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# The Origins of Anti-Competitive Regulation: Was Hong Kong 'over-banked' in the 1960s?

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#### Abstract

In the 1960s, Hong Kong was widely viewed as being 'over-banked', with claims that after the spectacular increase in deposit-taking in the 1950s the scope for new market penetration had expired. Competition among existing banks, therefore, was at the expense of the profits and viability of one another. The banks claimed that this excessive competition undermined the stability of the banking system by encouraging risky lending behaviour by banks, and that this situation called for anti-competitive regulation. These claims seemed to be vindicated after two banking crises showed evidence of contagion in 1961 and 1965. The judgement that there were too many banks in Hong Kong has since become entrenched in the standard literature on the development of the Hong Kong banking system.

Two regulatory innovations were specifically aimed at this diagnosis of 'excessive competition' – both were retained for over thirty years, until the Asian Financial Crisis of 1997 led to a reassessment of the banking system in Hong Kong. After much negotiation, the Exchange Banks Association (EBA) introduced an interest rate ceiling for deposits to contain competition in July 1964. In May 1965, the Banking Advisory Committee (BAC) successfully urged the government to impose a moratorium on new bank licenses to prevent entry into the market. The Interest Rate Agreement was finally ended in July 2001. The moratorium on new licenses was lifted in 1978 (but re-imposed for 1979-81). However, new foreign banks were restricted to one branch office until September 1999 and three branch offices until November 2001.

Given the longevity of these regulations and their impact on the development of the Hong Kong banking system, it is perhaps surprising that there has been no reassessment of the reasons why they were

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The Chartered Bank and HSBC called for a reduction in the number of banks after the Liu Chong Hing crisis in 1961. Memo by Hallows of a conversation with JAH Saunders, 15 June 1961. Letter from PLHogg to Heasman, 24/8/61. Bank of England Archive [hereafter BE] OV14/21. In 1965, HJ Tomkins, sent out by the Bank of England to draft a new banking ordinance advised the Financial Secretary that 'there is little doubt that the number of banks in Hong Kong is excessive in relation to the size of the population and the present stage of development of the economy. HJ Tomkins to Financial Secretary, 5 March 1965. Hong Kong Public Record Office [hereafter HKRS]163/3/249.

<sup>&</sup>lt;sup>2</sup> The two most authoritative accounts are YC Jao, *Banking and Currency in Hong Kong; a study of postwar financial development*, 1974, pp. 237-239. and TK Ghose, *The Banking System of Hong Kong*, 2ed., 1995, pp. 63-78.

imposed in the first place. This paper produces new evidence on the scale of banking activity in Hong Kong based on archival evidence and re-calculation of published data. Various measures of concentration and competitiveness are made to assess whether the system was 'over-banked' in the 1960s, and whether the anti-competitive regulation was justified.

#### 1. Background on 'Over-Banking'

The concept of 'over-banking' and its potentially destabilising effects has recently resurfaced in the economics literature. During the 1990s there was a rush of mergers and acquisitions in the banking sector, both within states and between states. This prompted a vigorous academic debate about the possible impact of consolidation in the banking system on banking stability and performance as well as a reconsideration of the appropriate regulatory and supervisory framework in which this consolidation should take place.<sup>3</sup> The consensus was that generally there were too many banks and that consolidation was likely to continue.

The 'mushrooming' of banks in transition economies in Eastern Europe in the 1990s generated a related literature assessing the extent of 'over-banking' and its implications. Bonin and Wachtel, for example, conclude that 'the proliferation of new banks creates more problems for the banking system than it solves' because poorly capitalised banks pursue excessively risky strategies that create systemic threats.<sup>4</sup> Pyle has argued that over-banking in Russia reduced the incentive of otherwise creditworthy borrowers to pay back their loans since reputation is not so important in an environment where there are a large number of alternative sources of bank loans. A large number of banks can obscure a borrower's credit history, since in the absence of a comprehensive credit reference agency it is easier to hide outstanding loans from other banks.<sup>5</sup> Petersen and Rajan show that highly competitive banking systems disrupt relationship-building that may be particularly important for SMEs' access to bank loans.<sup>6</sup>

It seems that the existence of 'over-banking' is mainly only determined in hindsight. That is after a boom there follows a contraction in the number of banks and therefore a claim that the system had been 'overbanked'. Another interpretation of this phenomenon, however, might be that the higher number of banks in period 1 was optimal to the market conditions of that period but that these changed, leading to a shedding of banks during period 2. Bonin has rather vaguely defined 'over-banking' in terms of the number of small banks and the number of banks per capita. Jaffee and Levonian have tried to overcome the subjective judgement of what constitutes an appropriate banking structure. They note that developed

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A survey of the literature to the end of the 1990s can be found in AN Berger, RS Demsetz, and P Strahan, 'The consolidation of the financial services industry: causes, consequences and implications for the future', *Journal of Banking and Finance*, 23 (1999), pp. 135-194. For more recent literature, T Beck, A Demirgüç-Kunt and R Levine, 'Bank concentration, competition, and crises: First results', *Journal of Banking and Finance*, 2005 (in press).

<sup>&</sup>lt;sup>4</sup> J Bonin and P Wachtel, 'Toward market-oriented banking in the economies in transition', in MI. Bleher and M Skreb eds., Financial Sector Transformation: lessons from economies in transition, Cambridge, 1999. pp. 93-131, p. 118.

W. Pyle, 'Overbanked and Credit Starved', *Journal of Comparative Economics*, 30(1), 2002.

<sup>&</sup>lt;sup>6</sup> Mitchell A. Petersen; Raghuram G. Rajan 'The Effect of Credit Market Competition on Lending Relationships', *Quarterly Journal of Economics*, 110(2), 1995, pp. 407-443.

<sup>&</sup>lt;sup>7</sup> C. Hainz, 'Are Transition countries over-banked? The effect of institutions on market entry', *German Economic Review*, 5(2), 2005, pp. 237-256, p. 237.

J Bonin, 'Banking in the Balkans: the structure of banking systems in Southeast Europe', *Economic Systems*, June 2004, 28 (2), pp. 141-153.

D. Jaffee and N Levonian, 'The structure of banking systems in developed and transition economies', European Financial Management, 7(2), 2001, pp. 161-181.

countries have a wide range of banking structures (e.g. assets/GDP, branches/GDP) that are influenced by a variety of economic and institutional factors. Using OECD data they calculate equations that explain the banking structure 26 developed countries and use these to provide a benchmark for transition economies in Eastern Europe to assess whether there are too many banks there. Their analysis, not surprisingly, suggests that size of GDP and the existence of an international financial centre are important determinants of the number of banks and the number of bank offices.

These approaches all suggest that there may be negative systemic results of an economy having 'too many' banks, and that these effects might be exaggerated in developing economies with a large number of SMEs (such as Hong Kong) although the threshold of what constitutes 'too many' banks is difficult to define and will be affected by the location of international banking centres (as exists in Hong Kong). Conversely, consolidation will not necessarily have a negative impact on competitiveness or efficiency of the banking system. The case of Hong Kong will show that the political economy of how consolidation is achieved has important implications for the outcome.

# 2. What evidence is there that Hong Kong was 'over-banked' in the 1960s?

First we need to examine the bank data that is available. Banking statistics were not collected until the Financial Secretary was forced by the Colonial Office in London to report some data for their annual reports. Until January 1953 bank data for the colonies was collected directly from international banks by the Bank of England, but from this date the colonial authorities were responsible for collecting banking data and reporting it to the Colonial Office. The Colonial Office insisted that the 24 authorised banks make returns in August 1953 and the Financial Secretary passed the request on to the Exchange Banks Association (EBA). However, it was not until March 1954 that the banks finally agreed to provide the data. The EBA agreed to submit the data from June 1954, but insisted that it should not be published. The HSBC was concerned about confidentiality even in consolidated accounts, given the relative size of HSBC, and the danger that if the information were public destabilising rumours might arise. A little bit of knowledge was deemed to be a dangerous thing. The Colonial Office persistently pressed for more disclosure to bring Hong Kong in line with other colonies.

The data initially covered only 29 out of 92 licensed banks in June 1954. The number of banks making returns gradually increased to 36 by 1958 and then increased more quickly to 67 by 1963. The March 1965 data included 16 more banks than the December 1964 figures, but these banks together only amounted to 1.6% of total deposits at the end of 1964. However, for the earlier years, when larger banks were excluded, there is more likely to have been an underestimation of total assets and liabilities of the banking system. For example, the data show a dramatic increase in banking activity in 1959

Secretary of State for the Colonies to Governor of Hong Kong 22 August 1953. W Ramsay-Main to FE Richmond of Colonial Office, 17 March 1954. HKRS163-1-625.

<sup>&</sup>lt;sup>11</sup> Letter from the Manager of HSBC to the Hong Kong Exchange Controller, 9 September 1953. HKRS163-1-625.

<sup>&</sup>lt;sup>12</sup> See correspondence between JJ Cowperthwaite and W Searle (CO), HKRS163-1-625.

(deposits increased 30% and loans by 49%) but this is the first year that Hang Seng, Overseas Trust Bank, Liu Chong Hing Bank, Hong Kong Chinese Bank, and Bank of America (International) were included. Of the locally incorporated banks, Hang Seng and Liu Chong Hing were the largest in this group (together they had \$102m in total assets in 1957). Overseas Trust had only opened for business in 1956 with \$6m in paid up capital. By 1964, when data become available, Hong Kong Chinese Bank only had 0.66% of total bank deposits and Overseas Trust 0.96% compared with 1.9% for Liu Chong Hing and 9.8% for Hang Seng. Hong Kong data for Bank of America in 1958 are not available, but by 1964 they held almost 1.5% of deposits. In 1958 (the year before it was included in the returns) Hang Seng had \$60m in deposits, which would add almost 4% to the published total deposits for that year, and so reduce the published growth rate in 1959. Adding in Liu Chong Hing Bank and Hang Seng Bank to the data reduces the growth rate of total assets in 1959 from 23% to 18%, which still leaves a considerable burst of growth in that year.

In December 1958 the EBA agreed that the figures collected on deposits and advances only could be published (back to 1954). To date, the full data have never been published, but it is available in the archives of the Financial Secretariat and is used in the following analysis. In July 1962 the EBA finally agreed that quarterly consolidated balance sheet data could be published in the government Gazette after they had already appeared in the Tomkins Report and in Nigel Ruscoe's Hong Kong Register (published by the Far Eastern Economic Review). The published series was moved to monthly from June 1965, but earlier monthly reports are available in the archive.

One unusual aspect of the Hong Kong banking statistics is that they included notes issued by the banks on the liabilities side and the corresponding certificates of indebtedness among assets. There was no central bank in Hong Kong. Instead three banks issued notes under separate statutory provisions. <sup>16</sup> This was not, however, a case of free banking since Hong Kong operated an effective currency board system under which the note issue was backed 100% by sterling assets. <sup>17</sup> Notes were issued by the note-issuing banks against the deposit of sterling in the Exchange Fund, which then issued 'certificates of indebtedness' that appeared in the asset side of the note-issuing banks' balance sheet. The notes themselves were not net liabilities of the note-issuing banks since they were issued on behalf of the Exchange Fund on which the note issuing banks had matching claims. The inclusion of the note issue swelled the total value of assets and liabilities considerably, with particularly important effects in the early years. When the data were analysed within the government, however, the note issue components were usually ignored. In summary, the note issue and matching assets arose from the absence of a central bank in Hong Kong and are not relevant to measurements of the extent of commercial banking activity in the colony, which is the basis of the claim that Hong Kong was 'over-banked'.

<sup>&</sup>lt;sup>13</sup> The dates the banks were included is in HKRS163-1-625.

Hang Seng's deposits increased from \$60m to \$82m from 1958-59. G Chambers, Hang Seng: the evergrowing bank, 1991, p. 38.

<sup>&</sup>lt;sup>15</sup> JJ Cowperthwaite to Director of Commerce and Industry, 20 December 1958. HKRS532-3-54.

About 90% of currency note issue was by HSBC. Chartered Bank and Mercantile Bank also issued notes. The terms of the statutes are detailed in FHH King, Money in British East Asia, HMSO, 1957.

Other colonies also operated currency boards during the post-war period but the note issue did not appear in their aggregate banking statistics because notes were issued by separate crown institutions.

Hong Kong's note issue and associated assets were removed from the official statistics of consolidated bank balance sheets from April 1975 (back-dated to 1973). To make the pre-1972 data more appropriate for international comparison of commercial banking activity and consistent with more recent data we exclude the note issue and corresponding assets. From 1973 to 1982 the published data also exclude 'Balances Due to Banks in Hong Kong' from total liabilities. For consistency, these balances are also excluded from the 1954-1981 data (although inter-bank balances were reintroduced from 1982). The notes that were held in the banking system as cash balances at banks are still, of course, included in the aggregate statistics. These adjustments change the complexion of the data, particularly for the 1950s and early 1960s when note issue was large relative to deposits, as shown in Figure 1.

The importance of the new definition of total assets is clearly apparent in the comparison shown in Figure 2. Bank assets fall from 100% of GDP in 1954 to 63% once note issues and balances with banks in Hong Kong are excluded. The assets of the banking system only reached 100% of GDP in 1972.<sup>18</sup> This downward adjustment has implications for the claim that Hong Kong was 'over-banked' in the 1960s because it reduces the relative size of bank business in the economy.

The adjusted level of banking activity is not high relative to OECD countries in the 1990s, most of which had ratios between 100-200%, except for hosts of IFCs where the ratio was much higher (400% for Switzerland, 4370% for Luxembourg). By the mid 1960s Hong Kong had also emerged as a regional international financial centre and this must be borne in mind when assessing the demand and supply of banking services in the Colony. There was a considerable (although not well quantified) inflow of deposits from overseas Chinese that came to comprise half of total bank deposits, according to some estimates. The Financial Secretariat believed that most time deposits in the 1960s were from overseas.

The following descriptive statistics are based on new unpublished data, which allows a longer-term view than has previously been possible and deeper analysis. The new data are

- 1. Pre-1961 balance sheet data (only deposits and advances have previously been used)
- 2. Recalculated total assets and liabilities for 1961-73 to exclude local note issue and associated assets.
- 3. Bank level data for 1964-1972
- 4. Monthly data from December 1964 (previously only available from June 1965)

Figure 3 shows the acceleration in the rate of growth of deposits and total assets from 1954-1964.<sup>22</sup> The impact of the 1965 banking crisis was a redistribution of deposits rather than an overall decline. In 1967, however, there was a flight of capital out of the colony and an absolute reduction in bank deposits.

Jao calculated that bank assets were 99% of GDP by 1963 using published data and earlier GDP estimates. YC Jao, Banking and Currency in Hong Kong, p. 29.

D Jaffee and N Levonian, 'The structure of banking systems in developed and transition economies', European Financial Management, 7(2), 2001, pp. 161-181, p. 165.

<sup>&</sup>lt;sup>20</sup> CR Schenk, Hong Kong as an International Financial Centre: emergence and development, Routledge, 2001.

<sup>&</sup>lt;sup>21</sup> 'Chinese Boomerang', *The Economist*, 18 November, 1967. This proportion was widely cited elsewhere.

In addition to the banks that made returns, the deposits data includes Hang Seng Bank. Total assets includes Hang Seng Bank and Liu Chong Hing Bank.

Figure 4 shows the trend in bank liquidity measured as the ratio of loans to deposits for banks that made returns. The ratio increased from 1954, peaking in 1964 at 71% before falling back after the first banking crisis of 1965 and the disturbances of 1967 to 58%. Singaporean commercial bank's loan-deposit ratio was about 10% higher than that of Hong Kong in the 1960s. The period of fall in demand for loans and increased liquidity coincided with lobbying by banks for anti-competitive regulation and claims that Hong Kong already had enough banking facilities. Figure 4 also shows the rise in the interest rate margin during the 1960s and 1970s. The rising trend, particularly in the 1970s when the loan/deposit ratio increased dramatically, suggests rising revenues for banks.

Figure 5 shows the changes in how banks used their funds (together these two categories accounted for a stable 70-80% of total assets throughout the period). In the mid-1950s about half of funds were deposits or other assets with banks abroad but this share fell below 30% in 1961. About two thirds of the money was with banks in the UK in the 1950s, although an increasing share was in China and the USA by the end of the decade.<sup>23</sup> Much of this trend was driven by increases in loans and advances in Hong Kong, associated with local industrialisation and international trade expansion. There was an absolute fall in the amount due from banks abroad in 1964 (\$325m), reflected in an almost equal increase in local investments during the stock market and property boom of that year.<sup>24</sup> From the 1970s there was increased demand for loans for local stock market investment.

Figure 6 shows international bank participation in the assets and liabilities of the Hong Kong banking system. Liabilities to banks abroad accounted for only 10% of total liabilities until the 1970s, although they were more significant in the mid-1950s. From 1972 this increased dramatically as a share of total liabilities, reaching 43% in 1980. This reflected the transfer of balances from head offices to local branches of foreign banks to increase their funds during the boom of the 1970s.

The growth in banking activity was accompanied by changes in the structure of the system. The number of licensed banks decreased from 133 in 1950 to 92 by 1954, and 82 by 1959. Figure 7 below shows that while the number of licenses was pretty stable by the 1960s and declined slightly in the 1970s, the number of bank offices increased due to branching activity.

Looking at Hong Kong in a comparative perspective for the 1960s, we need to recognise that this decade was a period of considerable banking expansion globally. Table 1 below compares the growth rate of bank assets of Hong Kong with selected OECD countries. The data for other countries cover only their commercial banks to enhance comparability.<sup>25</sup> This shows the acceleration in the growth rate in Hong Kong, that it was considerably faster than elsewhere in the 1970s, and that it was comparable to that of Japan in the 1960s (during that country's period of high-speed growth). We would expect higher growth rates in Hong Kong, which started from a lower level than these more highly developed countries.

 $<sup>^{23}\,\,</sup>$  The unpublished data for the 1950s are in HKRS163-3-13.

After being in the doldrums in 1962 and 1963, the FEER share index rose from 116.4 in January 1964 to peak at 128.55 in December 1964.

<sup>&</sup>lt;sup>25</sup> Competition in Banking, OECD, 1989.

Table 2 shows the number of bank offices per 100,000 population, which shows the increase in banking density in Hong Kong from its low level in 1960. In 1970, per capita GNP in Hong Kong was half of that of Japan but banking density in Hong Kong was less than one third that of Japan.<sup>26</sup> The table also shows a wide variety of ratios in Europe, Japan and the USA, although there was a general increase in banking density from 1960-1980.

Table 3 shows the concentration of banking in Hong Kong in 1960 compared with other countries. Again, this shows the wide range of banking structures internationally and that Hong Kong sits towards the middle of the group.

Table 4 shows some comparative indicators between Hong Kong and Singapore. This shows that the Hong Kong banking system did grow considerably faster in terms of deposits and total bank assets in the 1960s, resulting in higher per capita bank deposits by 1971. The number of bank licenses per capita, however, was not very different between the two territories. The Singapore data for the 1960s are from Jao (1974) who explains that they are not strictly comparable because of the substantial deposits outside the Singapore banking system in the Post Office Savings Bank and finance companies. Including these deposits raises Singapore's per capita deposits to US\$743.

Hong Kong was a somewhat more developed economy than Singapore in the 1960s (GDP per capita was US\$978 by 1970 compared to US\$914 in Singapore) and hosted a much larger international financial centre. Taking these aspects into account, the growth of Hong Kong's banking sector does not seem so extraordinary in international perspective.

#### 3. Measuring Market Concentration

The relationship between market concentration and competitiveness is intuitively attractive. We might assume that a higher degree of concentration is associated with greater market power among a smaller group of banks and therefore a lower level of competitiveness of the market and higher abnormal profits. However, the negative relationship has been shown not to be empirically (or even theoretically) reliable in the economics and industrial organisation literature. High levels of concentration may still generate competitive markets. Nevertheless, market concentration is an important feature of assessing the nature of a banking system and helps to specify more precisely the situation historically in Hong Kong and compare it with more recent experience.

Figure 8 shows that the average size of banks in Hong Kong grew rapidly during the 1960s, particularly after the moratorium on new licenses in 1965, and this was mainly achieved through branch expansion. The average size of banks by offices rather than licence did not change dramatically during this period.

<sup>&</sup>lt;sup>26</sup> UN Statistics, http://unstats.un.org/unsd/. In 1970 Japanese GDP per capita was US\$1959 and for Hong Kong US\$978. Like Singapore, the Japanese figures are biased due to the large post office savings bank.

AN Berger, A Demirguc-Kunt, R Levine, JG Haubrich, 'Bank Concentration and Competition: an evolution in the making', Journal of Money, Credit ad Banking, 36(3), 2004, pp. 434-451. S Claessons and L Laeven, 'What Drives Bank Competition?' Some International Evidence', Journal of Money Credit and Banking, 36(3), 2004, pp. 563-583.

The number of bank offices did grow considerably, but to put this into perspective the number of bank offices grew only slightly faster than GDP.<sup>28</sup>

Within this average, however, there was considerable variation in size. Given the well-known dominance of the HSBC and Chartered Bank in both deposits and lending, the Hong Kong banking system might be expected to be highly consolidated even before the moratorium on new licenses. Figures 9 and 10 show the distribution of deposits and assets by cohort in 1964 and 1968.<sup>29</sup> The 10 or so banks with 1-2% market share lost position in terms of deposits between 1964 and 1968, but gained in terms of advances. The trend in deposits was toward the largest banks.

To give another perspective, Figure 11 shows the Lorenz curve for the market share of deposits and for Advances+Specified Liquid Assets in 1968. This is the broadest measure of total assets available for bank level data. The associated Gini coefficient for Advances+SLA is 0.756 in 1968 compared to 0.694 in 1964. The figure shows that market share for deposits was more concentrated than for Advances+SLA.

The most common measure of market concentration is the Hirfendahl-Hirschman Index (HHI), which gives particular weight to the largest market participants. It is calculated as:

$$H = \sum_{i=n} B_i^2$$
 where B = market share of bank i.

H=1 where one bank controls all the market, and H=1/n where every bank has an equal share. To give another perspective on the degree of concentration, we can calculate the number-equivalent of the HHI, or the number of banks that would deliver a given H if all banks were of equal size<sup>30</sup>

m=1/H

In the case of Hong Kong's assets data, for 1964-68, m=9-10, or if all banks had an equal share of the market, then there would have been 9-10 banks. In fact there were 75-86 banks in these years.

Figure 12 shows an increase in concentration in advances during the banking crisis of 1965 and again during the disturbances of 1967. In terms of deposits there was an increase in concentration in 1965, but no change in response to the disturbances of 1967. This is because the large, especially foreign, banks lost deposits in 1967 but there was a flow of deposits toward large banks in the banking crisis of 1965. The difference between the HHI for Advances compared to Advances plus Specified Liquid Assets reflects the sharp decline in the HSBC's SLA compared to other banks in 1967. The higher concentration of deposits compared to assets reflects the presence of international banks with higher local loan/deposit ratios than local banks.

The surge in the average assets per license and the expansion of branch networks increased the franchise value of existing bank licenses, which further encouraged foreign take-overs.

<sup>&</sup>lt;sup>29</sup> The bank specific data come from HKRS163-1-3273, 3274, 3275, 3276.

E. Nissan, 'Changes in the size structure of the world's largest banks by country, 1990-2000', *Quarterly Journal of Business and Economics*, 41, 2002, pp. 21-48.

The Herfindahl-Hirschman index has taken on an important regulatory role since its adoption in 1992 by the US Department of Justice and the Federal Trade Commission as a guide for their anti-trust policies. Their interpretation is that markets where the HHI is between 0.1 and 0.18 are 'moderately concentrated' and those above 0.18 are 'highly concentrated'. Justing this guideline, the Hong Kong banking system would fall into the low end of 'moderately concentrated'. Moreover, market concentration did not increase after the moratorium on new banking licenses in 1965. This index can also be compared with the HHI calculated for bank assets in 1994-2002, which showed a fall from .13 to .123 during this period, which was interpreted as indicative of an increasingly competitive environment. The level of concentration for bank assets in the mid-1960s was considerably lower in the period 1964-72. The declining trend from 1968-72 suggests increased competitiveness of the market. Perversely, this analysis suggests that the moratorium was imposed at a time of heightened concentration due to the banking crisis of 1965, rather than at a time of increased competition which was the justification for its introduction. Moreover, the moratorium does not appear to have increased concentration in the banking industry, suggesting that it may have protected the smaller banks disproportionately.

#### 4. Profitability and Competitiveness

Measuring competitiveness is more difficult than measuring concentration. Various approaches have been used, including net interest margin, spread between lending and borrowing rates, Panzar-Rosse and X-efficiency methods (which require bank level data). Unfortunately bank level data are not available for most of the period 1960-80. Nor are details of the income of banks. Profitability can only be calculated by referring to the published balance sheets of each individual bank, but foreign banks were not required to publish data specific to their operations in Hong Kong. The quality of the information in the published balance sheets is also relatively poor with no disclosure of internal reserves or allocation for non-performing loans. Profits were reported after transfer to inner reserves, which were included in Deposits and Other Accounts. Still, if we can assume a generally consistent approach to these transfers then we can measure change over time.<sup>33</sup>

Net interest margins are available from data from the Census of Banks which began to be collected in 1980.<sup>34</sup> This data suggests that the banking system was increasingly competitive in this period since the NIM declined steadily from 1980-1987, during which period a series of bank fraud cases were exposed. Overhead costs fell in these years from about 1% to 0.4% of assets, suggesting an increase in efficiency of the banking system. This was driven by a fall in wages as a percentage of assets from

<sup>31</sup> www.usdoj.gov/atr/public/testimony/hhi.htm accessed 28/9/2005.

<sup>&</sup>lt;sup>32</sup> S Gerlach, W Peng and C Shu, 'Macroeconomic Conditions and Banking Performance in Hong Kong: a panel data study', HKMA Research Memorandum, April 2004.

In 1982 the Monopolies and Mergers Committee saw the raw data for HSBC and confirmed that the accounts had been prepared consistently. Mergers and Monopolies Commission, The Hongkong and Shanghai Banking Corporation, Standard Chartered Bank Limited, the Royal Bank of Scotland Group Limited: a report on the proposed mergers, HMSO, 1982.

Census and Statistics Department, Census of Storage, Communications, Financing, Insurance and Business Services, various years.

0.5% to 0.2% and a fall in rental payments as a share of assets from 0.19% to 0.06% of assets due to a fall in the property market.<sup>35</sup>

Data for the 1960s and 1970s is much scarcer and more patchy. Jao (1974) showed that, in common with elsewhere, small banks outperformed larger banks in terms of growth in deposits and profits from 1965-71, although they showed considerable variation. Assets and capital on average grew faster for large banks.

The trend in profitability for HSBC (including overseas branches) in Figure 15 shows why the bank was such a keen supporter of anti-competitive regulation. The return on assets increased from 1954-60, but then declined, reaching a low during the year of the 1967 disturbances. From this year, after the imposition of the moratorium on new licenses in 1965 and the interest rate agreement in 1964, profitability increased. In 1982 the bank reported that their profits in Hong Kong were 'much higher' than elsewhere. The Standard Chartered Bank reported that their profits in Hong Kong more than trebled from 1977-80 while their global profits merely doubled.<sup>36</sup>

Figure 16 shows the average return on assets for 14 locally incorporated banks whose balance sheets are publicly available, plus Chartered Bank's Hong Kong office from their archive records. This shows increasing profitability from 1964 onward punctuated by declines in the crisis of 1965 and 1967 and a surge in the boom of 1973. The profits for the five largest banks in Hong Kong (plus Chartered Bank) show a slower rate of growth than for the banks as a whole. Given that the banks excluded from the sample tend to be smaller, the gap between the rates of profit of large and small banks is likely to have been even higher.

#### 5. Interest Rate Spread

Another way to get at the competitiveness of the market is looking at the spread between lending and deposit rates. A declining spread is evidence of an increasingly competitive market. In 1994 the Consumer Council claimed that the IRR generated monopsony profits for banks based on the interest rate spread for 1978-91. They calculated that Hong Kong's BLR-Fixed Deposit spread was 1.65% higher on average than other countries. <sup>37</sup>

The data for the 1960s are patchy but the trend shows a general increase in the lending spread (calculated as the best lending rate less the weighted deposit rate), from about 1% in the third quarter of 1961 to 2% when the IRA was introduced and then rising above 3% in the later 1960s. This suggests that the

S Kwan found that total operating costs averaged 1.2% of assets for Hong Kong's commercial banks in 1999. The corresponding figures for labour costs was 0.69% and for physical capital cost of 0.52%. S Kwan, 'Operating Performance of Banks among Asian Economies; an international and time series comparison', HKIMR Working Paper, 13, 2002.

Mergers and Monopolies Commission, The Hongkong and Shanghai Banking Corporation, Standard Chartered Bank Limited, the Royal Bank of Scotland Group Limited: a report on the proposed mergers, HMSO, 1982.

Hong Kong Consumer Council, 'Are Hong Kong Depositors Fairly Treated?', 28 February 1994. The HKMA rebutted this aspect of the report, criticising it on the basis of comparability of the data. HKMA, 'Study on the Consumer Council Report 'Are Hong Kong Depositors Fairly Treated?", 4 July 1994.'

market was becoming less competitive, which rather contradicts the contemporary testimony of the banks that complained about excessive competition.<sup>38</sup> The margins for small banks may have been lower than the margins for the larger authorised banks, but the evidence is patchy. In 1964, before the IRA was imposed, it was reported that smaller banks offered 1/2-2% more for deposits and charged 1-6% more on loans.<sup>39</sup> The IRA was introduced in response to an 'interest rate war' with reported deposit rates as high as 10% for 12-month deposits and 6% for 7-day deposits during early 1964.<sup>40</sup>

After the moratorium was introduced, Figure 18 shows that the lending spread was remarkably stable during most of the 1970s at about 3% for Best Lending Rate and 4.5-5% for SMR by the 1970s. <sup>41</sup> Margins then increased during the volatile interest rate period of the 1980s before stabilising at a slightly higher level towards the end of the decade.

In the 1960s the BLR was set jointly by the Chartered Bank and the HSBC and it then applied to all members of the Exchange Banks Association (39 in 1964).<sup>42</sup> The 3-month deposit rate tended to follow changes in British Bank Rate, remaining slightly above LIBOR and slightly below the US 3-month rate. The rate offered for savings deposits was determined by tax law, which set the tax-free limit of 3% until July 1968 and 3.5% thereafter. Time deposit rates were not controlled until the IRA was enforced in July 1964. In the early 1960s, before the IRA was introduced, the HSBC and Chartered Bank did try to exercise control over deposit rates. The rise in UK Bank rate from 5% to 7% in 1961 set off increases in rates by foreign banks that led to increased competition for local banks, who in turn raised their rates. In September-November 1961 the EBA and some large non-authorised banks engaged in discussions to set a sliding scale of interest rate ceilings for deposits, but the agreement was not effective.<sup>43</sup> The main obstacle was that members could not agree on the overall range (non-member banks wanted a wider range of 1 1/2% as opposed to 1%). At the start of 1963 margins between deposit and overdraft rates had almost reached zero and HSBC and Chartered agreed to lower their deposit rates by 1% 'in the hope that other banks would follow suit'. 44 Some banks did, although mainly by less than 1%, but the rates crept back up during the year. HSBC and Chartered had to abandon this attempt and try to negotiate a more formal agreement, which was concluded at the beginning of April 1964 and implemented

<sup>&</sup>lt;sup>38</sup> For the 1960s only BLR is available. This was set by the Exchange Banks Association. The deposit rates are those prevailing at the large authorised banks, led by HSBC. Other banks paid 1/2 - 2% above these rates. *Nigel Ruscoe's Annual Hong Kong Register* 1964.

<sup>39</sup> Nigel Ruscoe's Annual Hong Kong Register 1964.

<sup>&</sup>lt;sup>40</sup> This was reported by SC Chen in the Far Eastern Economic Review, 30 July 1964, p. 213.

The deposit rate is the weighted average of Time and Savings Deposits weighted by the value of each of these categories of deposits for each year.

The Committee of the EBA set brokerage commissions for commercial and foreign exchange dealing. Banks represented on the Committee in 1964 were Chartered Bank (chair), HSBC, Mercantile, FNCNY, Netherlands Trading Society, Bank of China, Bank of Communications and Bank of East Asia.

<sup>&</sup>lt;sup>43</sup> KL Ng, 'More Banks in Hong Kong', Far Eastern Economic Review, 12 April 1962, p. 65.

<sup>&</sup>lt;sup>44</sup> Far Eastern Economic Review, 30 April 1964.

in July for 12 months in the first instance. Banks were classified into 5 categories, charging interest within a range of 1 3/4%.<sup>45</sup>

Not all banks were satisfied by the IRA structure and they sought to move outside it. This suggests that some banks (in particular the HSBC who pushed the scheme on other reluctant banks) benefited at the expense of others. The B2 category was eliminated after three European banks threatened to withdraw in July 1965. Some large local banks were moved to a 'Special Category' in March 1966 to bring them into closer competition with foreign banks.

JJ Cowperthwaite was a critic of the IRA in the 1960s, and his successor Haddon-Cave, was also critical of the generous margins that the commercial banks operated in the early 1970s. 46 By 1980, however, the financial secretary was a strong supporter of the IRA. The main reason he gave was that it protected small banks from competition. The implication is that the large banks would otherwise charge higher interest rates that the smaller banks could not afford to pay. In 1964, however, the goal was to prevent the large banks from having to offer the same high rates as the smaller banks and to ensure that the smaller banks followed the rates set by the Exchange Banks Association. The IRA also benefited the dominant bank in each category. Thus the IRA prevented competition of other foreign banks against the HSBC and protected Hang Seng from competition from mid-sized banks. HSBC Group, therefore, benefited doubly. At the other extreme, the extra risk and narrower range of services associated with depositing in smaller banks was reflected in the margins above the base deposit rate.

#### 6. Competition and Crisis

The evidence for the increase in banking activity is clear, but the link between this trend and systemic instability as exhibited in the banking crises of 1961 and 1965 is not. This case, therefore, relates the large current literature on the relationship between competition and stability in the banking sector. <sup>48</sup>

In the early 1950s excess capacity that had arisen due to the post-war financial turmoil in the late 1940s was remedied by exit of banks from the sector without systemic difficulties. In 1948 143 banks, many very small and with limited scope of business, were licensed under the new banking ordinance of that year, but this total soon declined. By 1950 there were 133 licensed banks, 92 by 1954, and 82 by 1959. Many closed of their own accord after the opportunities to profit from the gold trade, remittances or

More recently Hellman et al. have recommended controlling deposit rates to facilitate prudent investment in a competitive environment. TF Hellman, KC Murdoch, JE Stiglitz, 'Liberalization, Moral Hazard in Banking, and Prudential Regulation: Are Capital Requirements Enough?', American Economic Review, 90(1) 2000, pp. 147-65.

<sup>46</sup> Haddon-Cave speaking in the Hong Kong Legislative Council Hansard, 9 January 1974, p. 351-352. He also expressed these views privately in the Banking Advisory Committee.

Financial Secretary speech 3 December 1980. Quoted in HKMA, 'Study on the Consumer Council Report 'Are Hong Kong Depositors Fairly Treated?", 4 July 1994.", pp. 8-9. The Financial Secretary stated that the second purpose of the IRA was to allow deposit rates to be used for the 'management of our monetary affairs'.

<sup>&</sup>lt;sup>48</sup> F Allen, D Gale, 'Bank Competition and Stability', *Journal of Money, Credit & Banking*, 36(3) 2004, pp. 453-480,

capital flight from mainland China declined. They merely sent their licenses back to the Banking Advisory Committee after winding up their business. Others, however, went bankrupt leaving dishonoured debts to depositors sometimes leading to public runs on the banks, but not leading to systemic contagion.<sup>49</sup> If there was a time of 'over-banking' it was arguably the 1950s when there were 133 banks rather than the 1960s when there were 74.

Another argument against the claim that small bank failures threatened systemic stability is that the failure of small banks did not always spark off a banking crisis. One case in the early 1960s (between the two banking crises, when it must be assumed that public confidence was fragile) was Chiu Tai Bank, whose offices were raided by the police in November 1963 because of allegations of fraud associated with a series of dishonoured cheques.<sup>50</sup> The bank came under scrutiny by the Deputy Economic Secretary, TD Sorby, in October 1961 when the Registrar General alerted him that the balance sheet for 1960 suggested the bank might be insolvent. The Assistant Secretary (E) advised Sorby that 'this bank is small fry, but the loans to and through directors and the failure to provide for bad debts suggest that things are not being run as they should...I think that the worst danger about this kind of thing is that it is bad for the already dubious prestige of the Chinese banks.' He concluded that 'what I normally do in these cases is to write to the bank asking what they are going to do about the situation. Their answers are seldom convincing, but it seems worth while to show that the F[inancial] S[ecretary] cares, and has his eyes open."51 In the end, the bank was allowed to continue operating until December 1963 (although it was told not to open any new deposit accounts from June 1962) on the basis of repeated reassurances from the Managing Director (also the major shareholder) that he intended to improve the bank's position. The Commissioner of Police wanted to pursue a criminal prosecution in August 1965 but the financial secretariat refused to provide the resources to undertake a thorough audit of the bank's books.<sup>52</sup>

The danger of a run on the Chiu Tai Bank was considered unlikely by Sorby since most deposits were from family members of the owner, or from close associates. In these circumstances protection of the public was not considered a reason to take action to suspend the bank's license even after the bank admitted that it was insolvent and after the first few large cheques were dishonoured at the beginning of 1963.<sup>53</sup> In February 1963 the Managing Director admitted taking more deposits from existing customers (against Sorby's instructions) since refusing to do so 'would have made them suspicious.'<sup>54</sup> Bad cheques continued to surface throughout 1963 and the bank was involved in a public dispute with BNCI that was

<sup>&</sup>lt;sup>49</sup> For details of prudential supervision in the early 1950s see CR Schenk, 'Banking Crises and the Evolution of the Regulatory Framework in Hong Kong 1945-70', *Australian Economic History Review*, 43(2), July 2003. One bank closed in 1952 after it 'was besieged by its creditors when it failed to open its doors' after the New Year holiday. HKRS54-1a-5(3).

<sup>&</sup>lt;sup>50</sup> The details are drawn from HKRS163-3-7.

<sup>&</sup>lt;sup>51</sup> AS(E) to DES, 7 October 1961. HKRS163-3-7.

<sup>&</sup>lt;sup>52</sup> DR Harris to Colonial Secretariat (attn GCM Lupton for Financial Secretary), 26 August 1965. Reply from Lupton 8 September 1965. HKRS163-3-7.

Note by DES, 30 January 1963. The view that the BAC should not be asked to revoke the license was confirmed by JJ Cowperthwaite in March 1963 after the bank's balance sheet showed loans in excess of total liabilities and no liquid assets to meet deposits. HKRS163-3-7. In March 1963, the Managing Director assured Sorby that 'almost all' depositors were family members, although this is cast into some doubt in the bank's subsequent petition to the Governor in November 1963.

<sup>&</sup>lt;sup>54</sup> Note of a Conversation between Sorby and Managing Director Chiu Tai Bank, 21 February 1963. HKRS163-3-7.

reported in the newspapers, further undermining the reputation of the bank but no run occurred, and there was no systemic contagion. The incompetent or perhaps fraudulent operation of a small bank was not sufficient to cause systemic problems.

Using archive data for the 1965 crisis it is clear that there is no correlation between size of deposits in December 1964 (a month before the second bank crisis) and the proportional fall in deposits during January and February. Figure 19 plots the relationship, leaving out HSBC to enhance the scale (HSBC's deposits were \$2.2b at the end of 1964 and increased by 8% during this period). The correlation coefficient for size of deposits at the end of 1964 and liquidity ratio at the end of February 1965 is -0.04.

There is a slightly higher correlation for local banks (other than HSBC) between size of deposits and change in deposits during the first round of the crisis but it is still low at -0.18 (compared to 0.06 for the banking system as a whole).

Some of the largest percentage withdrawals of deposits during this first stage of the crisis were from branches of foreign banks. The Bank of Tokyo with \$98m in deposits fell 15%, the Bank of India with \$20m fell 22% and BNCI with \$134m fell 20%. It is not clear why there were such large withdrawals from foreign banks if the problem was merely due to contagion within the local banking system. Foreign banks would have been vulnerable to changes in sentiment about the Hong Kong banking prospects of their foreign depositors, but the data show that there was not a large overall decline in deposits like there was when international confidence in Hong Kong was rocked by the Communist disturbances of 1967. These multinational banks were not threatened by the local withdrawals, and they tended to rebound by the end of the second phase of the crisis in April 1965. Table 7 shows that it was the banks with 1-2% of total deposits that suffered more than smaller banks on average during both waves of the crisis (in January/February and April 1965).

In the case of Hong Kong, the prevalence of family ownership or sole proprietorship of small banks could reduce incentives to engage in excessively risky behaviour since the reputation and also assets of the family/founding individual were at stake. For a public bank, in contrast, the burden of failure would be spread to shareholders and depositors. On the other hand, private family ownership increased the opportunity for poor management and fraudulent activity, which could be exaggerated when the family controlled a group of inter-linked companies as was often the case in Hong Kong.

Looking more closely at the causes of the bank crises in the 1960s shows that they did not stem from excessive competition, but rather from the complexity of inter-locking business groups that encouraged insider lending and reduced the liquidity of assets. This was not directly or exclusively linked to an excessively competitive environment. Liu Chong Hing Bank, which was at the heart of the 1961 crisis, had paid up capital of \$10m (twice the amount recommended in the subsequent Banking Ordinance) and was by no means considered a 'small' bank. Other Liu Chong Hing businesses included construction, property development, warehouses and an insurance company, all owned by Liu Po-shan and his eight sons and all vulnerable to property market shocks. Investigation by Tomkins of the Bank of England revealed that

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 $<sup>^{55}\,</sup>$  Overall, deposits fell only 1.8% from the end of 1964 to 25 February 1965.

'the trouble was caused by the [Liu Chong Hing] Bank getting too deep into property (they have come out very much on the right side now) for its own account and for account of the former Managing Director Liu Po Shan who has since died. Shan dipped into the till to the extent of HK\$8m leaving his cheque in the safe in place of the cash i.e. 'borrowing' and not 'stealing'. The bank in its returns counted Shan's cheque as cash!'56

Despite this evidence, HSBC and Chartered Bank took the opportunity to lobby the Financial Secretary for anti-competitive regulation, arguing that there were too many banks in Hong Kong and that this excessive competition was undermining the stability of the system as a whole. They asserted that because small banks offered higher interest rates in their search for deposits, this forced them into risky higher nominal return investments that were often illiquid.<sup>57</sup> Oliphant, deputy manager of the HSBC, himself drew up a draft banking ordinance that required the government to constrain competition in banking by regulating opening hours, interest rates and lending policy.<sup>58</sup> The inclusion of opening hours suggests that there was a strong anti-competitive edge to his approach rather than merely concern for systemic stability.

The bank that sparked off the second banking crisis in February 1965 was the Ming Tak Bank with 3 offices and \$20m in total assets. This bank was solely owned and managed by Poon Kai Kwong who also owned a construction company, a contracting company, an investment company and a property company. It turned out that Poon had been taking in deposits to invest in the property boom of the early 1960s on his own account as well as drawing large amounts for 'entertainment expenses'.<sup>59</sup> He attracted deposits by 'rendering good service to the public (prompt attendance to customers, receiving and paying cash outside banking hours etc.)'<sup>60</sup> The problem again was the link between the bank and associated companies that were vulnerable to asset market shocks. The bank made only a few other loans to outside associates. Poon was eventually sentenced to serve two years in prison for falsifying his accounts. The official receiver discharged all the bank's liabilities (plus 8% interest) by November 1974 leaving over \$3m in surplus that went back to Poon.<sup>61</sup>

The Canton Trust and Commercial Bank that failed next was a much larger bank with \$176m in deposits and \$139m in advances at the end of 1964 making it the fifth largest bank by deposits in Hong Kong. It too was made vulnerable by exposure to the property market (the vice chairman was a property developer).

Letter from Tomkins (in Hong Kong) to Heasman (London), 1 March 1962, BE OV14/21. Liu Po-Shan died on 23 July 1961 aged 61.

Memo by Hallows of a conversation with JAH Saunders, 15 June 1961. Letter from PLHogg to Heasman, 24/8/61. BE OV14/ 21.

<sup>&</sup>lt;sup>58</sup> CR Schenk, 'Banking Crises and the Evolution of the Regulatory Framework in Hong Kong 1945-70', *Australian Economic History Review*, 43(2), July 2003.

In 1963-64 Poon drew on average HK\$18,000 per month for his personal use in addition to the entertainment expenses charged against property accounts. In 1964 he drew \$254,000 for entertainment expenses. WL Tse Memo for Nicoll (Senior Legal Adviser), 20 September 1966. HKRS 55-9-3(1).

<sup>&</sup>lt;sup>60</sup> WL Tse Memo for Nicoll (Senior Legal Adviser), 20 September 1966. HKRS 55-9-3(1).

The bank's assets were able to be liquidated after a \$10m loan from the government allowed the completion of construction on various properties. The Official Receiver was also helped by the recovery of the property market in the early 1970s.

A run on the Aberdeen branch drained its liquidity on the eve of Chinese New Year when the demand for cash was traditionally high. The HSBC met with Canton Trust over the New Year holiday and agreed to lend HK\$25m, but believed that the general crisis was caused by 'Government reluctance to take firm action in the case of Liu Chong Hing or to limit the number of banks'.<sup>62</sup> In the end Canton Trust could not be saved and it closed its doors on 8 February.

The other major casualty of the 1965 crisis was the Hang Seng Bank, the second largest bank in Hong Kong measured by deposits. Like Liu Chong Hing and Ming Tak, Hang Seng Bank was part of a network of companies engaged in a wide range of businesses. The holding company, Hang Chong Investment Co. Ltd., owned a property investment company, a trading company, and a taxi company as well as Hang Seng Bank.<sup>63</sup> The directors of Hang Chong Investment Co. Ltd. also had interests in Macao, the Miramar Hotel and hydrofoils.<sup>64</sup> In its analysis of the causes of Hang Seng's difficulties, the HSBC concluded that illiquid loans to group companies and heavy exposure to the property market were the main factors in Hang Seng's vulnerability.<sup>65</sup>

In none of these cases was the failure caused by the bank offering excessively high interest for deposits nor by excessive competition prompting risky behaviour. This section has argued that the threat to banking in Hong Kong was not the number of banks or their size, but the interlocking ownership of banks and other businesses that were prone to asset market shocks, combined with poor governance. Neither source of weakness was going to be directly affected by anti-competitive regulation. The moratorium on new licenses might encourage foreign takeovers of local banks that would enhance governance, but only when families were willing to relinquish control. This aspect will be addressed in a later paper.

## 7. Conclusions: Was Hong Kong 'over-banked'?

The history of the Hong Kong banking system has been seriously undermined by the lack of data. The published data are inconsistent, too generalised, and begin relatively late. This paper has reconstructed data from archival sources to add to the length of period, recalculated the data to increase consistency, and presented bank-specific data from official and private archives. This allows a more textured view of the structure of the banking system during the critical years of the 1960s when the regulatory framework for Hong Kong's banking system for the next 36 years was set.

Letter from Oliphant (Hong Kong) to Stewart (London), 4 February 1965. RGL Oliphant's Private file, Chairman's Papers Carton No. 4, HSBC Group Archives [hereafter HSBC]. Both the HSBC and the Bank of England urged the Government of Hong Kong to take the opportunity of the 1965 banking crisis to 'weed out some of the weaker brethren amongst the banks'. Stewart to Oliphant, 12 February 1965. RGL Oliphant's Private file, Chairman's Papers Carton No. 4, HSBC.

Hang Chong held 70% of the shares in February 1965. Certified Copy of the Resolution by Hang Seng Bank Ltd., 9 February 1965. GHO508, HSBC.

<sup>&</sup>lt;sup>64</sup> The 'Family Tree' as at November 1965. GHO322, HSBC.

<sup>&</sup>lt;sup>65</sup> Internal Audit, May 1965. GHO322/2, HSBC.

The claims that Hong Kong was 'over-banked' can only be substantiated if market entry reduced the profits of existing banks to the extent of threatening bank solvency, or if the competition among banks led to higher risk in lending due to competition for sound outlets for loans. Both were claimed for Hong Kong in the 1960s. There is no evidence of an overall fall in profits before 1964-65, but certainly there is evidence of an increase in profits after the moratorium was introduced. The interest rate spread also suggests that the competitiveness of the market was decreasing even before the 1964 interest rate agreement was introduced, and that this trend continued afterward. In terms of market concentration, the evidence is incomplete, but it does seem to have been lower in the 1960s than in the 1990s. After the moratorium on new licenses in 1965 the market likely became less concentrated as HSBCs market share declined.

Examining the causes of the bank failures of the 1960s that triggered the anti-competitive regulation shows that the problem was not the size of the banks or excessive competition. In each case the bank was linked through family and group networks to other companies that were vulnerable to asset market shocks, in particular property. These banks engaged in insider lending within their group that ultimately threatened their liquidity and solvency. The solution to this problem was increased prudential supervision and enforcement, not reduction in competition.

In terms of the *ex post* identification of over-banking it is difficult to make the case for Hong Kong. After the moratorium, there were several applications for further licences that were turned down, mainly from foreign banks wanting to enter the market. Moreover there was no subsequent phenomenon of consolidation or bank closure as has been used to identify over-banking in Europe – rather the reverse. The number of licensed banks was remarkably stable throughout the moratorium. On the other hand, in the 1970s there was a dramatic increase in deposit taking companies, suggesting that there was still considerable scope in the market at the profitable wholesale end at least. These are not the conditions in which we would identify over-banking in the 1960s.

The general conclusion of the analysis is that the diagnosis of the problem in the 1960s was wrong and therefore that the medicine of anticompetitive regulation was inappropriate. Nevertheless, the interest rate agreement and the controls on foreign entry were retained for a further 36 years and they had a profound effect on the development and character of Hong Kong's banking system. The controls induced an increase in non-banking financial institutions, which will be addressed in a separate paper.

Table 1. Average Annual Growth Rates of Total Assets of Commercial Banks

	Hong Kong	Japan	USA	Australia
1954-59	8.5			
1960-69	17.9	17	8.3	7.2
1970-79	27.6	14.1	10.7	14.5

Source for other than Hong Kong, Competition in Banking, OECD 1989

Table 2. Number of Banking Offices per 100,000 Population

	Europe (9)	Japan	USA	Hong Kong
1960	38	34	13	4
1970	46	34	17	10
1980	50	35	23	23

Source for other than Hong Kong, Competition in Banking, OECD 1989

Table 3. Share of Five Largest Banks in Total Assets 1960

Germany	18
Austria	27
Italy	28
Japan	33
Denmark	46
Hong Kong	51
Belgium	69
Ireland	81
Greece	96

Australia and Belgium are 3 largest banks. Germany is end 1961. Hong Kong is 1964 and share of total advances. Source: *Competition in Banking*, OECD. HK data from HKRS.

Table 4. Comparison between Hong Kong and Singapore

	Singapore	Hong Kong
Per Capita Deposits 1971 (US\$)	636	815
Growth Rate of Bank Deposits 1960-71	14.5	20.6
Growth Rate of per capita Deposits 1960-71	11.9	16.7
Growth rate of Bank Assets 1960-71	13.7	18.7
GDP per Bank License 1970 (US\$m)	52.7	52.8
Bank License per 100k population 1970	1.74	1.84

Sources: First 4 rows for Singapore from Jao (1974), p. 115. Bottom 2 rows GDP and population data from UN data. Hong Kong data from author's calculations based on revised bank statistics.

Table 5. Annual Growth Rates of Banks by Size 1965-1971 (Percent)

		Large	Medium	Small
DEPOSITS	Range	14-29	8-30	0-78
	Mean	19.6	17.9	23.2
	Stand Dev	6.5	5.9	22.4
	Coeff Var.	.33	.33	.96
CAPITAL	Range	9-16	6-29	0-28
	Mean	13.3	13.9	10.3
	Stand Dev	3.1	6.9	8.3
	Coeff Var.	.23	.49	.8
PROFITS	Range	11-15	0-70	0-119
	Mean	13.3	26.1	37.3
	Stand Dev	107	19.9	32.7
	Coeff Var.	.12	.76	.87
ASSETS	Range	15-28	5-35	6-56
	Mean	20.6	17.5	18.4
	Stand Dev	5.4	7.1	16.1
	Coeff Var.	.26	.4	.87

Source: YC Jao, Banking and Currency in Hong Kong, 1974, p. 63

Large: Capital account over \$50m, Deposits over \$200m, Assets over \$250m Medium: Capital \$15m-50m; Deposits \$50m-200m; Assets \$65m-250m

Small: Capital <\$15m; Deposits <\$50m; Assets <\$65m

Table 6. Interest Rate Agreement July 1964

	7 Day	3 Month	6 Month	12 Month
Foreign	4	4 <sup>1</sup> / <sub>2</sub>	4 3/4	5
A1	4	5 <sup>1</sup> / <sub>4</sub>	5 <sup>1</sup> / <sub>2</sub>	5 <sup>3</sup> / <sub>4</sub>
A2	4	5 <sup>3</sup> / <sub>4</sub>	6	6 <sup>1</sup> / <sub>4</sub>
B1	4	6	6 <sup>1</sup> / <sub>4</sub>	6 <sup>1</sup> / <sub>2</sub>
B2	4	6 <sup>1</sup> / <sub>2</sub>	6 <sup>1</sup> / <sub>2</sub>	6 <sup>3</sup> / <sub>4</sub>

Table 7.

Share of Total Deposits  Jan 1965	Average % Change in Deposits Dec 1964- Feb 1965	Average % Change in Deposits Feb 1965-April 1965
>3%	-1.65	-8.59
2-2.99%	-2.82	-6.68
1-1.99%	-7.43	1.01
0-0.99%	-5.88	1.06

Source: HKRS 163-1-722. The Average Change is the un-weighted average for banks in each category.

Figure 1. Percentage Difference Between Published Series and Recalculated New Series (excluding Notes and Inter-Bank Deposits)

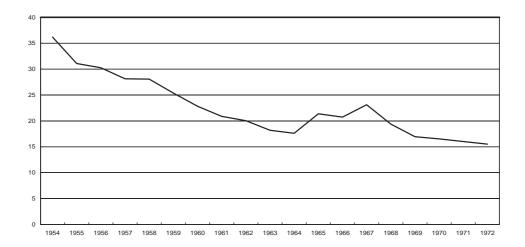


Figure 2. Bank Loans and Total Assets as a Percent of GDP 1954-1981

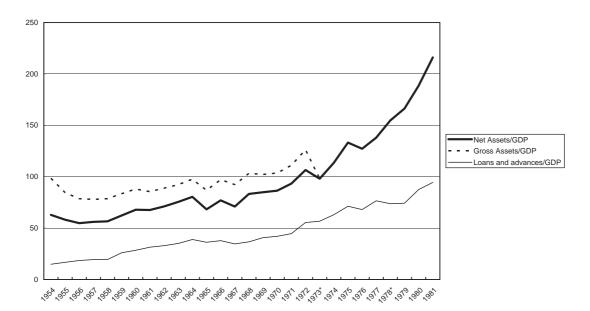


Figure 3. Annual Growth Rate of Deposits and Total Assets

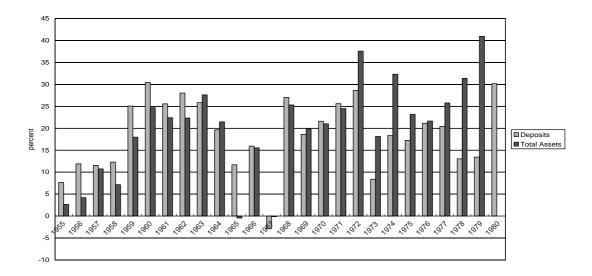


Figure 4. Loan-Deposit Ratio and Interest Rate Spread 1954-1980

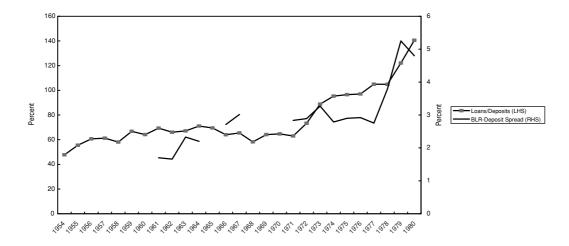


Figure 5. Principal Components of Bank Assets 1954-1980

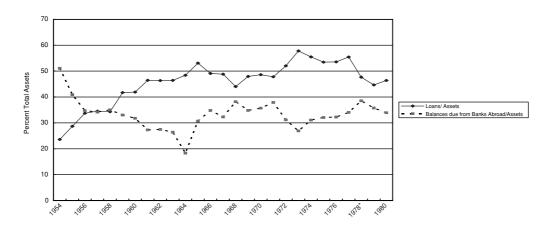


Figure 6. Hong Kong Banks' Assets and Liabilities at Foreign Banks Relative to Total Assets and Liabilities

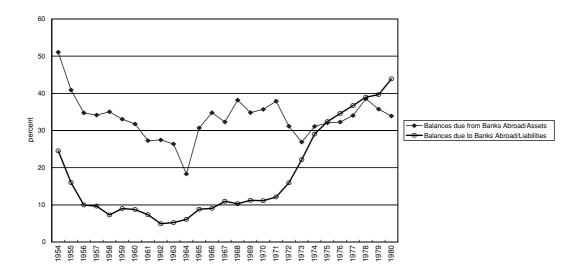
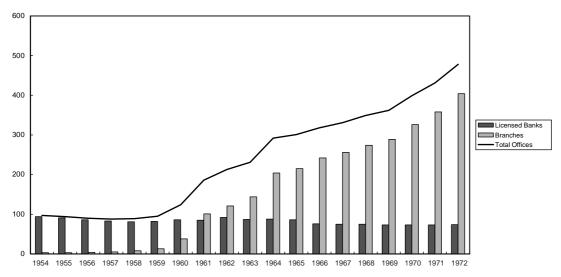


Figure 7. Bank Expansion 1954-72



Source: HKIMR Historical Database

Figure 8. Average Bank Size

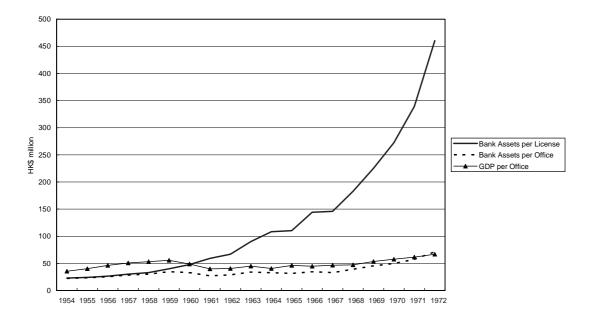
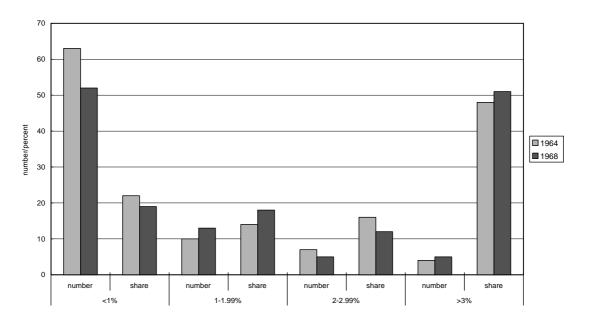


Figure 9. Distribution of Market Share for Advances





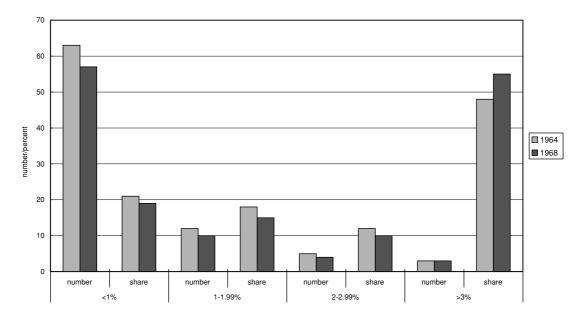


Figure 11. Lorenz Curve for Bank Market Share 1968

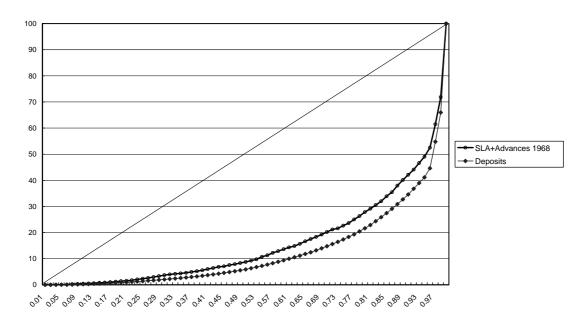


Figure 12. Herfindahl-Hirschman Index for Banks in Hong Kong 1964-1972



Figure 13. Components of Profit for Hong Kong Banks 1980-1991

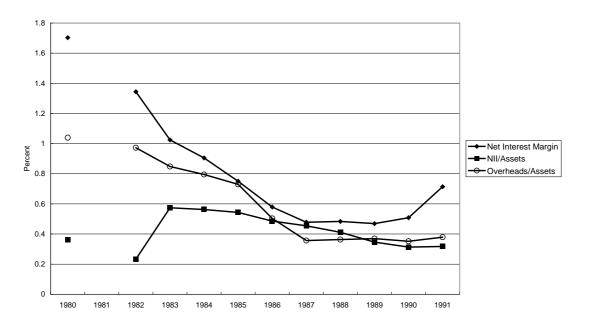


Figure 14. Return on Assets of Licensed Banks in Hong Kong (income-costs/assets)

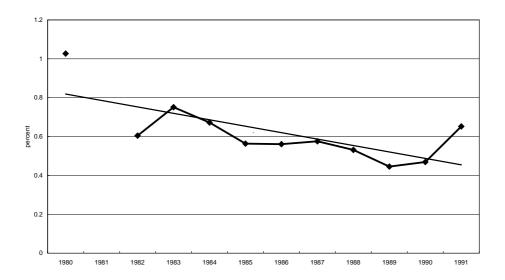
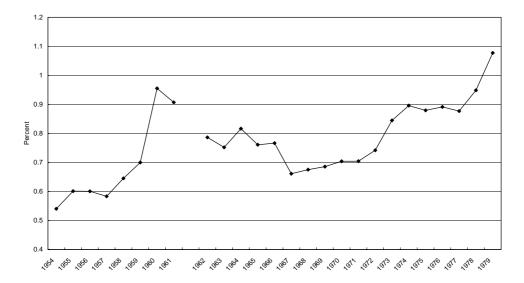


Figure 15. Return on Assets: Hongkong Bank



Source: King (1991)

Figure 16. Net Profit as Percent of Assets for a Sample of Hong Kong Registered Banks 1964-1980

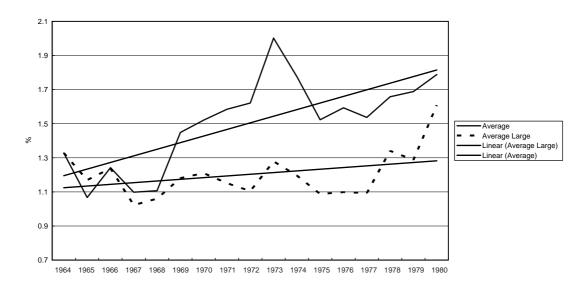
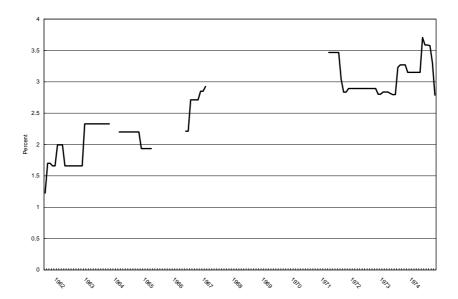


Figure 17. Best Lending Rate-Weighted Deposit Rate Spread October 1961-December 1974





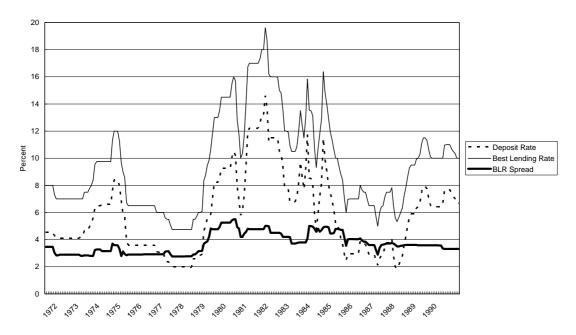


Figure 19. Percent Change in Deposit and Size of Deposits at End 1964

