroeconomic terms, the rate might have seemed a bit weak, but there was a danger in not winning market confidence, especially in view of the continuing political uncertainties, if an attempt was made to recoup more ground. In the event, the US dollar strengthened for the ensuing two years, pulling the Hong Kong dollar up against other currencies, though this could not, of course, have been built into the calculations at the time.

Operational considerations

The operational arrangements were straightforward. It was merely necessary for the two note-issuing banks and the government to specify the US dollar accounts to and from which the payments associated with CI transactions were to be made. The note-issuers would make similar arrangements with the other banks.

Consultation

---

[60] Meaning to be assured of good luck.

All the discussions on the plan in its early stages were taken in hand by the Monetary Affairs Branch of the Government Secretariat, with the Financial Secretary being kept closely informed of progress. At that time the only non-official members of the Exchange Fund Advisory Committee were the representatives from the two note-issuing banks,[61] and they were fairly continuously involved in discussions once the peg option came under serious consideration towards the end of September. The Government Economist[62] also became closely involved.

The UK government was kept in the picture. Professor Alan Walters, the personal economic adviser to Prime Minister Margaret Thatcher, was an advocate of a return to the formal currency board and exerted influence behind the scenes to that effect. As the proposal took shape in Hong Kong, the Financial Secretary formally requested an expert opinion from London. London speedily despatched two experts – David Peretz, a senior Treasury official, and Charles Goodhart, chief monetary adviser at the Bank of England, to Hong Kong. They held discussions with relevant government officials and the note-issuers, as well as academics.[63]

The experts produced a report which broadly endorsed the proposal, believing that it had a fair chance of success, noting that there were few other practicable options which could be quickly effected, and observing that the return to the formal currency board would certainly be an improvement on the prevailing situation, even if it did not turn out to be ideal.

Armed with that recommendation, officials finally needed to win the support of the Executive Council. In formal terms, the Governor was seeking the advice of the Council before approving the measure. Discussion straddled two meetings. It was not easy for members, coming fresh to the topic, to absorb all the technical detail. It was recognised that something must be done about the currency crisis, but in some ways this plan looked all too simple. Eventually, however, it was endorsed without dissent.[64]

It was then decided to implement the proposal as soon as possible. In practical terms the announcement could not be made while markets were open, and there needed to be some time for the banks to be notified of, and to prepare for, the new note-issue arrangements. The announcement was therefore scheduled for immediately after the close of the local market on Saturday 15 October, with the new arrangements going live at the start of business on Monday 17 October.

Performance and evolution

The announcement had an immediately powerful psychological impact, but there was still a mixture of some incomprehension and some scepticism both in the market and among commentators. It was acknowledged in official circles that the mere technical mechanism of the currency board as then constituted – with banknotes as the sole fulcrum – might well be insufficient to produce full convergence. Yet it was clear that the favourable initial reception and the overall credibility of the arrangement might dissipate if convergence was not achieved quite soon. The government and HSBC were therefore active in the market for some time in support of

[61] Bill Brown of Standard Chartered and Michael Sandberg of the HSBC, although the latter delegated the detailed negotiations to John Gray.
[62] Alan Maclean.
[63] They met with Y C Jao and Steven N S Cheung of the University of Hong Kong, and with John Greenwood of G T Management, who had also, by invitation, made a presentation on the merits of the currency board system to a meeting of officials and representatives of the note-issuing banks on 25 September.
[64] Proceedings remain confidential, but the author would pay tribute to the skilful role of the Governor, Sir Edward Youde, in steering the discussion towards a final decision.

the exchange rate, and the money market scheme continued to be operated in an attempt to ensure the associated tightness of the money market.

In the event, the market exchange rate moved close to 7.80 within a few days and the credibility of the new system became established. But the fact remained that the theoretical mechanism alone could not be relied upon in practice to keep the rate anchored around 7.80. Yet if the rate was observed to hold very close to that point, public confidence in the mechanism would mature, even if unspoken doubts lingered in some minds.

In July 1988 an important step was taken to strengthen the mechanisms ancillary to the currency board. The money market scheme was discarded in favour of the so-called Accounting Arrangements whereby HSBC, which was the settlement bank for the banking system, maintained a balance at the EF (the "aggregate balance") which could only be altered by transactions at the discretion of the government, and was charged a penal rate of interest by the government if the balances of the banking system with HSBC exceeded the aggregate balance, or if the banks were collectively in deficit on their balances with HSBC.[65] This in effect gave the government, for the first time, direct influence over the liquidity of the banking system, by providing HSBC with a clear incentive (via penal charges) to conduct its operations so as to keep the banks' overall balance close to a particular level.

This meant, in turn, that, if it so wished, the government could, for example, choose to allow the HK dollar leg of a purchase by it of US dollars from the market to be settled against the aggregate balance and so induce HSBC to contract interbank liquidity. In other words, the government could choose to let the impact of foreign exchange intervention be fully felt in the money market – unsterilised intervention (where the monetary base is contracted/expanded one-for-one against a sale of foreign currency by/to the monetary authorities) – whereas previously the default path was to feed the HK dollars straight back to the money market. Non-sterilisation of such operations would be consistent, in terms of monetary discipline, with the note-issue arrangements and provided a new formal dimension to Hong Kong's currency board system.

Therefore the currency board mechanism now effectively applied not only to changes in the note issue but also to changes in banks' ultimate liquidity in the form of their clearing balances – to the extent that the government chose to settle any of its HK dollar transactions with the banking sector against the aggregate balance and to the extent that HSBC responded to the related inducements.

Subsequently, in December 1996, all banks were required to open accounts directly with the EF, and so the intermediary role of HSBC was terminated. The government (by then in the shape of the Hong Kong Monetary Authority, which had been established in 1993) continued to execute foreign exchange deals with the banks on a purely discretionary basis, with a view to maintaining confidence in the 7.80 currency peg.[66] This lasted until the HKMA, as part of a number of measures to strengthen the system in September 1998,[67] gave a firm undertaking to sell US dollars to banks, against their balances at the EF, at the fixed rate of 7.80,[68] while, however, maintaining discretion over the rate at which it would intervene to buy US dollars when the market exchange rate was stronger than 7.80.

---

[65] Jao p96ff and appendix E, in Jao and King, provides a more detailed description and analysis.
[66] However, for a considerable period the market rate became focussed on 7.75, which the government tolerated.
[67] HKMA 1998.
[68] In fact the initial rate was 7.75 and it was moved up to 7.80 at the pace of one pip per calendar day over the ensuing 250 days from 26 November.

This move established clearly the principle that all central bank money – not just the banknote equivalent – was subject to the currency board mechanism.[69] Thus the system has evolved considerably since its restoration in 1983. At the time of the introduction of the Accounting Arrangements in 1988, there was some debate as to whether, by establishing a mechanism which could be used for discretionary monetary management, the textbook currency board principles of automaticity and non-discretion were being compromised.[70] However, if there had been no move in that direction – and subsequently to the position where banks hold their ultimate reserve money on an account with the Exchange Fund which qualifies for the convertibility undertaking – the currency board mechanism would never have applied beyond the note issue. It seems, on balance, preferable that the coverage should have been broadened, even if, by so doing, the authorities have gained for themselves a degree of incidental discretionary power.

The peg at 7.80 is generally regarded as having been a success in terms of establishing and maintaining monetary stability. There is scope for debate as to whether Hong Kong, now that it possesses the instruments and infrastructure that would be required to operate a more discretionary monetary policy, should in fact now move in that direction. But that debate lies beyond the scope of the present paper.

Assessment

Hong Kong has always been something of an odd-man-out in the context of currency regimes. It kept to the silver standard up until 1935, for the understandable reason of matching China but nevertheless increasingly distinct from everywhere else. It then adopted a currency board; this was not uncommon at the time for colonial situations, but, with the exception of the aberrant years 1972-83, Hong Kong clung to that system during the second half of the century when it was being abandoned almost everywhere else, albeit with a modest resurgence in the 1990s.[71]

In effect, therefore, Hong Kong practised some form of fixed rate arrangement for all but nine years (1974-83)[72] of the century. By contrast, the major currencies of the world moved from gold standard early in the century to enforced abandonment of gold, first through war and later the Great Depression; then, after some years of floating and another war, back to the quasi-gold standard of Bretton Woods; then generalised floating; and finally back to more fixity with the passage to the euro and a preference among some, mostly Asian, economies for *de facto* pegs to the dollar.

Hong Kong's choice of regime was always limited by the fact that it had, until 1993, no central bank. Given that limitation, there were effectively only three choices – a commodity standard, a currency board or free banking – and in fact Hong Kong tried all three.

[69] HKMA also includes EF bills and notes in its definition of the monetary base since, although they cannot be directly settled against foreign currency, they are immediately convertible by banks, at an appropriate discount rate, into balances at the EF.
[70] The debate can be found in Jao 1988 and Greenwood, 1988a, 1988b.
[71] eg Argentina, Estonia, Bulgaria.
[72] It maintained a fixed rate within a narrow margin from July 1972 to November 1974, despite having already altered the basic framework.

The earlier existence of a central bank would have widened the policy choice to include, for example, a managed float (in contrast to the rudderless float of 1974-83) and allowed for monetary independence. This was the route taken by most other colonies – albeit often with disastrous consequences. Why did Hong Kong not establish a central bank sooner? In the early phase – roughly until the 1950s – such a move probably never crossed anyone's mind. Colonies were not in general believed to need or merit that degree of independence, and they never asked for it. In the later phase, the question was probably raised from time to time and, although no discussions are documented, one may surmise that there were three main reasons for rejecting the idea.

First, Hong Kong prided itself in keeping government small. A highly convincing case would have to have been made for creating any new public institution, and the idea of a central bank would have failed that test. Second, the creation of a central bank would have risked upsetting the delicate balance of mutual interests between the government and the banks, notably HSBC. Third – and a likely consideration particularly later in the period – in the context of relations with China it may not have been tactful to indulge in explicit institution-building of this sort; the HKMA was eventually established only after the framework for the handover of sovereignty had been agreed.

The 1935 regime change was very deliberate. It had been in preparation, or at least under discussion, for more than five years. It was precipitated mainly by external events – the high silver price and China's decision to leave silver. The decision was effectively dictated from London, though local colonial officials had been involved in the discussions over a number of years and were in full agreement. The move is generally judged to have been the right one – arguably, it might to advantage have come sooner – and the economy was seen to benefit.

The 1972 change presents a stark contrast. From the available evidence – which admittedly may not be complete because official papers are still being withheld – it was a hasty decision, prompted by disarray in the international currency markets rather than any home-grown crisis. The decision was taken locally and seemingly without advice from London – since the move did not involve any statutory measures formal consultation with London was not required. The decision also appears to have been taken without any recognition of the economic implications of abandoning the monetary anchor implicit in a currency board in favour of a free-banking model. In the event, the consequences were not obviously adverse for the ensuing ten years, since the Hong Kong economy prospered. But by its very design the system was almost certain to collapse if hit by a big enough shock, and that is what happened in 1983.

The 1983 change was also quite a hasty decision, with the period from the first focused official deliberations to implementation being a matter of weeks. But this was long enough for the monetary policy dimension to have been thoroughly and expertly explored. Action was necessitated by a Hong Kong-specific confidence crisis, the impact of which was magnified by the shortcomings of the prevailing regime. The decision was taken locally but after full consultation with, and blessing from, London. It has been generally acclaimed as a success: certainly it stabilised the situation quickly, and delivered monetary stability and a very respectable economic performance through the sensitive period of negotiations over Hong Kong's future.

Whether the currency board still remains appropriate today is beyond the essentially historical scope of this paper. However, Hong Kong now possesses a central bank (in the shape of the HKMA) and the freedom to operate alternative regimes. Although the HKMA may lack the degree of independence from the financial secretary that might nowadays regarded internationally as desirable for conducting active monetary policy, Hong Kong is, in principle, no longer so limited in its choice of monetary regime as it was in 1935, 1972 or 1983. Only time will tell whether Hong Kong exploits this broader capability.

Sources

This project has been largely dependent on source material available in Hong Kong – principally in the library of the University of Hong Kong and the Public Records Office, supplemented by the author's personal recollections. One brief visit was made to the Bank of England in London to examine relevant archives.

Bank of England, London *Archive – various papers in files OV 14/18 and OV 44/103-106, covering years 1930-37*

Cain P J and Hopkins A G 2002 *British imperialism 1688-2000* Pearson Education Ltd

Dayer, Roberta Allbert 1988 *Finance and Empire: Sir Charles Addis 1961-1945* St Martins Press

Endicott, Stephen L 1973 *British Financial Diplomacy in China: the Leith-Ross Mission 1935-1937* Pacific Affairs, winter 1973-1974

Fisher, Irving 1934 *Are booms and depressions transmitted internationally through monetary standards?* In XXII[me] Session de l'Institute de Statistique à Londres. The Hague: Van Stockum

Friedman M and Schwartz A 1963 *A monetary history of the United States 1867-1960, Princeton University Press*

Greenwood J G 1988a *Intervention replaces arbitrage – the July package of monetary measures* Asian Monetary Monitor, July-Aug 1988

Greenwood J G 1988b *Response to Dr Jao* Asian Monetary Monitor Nov-Dec 1988

Hong Kong Legislative Council 1935 *Official Record of Proceedings, 5 December 1935*

Hong Kong Government --- *Administration Report* – to 1939
--- *Annual Report* – to present

Hong Kong Monetary Authority *Strengthening the currency board arrangements in Hong Kong* HKMA Quarterly Bulletin, November 1998

Hu, Shizhang 1995 *Stanley K. Hornbeck and the open door policy 1919-1937* Greenwood Press

Jao Y C 1988 *Intervention replaces arbitrage – the July package of monetary measures: a comment* Asian Monetary Monitor Nov-Dec 1988

Jao Y C and King, Frank H H 1990 *Money in Hong Kong—Historical Perspective and Contemporary Analysis* Hong Kong: Centre of Asian Studies, the University of Hong Kong

King, Frank H H 1953 *The Monetary System of Hong Kong* Hong Kong: K. Weiss

King, Frank H H 1968 *A concise economic history of modern China* Bombay, Vora

King, Frank H H 1985 *The Hongkong Bank's role on currency and banking reforms* Department of Economics, University of Hong Kong Discussion Paper 47, March 1985

King, Frank H H 1988, with Catherine E King and David J S King *The Hongkong Bank between the wars and the bank interned, 1919-1945 : return from grandeur* **(***History of the Hongkong and Shanghai Banking Corporation vol 3)* Cambridge University Press

Lai, Cheng-chung and Gau, Joshua Jr-shiang 2002 *The Chinese silver standard economy and the 1929 Great Depression* National Tsing Hua University, Taiwan, Working Paper 0205E.

Lin W Y 1935 *The New monetary System of China* P S King & Son Ltd, London

Luk Y F 1991 *Money and Prices Without a Central Bank—the Case of Hong Kong, 1974—83* Cornell University, reproduced by University Microfilms International

Report of Currency Committee 1930 Hong Kong Government

Report on Hong Kong Currency 1931 London, Cmd 3932

Schuler, Kurt 1989 *A brief history of Hong Kong monetary standards* Asian Monetary Monitor Sept-Oct 1989

South China Morning Post 5, 6 & 7 July 1972

Tom C F J 1963 *Monetary problems of an entrepot: the Hong Kong experience* Chicago, Illinois: The University of Chicago Press

Tom C F J 1964 *The Entrepot Trade and the Monetary Standards of Hong Kong, 1842—1941* Hong Kong: K. Weiss

Trotter, Ann 1975 *The response of China and Japan to the Leith-Ross mission to China* Asian Profile, April 1975