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Economic Analysis

Hong Kong as international banking center: present and future

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Summary

The banking industry is key for Hong Kong's economy but Hong Kong is not a big international banking center, at least not when compared with other centers belonging to large economic areas, such as New York and, to a lesser extent, Tokyo. Within Asia, Hong Kong has a larger banking sector as a whole but similar if we focus on the off-shore side of it and growing faster than in Hong Kong. Furthermore, Singapore is being more active as a banking platform for international corporates while Hong Kong remains larger in terms of banking relations. In fact, Hong Kong continues to have one of the highest concentrations of large banking institutions in the world.

Such international banking platform, together with the increasing local presence of Chinese banks, offers Hong Kong a unique opportunity to become a major banking center, probably the largest off-shore center in Asia. Whether Hong Kong will reap this opportunity will very much depend on how it navigates among the opportunities that China offers in is current situation of capital controls without losing its international clout. In fact, Hong Kong banking system should benefit from the business from China coming off-shore due to capital controls (including RMB settlements but also issuance of RMB-denominated bonds). However, it should also look for non-Chinese related banking business so as to ensure that it remains distinguishable from Chinas' domestic banking system in the years to come.

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1. How large is Hong Kong as international banking center?

Hong Kong is known to depend massively from one sector, namely the export of financial services abroad. In fact, the financial system accounts for 5.5% of employment (190.000 jobs) and about 20% of GDP (Table 1). In fact, it is so important that it is even stated in the Basic Law[2]

Table 1

HK's four key industries (as of 2007)

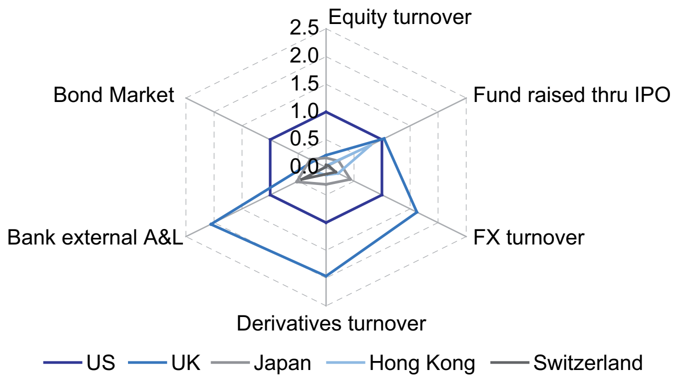
Industry	Share of GDP	Share of total employment
Trade and logistics	25.8%	24.2%
Financial services	19.5%	5.5%
thereof :		
Banking	11.6%	2.5%
Professional services	11.0%	11.7%
Tourism	3.4%	5.6%

Source: Census and Statistics Department Hong Kong

Notwithstanding its importance, the size of Hong Kong's financial system is not as large as people make think simply by looking at how important it is for Hong Kong. In fact, Using a concentration index of different financial activities developed by Cheung and Yeung (2007), the size of different international financial centers is compared in five different aspects, namely turnover of the stock market and turnover of the foreign exchange market and of derivatives, size of the bond market, funds raised through IPOs in the stock market and, finally, the size of the banking sector measured by the size of bank assets and liabilities. When comparing Hong Kong with other major financial centers such as the US, the UK, Japan and Switzerland, Hong Kong appears quite small especially when we focus on the banking system (Chart 1). In fact it is the smallest among the countries reviewed.

Chart 1

Comparison of Hong Kong with Major ICFs in Financial Activities



Source: BIS

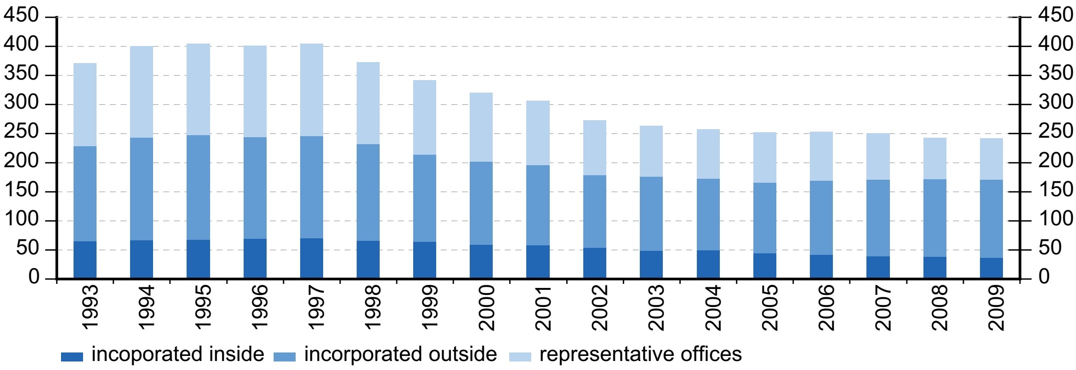
2: Article 109 states that "The Government of the Hong Kong SAR must provide an appropriate economic and legal environment for the maintenance of the status of Hong Kong SAR as an international financial Centre."

The small size of Hong Kong's banking sector should not surprise when we think of how much larger the other economies reviewed, specially the US, UK or Japan. In fact, Hong Kong should be compared to other small open-city economies which have relied on off-shore financial services as one of the key sectors. This is clearly the case of Singapore, which will be our benchmark for Hong Kong henceforth.

If we only concentrate on the off-shore part of the banking system, Hong Kong has also been losing steam. For example, Hong Kong banks lend less abroad, at least when compared with other Asian financial centers. More specifically, and based on statistics from the Bank of International Settlements (BIS), Hong Kong's share in total gross external positions reported by Asian banks was 17.4 percent at September-2009, down from 25 percent in 1998[3]. Furthermore, Japan and Singapore, have been playing more prominent roles in bank intermediation, accounting for 49.3 percent and 21.2 percent, respectively, of Asian banks external assets and liabilities in 2009.

Nonetheless, we should recognize that Hong Kong has one of the highest concentrations of large banking institutions in the world. In fact, 70 of the largest 100 banks in the world have an operation in Hong Kong, according to the statistics of the Hong Kong Monetary authority (Chart 2). All in all, there were 199 authorized bank and deposit-taking companies, as well as 71 local representative offices at end 2009 (Chart 2). It should be noted, though, that this number has been decreasing since the peak reached right before the Asian crisis which hit Hong Kong in 1997. Such large number of financial institutions – and increasingly more Chinese ones which are also becoming the largest banks worldwide- bodes well for Hong Kong's banking sector as long as its policy makers and major banking institutions find ways to entice those institutions' appetite for operating in Hong Kong rather than elsewhere where they may be present.

Chart 2
Bank instituions in Hong Kong



Source: HKMA

3: Chart 3 and Chart 4 look into the external position of banks in Hong Kong . It can be seen that the growth ralte of assets and liabilities has been slightly faster for Singapore.

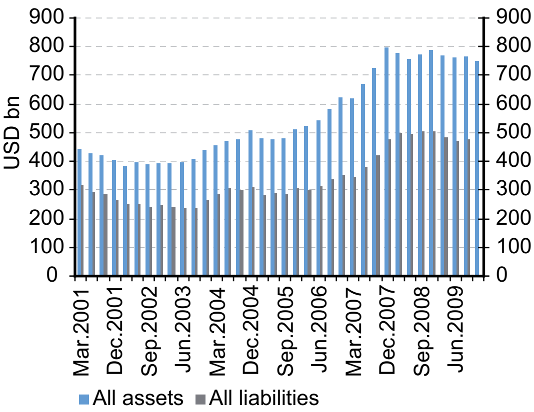
2. Comparing Hong Kong with Singapore

Which one is larger? Hard to tell

Hong Kong and Singapore are not really large international financial centers when compared with those of major economies but they clearly are for the size of their economies. Although it is argued that Hong Kong and Singapore have their own comparative advantage in China and Southeast Asia, respectively, they have been competing with each other for decades to be the next largest international financial center after Tokyo. The two have their comparative advantage in two different sectors: the stock market –namely IPOs - in Hong Kong and derivatives and foreign exchange markets in Singapore. When looking at the banking system as a whole, and not only at the off-shore activities, Hong Kong continues to be bigger, according to BIS statistics, but Singapore is catching up. In fact, Hong Kong's consolidated bank claims[4] (shown in Chart 3 as external position) rose steadily from 250 billion USD in the beginning of 2003 to 450 billion USD at the end of 2009 (i.e., 11% yearly increase) while Singapore's consolidated bank claims (Chart 4) increased from 130 billion USD to 260 billion (i.e., a 14% annual growth).

Chart 3

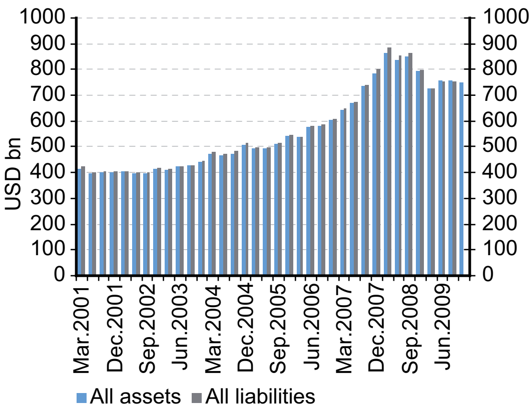
Bank instituions in Hong Kong



Source: BIS

Chart 4

Bank instituions in Singapore



Source: BIS

When we looked into the off-shore banking sector only, the size is quite similar. In fact, external assets of banks in Hong Kong and Singapore are at about 750 billion USD in 2009. However, external total liabilities are quite different. In Hong Kong, external total liabilities were about two third of external total assets in the past decade; in contrast, in Singapore, external total assets and liabilities were almost the same. This means that banks in Hong Kong have financed their expansion abroad from Hon Kong while this is not the case of Singapore. The difference between the two probably stems from Singapore's much stricter offshore banking regulation. As for the evolution of external bank assets and liabilities, both banking centers have grown at a similarly rapid speed during the last few years; in fact their external position has doubled until the beginning of the global crisis and have stagnated since in Hong Kong, or even fallen somewhat in the case of Singapore.

If we look at broader definitions of size, both Singapore's and Hong Kong's banking sectors tend to rank close in existing international surveys. A recent example of such survey is the one conducted by the City of London (Global Financial Centers 2010) ranks Singapore and Hong Kong as global and deep financial centers, together with Chicago, Frankfurt, London, New York, Toronto and Zurich. Such classification is based on three key criteria: degree of connectivity (how well known a center is known around the world); diversity (how many industry sectors flourish in each center); and "specialty" (the quality and depth of certain sectors offering financial sectors). Notwithstanding Hong Kong's recognized merit, the survey shows that it has been losing some of the clout as shown by its decreasing ranking in business environment, human capital, infrastructure, general competitiveness and market access. The most rapid fall in the ranking actually refers to human capital.

4: Consolidated bank claims stand for all assets that foreign banks have in Hong Kong, be it with cross- border lending or through the activity of subsidiaries.

Table 2
Classification of Global Financial Centers

Rank	People			Business Environment			Market Access			Infrastructure			General Competitiveness		
1	New York	▲	(+1)	New York	▲	(+1)	London	▶	(-)	New York	▲	(+1)	London	▶	(-)
2	London	▼	(-1)	London	▼	(-1)	New York	▶	(-)	London	▼	(-1)	New York	▶	(-)
3	Singapore	▲	(+1)	Hong Kong	▶	(-)	Hong Kong	▶	(-)	Hong Kong	▶	(-)	Hong Kong	▶	(-)
4	Hong Kong	▼	(-1)	Singapore	▶	(-)	Singapore	▶	(-)	Singapore	▶	(-)	Singapore	▶	(-)
5	Tokyo	▶	(-)	Chicago	▶	(-)	Tokyo	▲	(+2)	Chicago	▲	(+2)	Tokyo	▲	(+2)
6	Toronto	▲	(+3)	Tokyo	▲	(+3)	Zurich	▶	(-)	Tokyo	▼	(-1)	Zurich	▶	(-)
7	Chicago	▲	(+3)	Zurich	▼	(-1)	Shanghai	▲	(+19)	Zurich	▼	(-1)	Chicago	▼	(-2)
8	Sydney	▼	(-2)	Sydney	▶	(-)	Chicago	▼	(-3)	Sydney	▲	(+3)	Shanghai	▲	(+12)
9	Zurich	▼	(-2)	Geneva	▼	(-2)	Geneva	▲	(+1)	Toronto	▲	(+3)	Geneva	▼	(-1)
10	Shanghai	▲	(+7)	Toronto	▲	(+5)	Frankfurt	▼	(-2)	Shanghai	▲	(+23)	Shenzhen	▲	(+9)

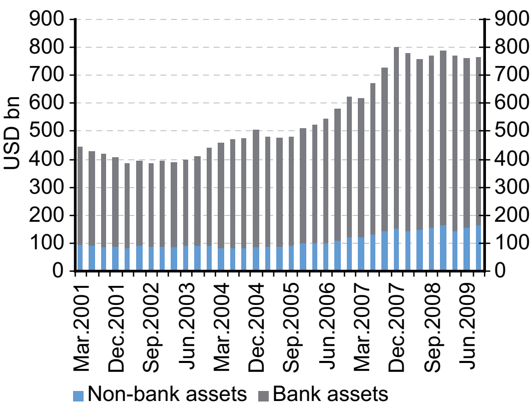
Source: The City of London (2010)

Hong Kong banking center more bank-oriented and Singapore more corporate-oriented

When examining the components of external total assets in Hong Kong and Singapore, financial sector related assets account for 80% of external total assets for banks in Hong Kong on average, and non-bank assets account for the rest (Charts 5 and 6) . In other words, most of Hong Kong's banks lending abroad is with other banks and not so much to finance corporates. The numbers for Singapore are similar to Hong Kong prior to 2005 but the financial sector related assets rapidly went down thereafter below 70% in 2009, while non-bank assets' share went up to about 30%, accordingly (Charts 7 and 8). In order words, Singaporean banks are lending more and more to companies abroad instead of lending to banks abroad. This reflects Singapore's efforts to become a large corporate banking center as opposed to Hong Kong which is a more pure banking sector (with most transactions happening between banks)[5].

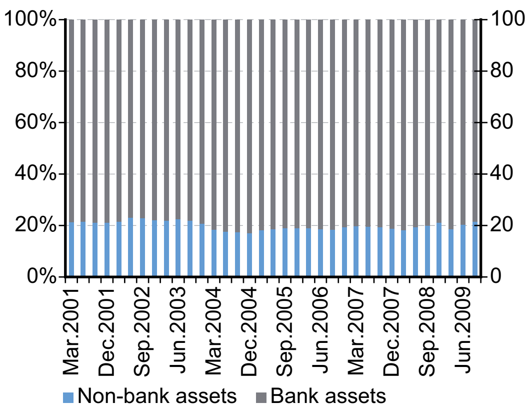
While it is hard to tell which model is better, it is true that Hong Kong's model is too dependent on banks outside Hong Kong wanting to borrow from Hong Kong banks while Singapur's model seems more diversified. However, Hong Kong's focus on financial institutions may be beneficial in terms of attracting more foreign financial institutions to operate in Hong Kong, which – as we shall mention later – should give Hong Kong a first mover advantage in its challenging future, both when compared with Singapore but also Shanghai.

Chart 5
External Positions of Banks in Hong Kong: Asset



Source: BIS

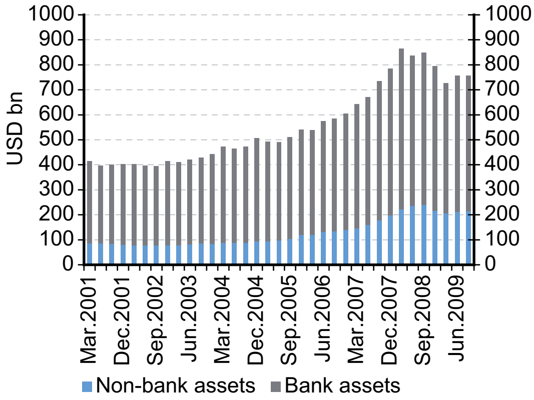
Chart 6
External Positions of Banks in Hong Kong: Asset



Source: BIS

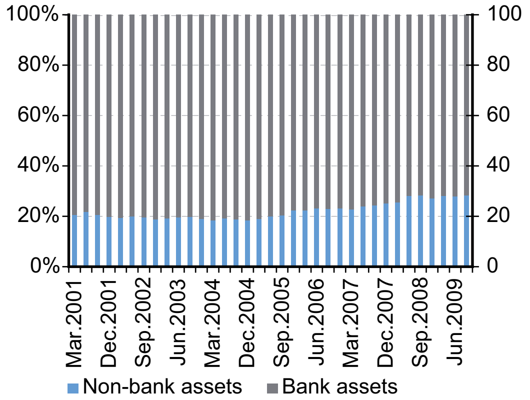
5: In terms of the composition of external total liabilities, Hong Kong and Singapore have followed a very similar pattern. The external non-bank liabilities as a share to external total liabilities rose slightly in last decade for both banks in Hong Kong and Singapore; however they were not far from 30%.

Chart 7
External Positions of Banks in Singapore: Assets



Source: BIS

Chart 8
External Positions of Banks in Singapore: Assets

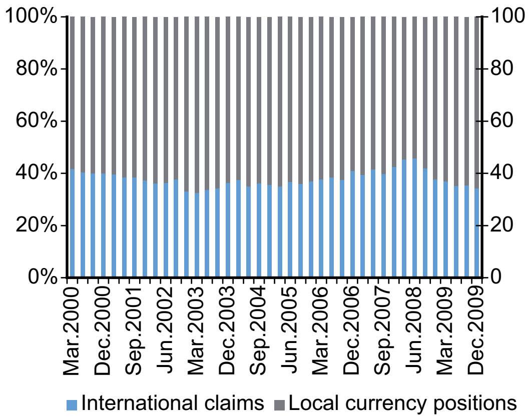


Source: BIS

Subsidiaries versus cross-border lending

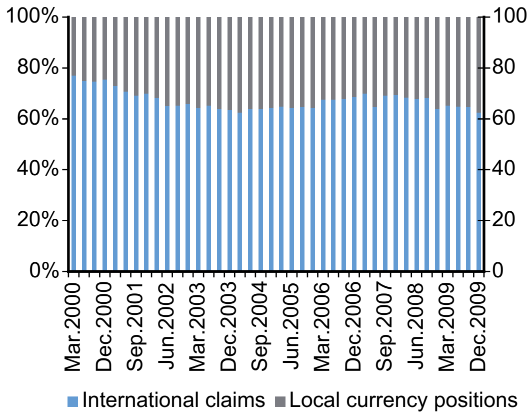
Other than size, Hong Kong and Singapore banking centers differ in as far as Hong Kong attracts more assets from foreign banks' subsidiaries (60% of total foreign bank assets as shown in Chart 9) while Singapore attracts more cross border bank loans (over 60% of total as shown in Chart 10). In fact, cross border bank loans into Hong Kong and Singapore are actually very similar in absolute size so the difference lies on the role of subsidiaries, much more active in Hong Kong than in Singapore.

Chart 9
BIS Reporting Banks (consolidated) Claims on Hong Kong



Source: BIS

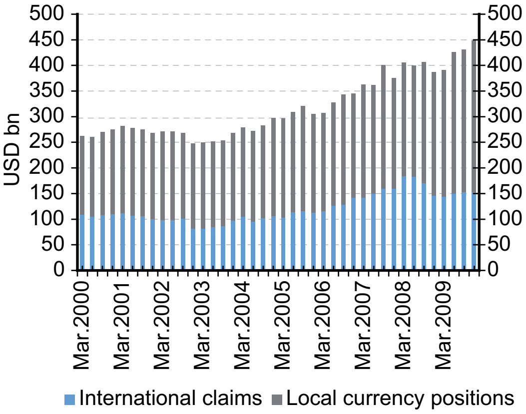
Chart 10
BIS Reporting Banks (consolidated) Claims on Singapore



Source: BIS

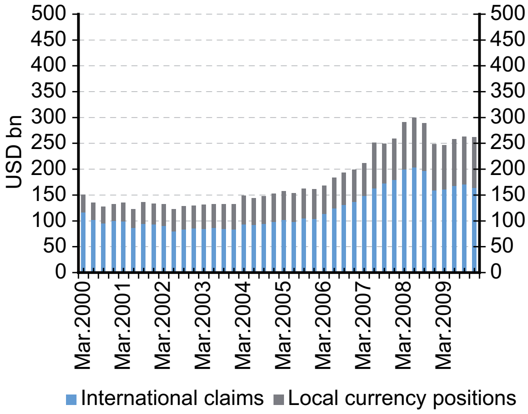
The difference in the composition of bank flows has been found to make a difference in terms of the origin of bank assets but also in terms of their stability. In particular, Garcia-Herrero and Martinez Pería (2006) show empirical evidence of local bank assets (i.e., those from foreign banks' subsidiaries in a certain country) being more stable than cross-border bank financing. In we now turn to the experience of the recent global financial crisis, cross border funding in Hong Kong and Singapore fell 20% and 22% respectively between the second quarter and the fourth quarter of 2008. Local assets by foreign subsidiaries, though, fell much less (7% in Singapore) or even grew by 11% in Hong Kong during the same period. We can see that in 2009 it went back to its trend in Hong Kong, much quicker than in Singapore where it barely increased (see Chart 11 and 12). In other words, the more stable behavior of subsidiaries than cross-border lending during the recent global crisis supports the idea that having an international financial center with subsidiaries is safer – in terms of stability of the assets - than one based on pure cross-border lending. This bodes well for Hong Kong in the future and shows again how important it is for Hong Kong to attract other major banks operating with subsidiaries in the future.

Chart 11
BIS Reporting Banks (consolidated) Claims on Hong Kong



Source: BIS

Chart 12
BIS Reporting Banks (consolidated) Claims on Singapore

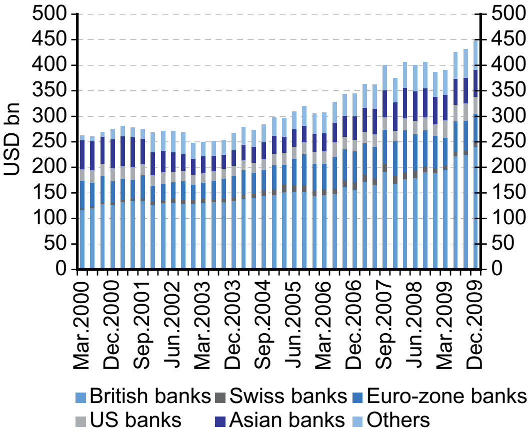


Source: BIS

Hong Kong banking sector very dependent on British banks, Singapore much more diversified

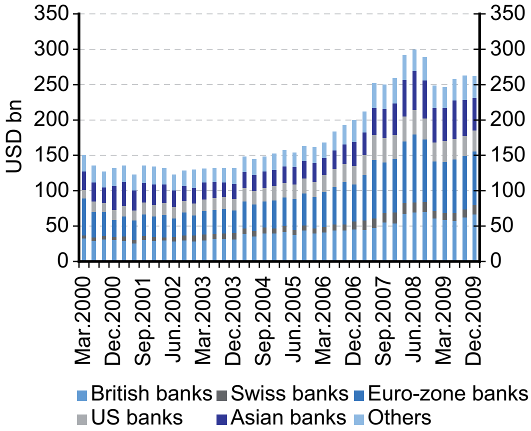
Hong Kong and Singapore banking centers are dominated by British banks followed by euro-zone ones. Asian banks, mostly Japanese banks, rank third and US ones only fourth. The weight of British banks has increased substantially over time, although it was always large while the weight of euro-area banks is decreasing over time (Chart 13). The origin of banks located in Singapore is much more diversified (Chart 14).

Chart 13
BIS Reporting Banks (consolidated) Claims on Hong Kong by georgraphic origins



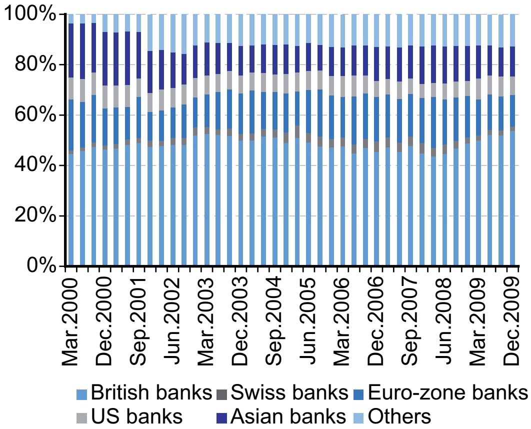
Source: BIS

Chart 14
BIS Reporting Banks (consolidated) Claims on Singapore by georgraphic origins



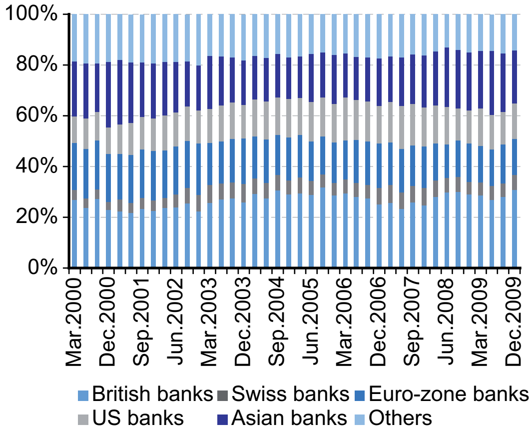
Source: BIS

Chart 15
BIS Reporting Banks (consolidated) Claims on Hong Kong by georgraphic origins



Source: BIS

Chart 16
BIS Reporting Banks (consolidated) Claims on Singapore by georgraphic origins



Source: BIS

In conclusion, Hong Kong is still a larger banking center in absolute terms but it looks much more similar to Singapore when focusing on the off-shore market. The fact that Singapore may be catching up as an international banking center should be seen by Hong Kong authorities and other operators as a signal that measures have to be taken for Hong Kong to lure international banks to continue to operate in Hong Kong.

On the positive side, the fact that Hong Kong has a very large number of foreign banking institutions and that it is more concentrated on banking and not on direct borrowing from corporates should clearly help. Furthermore, the fact that Hong Kong is less dependent on bank branches and more on bank subsidiaries should also imply –according to existing literature– less volatility of foreign banks' exposure to Hong Kong.

These positive aspects about Hong Kong are mitigated by the looser definition of off-shore versus on-shore banking activities in Hong Kong versus Singapore. In fact, Hong Kong have financed one third of external operations with local funds while liabilities and assets from non resident are perfectly matched. The crises experienced by some off-shore financial centers in the past (an example would be Uruguay in the 1980s) warns against having large open positions between non-residents' assets and liabilities.

3. Hong Kong's special niche: China's offshore banking center

The comparison between Singapore and Hong Kong may be interesting but hides a very important fact, which is the two city-sates' different relation with China. This, in fact, may change any conclusion we may have taken merely looking at the past.

Hong Kong is set to benefit more from the modernization and internationalization of mainland's financial system, at least in the near term. Hong Kong has a clear advantage of geoChartic and cultural proximity, as well as very close political ties. Within that proximity, Hong Kong's skilled labor, strong regulatory environment, and high quality of business services are just what mainland is short of. We should, thus, expect Hong Kong to continue to provide financial expertise to China and the development of China's financial system. In return, Hong Kong's position as a financial and banking center and gateway to China will be strengthened with China as its main hinterland.

Hong Kong's specialty in terms of its relation with China is demonstrated through seven different Closer Economic Partnership Arrangements (CEPA).These agreements give Hong Kong banks an easier access to China in several ways. First, less capital is required to open a branch in China, less time is needed to offer RMB services and it is also easier to have an incorporated bank. All these advantages basically imply that foreign banks should find it interesting to be placed in Hong Kong as a gateway for China. The fact that the number of foreign institutions has remained stalled during the last few years (see Chart 2 above) does not seem to support this hypothesis. The reason behind might be that foreign institutions actually prefer to access the Chinese market directly as shown by the rapid growth of foreign financial institutions in Shanghai.

Hong Kong's niche market as regards China also goes in the opposite direction, i.e., Chinese banks opting to operate in Hong Kong for their offshore services. Beyond culture and language reasons, an important factor which explains the growing presence of Chinese banks in Hong Kong is the peculiar way in which China is opening its capital account. In fact, Hong Kong has so far been only place where you can offer a wide range of RMB services (from deposits for residents to RMB settlements for trade-related operations to issuance of RMB denominated bonds)[6].

It goes without saying that this advantage should favor Hong Kong's role as offshore center. However, it will also push Hong Kong towards being more and more dependent on China's financial services and less so on European financial services. The key issue is whether Hong Kong will manage to maintain that comparative advantage (i.e., attracting banking business from China) even after China's capital account is fully liberalized.

6: The RMB settlements program is being extended beyond Hong Kong.

4. Hong Kong and Shanghai: complementary more than competitors

Hong Kong, as international banking center, has two key challenges for the next few years: One is to continue to be a large Asian banking center and to be able to withstand the competition coming from Singapore. The other key challenge is to adapt to Shanghai's becoming an international financial center on its own. In fact, Shanghai's achievements have attracted the world's attention in past years, especially when its GDP passed Hong Kong's in 2009. Chinese central government and Shanghai municipal government both aim at establishing the city as an international financial center. However, this does not mean that Hong Kong's position have to be replaced by Shanghai. On the contrary, Hong Kong could actually benefit from Shanghai's growth if it is to find its niche. Hong Kong's primary role should be to serve as a main international offshore financial center for China, Asia but also the Globe. On the other hand, it could also facilitate foreign capital into the mainland. Instead, Shanghai main target should be to become a major domestic financial like Tokyo (or actually bigger). Hong Kong should also remain key to conduct financial services between the Pearl River Delta and the rest of the world.

In conclusion, Hong Kong should be complementary with the development of Shanghai as major banking sector. This is also what history according to McCauley and Chan (2007). Their complementarity should be more the case the more slowly China's capital account liberalization proceeds. In fact, Hong Kong will benefit more than any other financial center from the controlled outflows of funds from China. This is due to China's better knowledge of Hong Kong's financial system.

5. Conclusions

Hong Kong has withstood the global financial crisis as international banking center in a relatively good way but this is not particular of Hong Kong but rather of Asia as a region. In fact, if anything, Hong Kong's financial system has been losing steam during the last few years. In this regard, there are a number of challenges that Hong Kong is facing in the next years to come. The first has from Singapore which is growing its regional presence as offshore banking center. The second comes from Shanghai, which has been "appointed" China's international financial center by the Chinese authorities.

The two challenges are very different in nature. That coming from Singapore is about Hong Kong continuing to be an Asian financial center and not so much a purely Chinese one. It is clear that Singapore is not in the position to overrule Hong Kong as the Mainland offshore banking center for the objective of internationalizing the use of the Renminbi. However, Singapore seems to be progressing faster than Hong Kong in terms of attracting regional interests. To change that trend, two things seem absolutely warranted: first, maintaining international standards in all spheres related to banking and, second, continuing to improve banking related human capital. For the former, it includes accounting and legal services but also a well functioning rule of law. In this regard, it is extremely important to dispel any doubt that Hong Kong is fully independent from China as regards the rule of law. For the latter, Hong Kong tertiary education is well placed for international standards but there are also issues as regards the command of English different reforms which have fostered the teaching of Cantonese.

As regards the challenge coming from Shanghai's future role as international financial center, China's needs for financial services should be large enough to ensure space for both centers. The key issue, though, is to identify in advance which are the key sectors where Hong Kong may have a comparative advantage. As regards banking, Hong Kong should clearly push for maintaining a more favorable tax environment than Shanghai as well as more secrecy for banking operations if it wants to maintain its off-shore banking role. Finally, fostering the opening up of as many branches and subsidiaries as possible now will also help move forward before Shanghai can compete. This will really only happen fully when China's capital account is fully convertible and when the opening up of branches and subsidiaries in China is more liberalized than it is today.

To end with a positive note, the very large number of financial institutions, which operate in Hong Kong constitutes a very important advantage for Hong Kong, compared with Singapore and perhaps even Shanghai. The experience of the recent global crisis but also the consensus in the economic literature indicates that the more subsidiaries such financial centers have as opposed to cross-border lending the better in terms of financial stability. Finally, if Hong Kong could also expand more the lending to corporates and not only the bank-to-bank business, this could bring diversification gains.

References

Bank of International Settlements (2010), “Consolidated banking statistics”, internet access via *http://www.bis.org/statistics/consstats.htm*

Bank of International Settlements (2010), “Locational banking statistics”, internet access via *http://www.bis.org/statistics/bankstats.htm*

Cheung, Lillian and Vincent Yeung (2007), “Hong Kong as an international financial centre: Measuring position and determinants”, *HKMA Working Paper 14/2007*

City of London (March 2010), “Global financial centres 7” *http://www.geneve-finance.ch/fr/place_fin/file.cfm/document/The_Global_Financial_Centres_Index_7.pdf?contentid=2190*

Garcia-Herrero, Alicia and Soledad Martinez Peria (2006), “The mix of international banks’ foreign claims: Determinants and implications” *Journal of Money and Banking*, Vol 31, Issue 6, pp 1613-1631

McCauley, Robert N. and Eric Chan (2007), “Hong Kong and Shanghai: Yesterday, today and tomorrow”, *BIS Research Papers of Asian Research Programme, internet access via http://www.bis.org/repofficepubl/arpresearch_fs_200803.01.pdf*

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