Hong Kong *and* Shanghai: Yesterday, today and tomorrow

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I. Introduction

At some point in the not distant future, China will ease its capital controls and make the yuan renminbi fully convertible into foreign currencies. Shortly after, Shanghai will re-emerge as an international financial centre. Amid a broader debate over the competitiveness of major international financial centres (McKinsey (2006), Mainelli and Yeandle (2007)), the prospect of Shanghai's re-emergence has sharpened speculation regarding the relationship of Shanghai and the established international financial centre that has reverted to Chinese sovereignty, Hong Kong ((Wong (200_), Bradsher and Barboza (2007), Meyer (2007)).

This study argues that Hong Kong will gain stature as an international financial centre when China is more open financially and Shanghai returns as a competing centre. This thesis is in the tradition of Kindleberger (1974), who argued that federal states can support more than one financial centre. The thesis that the development of an onshore international financial centre can contribute to the development of a nearby offshore international financial centre is in some ways the inverse of that of Rose and Spiegel (2006), who argue that offshore competition can spur the onshore centre.

This thesis is developed in relation to historical evidence of the last century, the current range and intensity of financial activity in the two centres, and a prospective analysis of the evolution of China's international balance sheet and Hong Kong's share therein. The method is eclectic, depending on rankings based on nosecounts of banks and their links for the historical comparison, multidimensional measures of balance sheets and trading activity for the current comparison, and regression analysis for projecting the future.

The analysis is in three parts. The next section builds on the analysis of 1900-1980 in Reed (1981) to demonstrate that Hong Kong ranked higher among international banking centres in the 20th Century when China was financially open, that is, before and just after the Second World War. The following section supplements and updates the careful study of Jao (2003) with data from BIS (2002, 2005) and from Ho et al (2005), to emphasise the current gap between Hong Kong and Shanghai, especially in the trading of foreign exchange and derivatives. The following section draws on Lane (2000) and Cheung et al (2006), to fit a Kuznets curve relating international banking assets and liabilities to real income and openness in order to assess the potential growth of China's international banking activity. Then BIS and Hong Kong data are used to estimate the share that Hong Kong can be expected to enjoy. A final section concludes that China's financial opening and Shanghai's consequent re-emergence as an international financial centre promise to raise Hong Kong's standing vis-à-vis London and New York.

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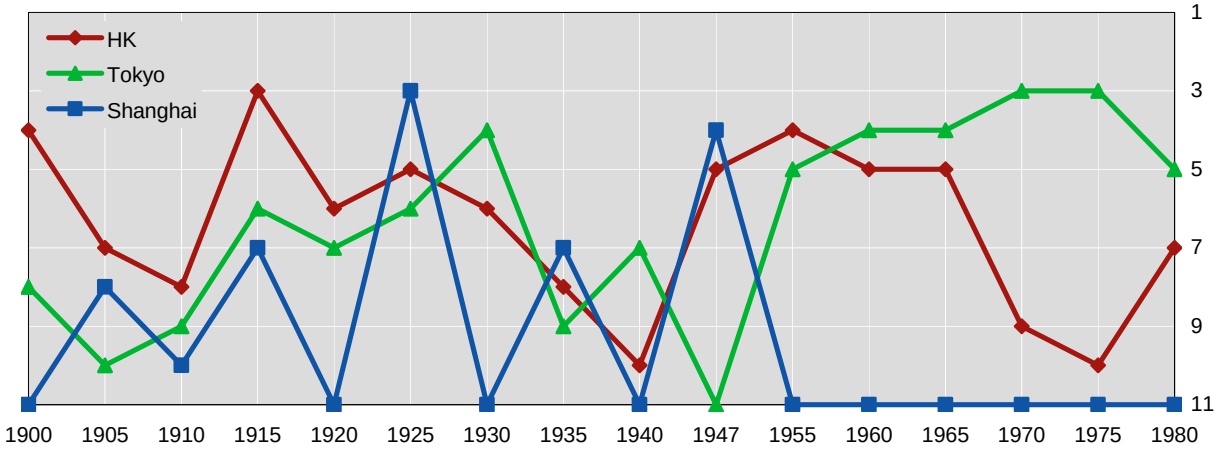
II. Hong Kong and Shanghai as international financial centres, 1900-1980

Reed (1981) based his analysis on five variables that combine the number of banks in a financial centre and their links to other financial centres (see Annex for complete definitions). The first two of these count the number of locally headquartered banks and their international links. In particular, both the number of internationally active banks that are headquartered in the centre and the number of their links through affiliates to other international financial centres are counted. The other three variables focus on the presence in the centre of private and foreign banks. In particular, the number of merchant or investment bank offices is counted. In addition, the number of offices in the centre of large, internationally active banks that are headquartered outside the centre is counted. Finally, in parallel with the count of links to other centres of locally headquartered banks, the links to international financial centres through offices of large, internationally active banks headquartered elsewhere are counted.

Rankings based on these measures may be far from ideal, but they do have the advantage of having been assembled on a consistent basis for most of a century. In particular, Reed ranked the world's international financial centres on this basis for 16 selected years between 1900 and 1980, inclusive, at generally five year intervals.

Reed's rankings consistently put London and New York in the top positions. Asian financial centres, including Hong Kong, Shanghai, Singapore, Tientsin, Tokyo and Yokohama, fell into the second or third tier of centres. Focusing on the three Asian centres of Hong Kong, Shanghai and Tokyo,[2] Graph 1 shows that Hong Kong started the century as the pre-eminent Asian centre, only to fall behind first Shanghai then Yokohama (aggregated with Tokyo in the graph) before World War II. Then, after 1960, Tokyo emerged as the pre-eminent centre in Asia.

Graph 1 – Ranking of international financial centres



Note: 11 denotes not in the top ten. Yokohama and Tokyo are considered one centre.

Source: Reed (1981).

In terms of the comparison between Hong Kong and Shanghai, Reed found that internationally active banks were better represented and more connected to other centres in Hong Kong than in Shanghai. Reed put Shanghai ahead of Hong Kong in two years, 1925

[2] See Myers (2007).

and 1947. But even apart from the Second World War and the Mao years, Shanghai did not make the international top ten in 1900, 1920 and 1930, while Hong Kong always places.

The most striking aspect of these rankings, though, is the relationship between Hong Kong's ranking and Shanghai's presence as a competitor. Shanghai was no competition for Hong Kong during the Second World War and the years after the founding of the People's Republic. During these years, Hong Kong averaged a ranking of 5.8 on Reed's measure (where London was ranked number one). In the years that Shanghai was, from an international banking perspective, out of the picture, Hong Kong was ranked 7.1. On this showing, Hong Kong did not benefit as an international banking centre from the absence of Shanghai.

Table 1: Ranking of Hong Kong and Shanghai as international banking centres, 1900–1980

Top ranked centre is ranked number one

	Hong Kong	Shanghai	Difference
Shanghai active (1900-35, 1947)	5.8	8.0*	2.1
Shanghai inactive (1940, 1955-80)	7.1		
Difference	-1.3		

* A rank of 11 is assigned to Shanghai in the years that it did not make the top ten. If only the years when Shanghai made the top ten were included, then Shanghai would show an average rankling of 6.2 in the top row while Hong Kong would show an average ranking of 6.0.

Sources: Reed (1981) and authors' calculations.

The result should not be surprising. Narrowly speaking, if banks headquartered in Shanghai tended to have affiliates in Hong Kong, then Hong Kong would have tended to rise on Reed's measure. More broadly, the engagement of China with the world's trading and financial system raised the weight in that system of East Asia and the ranking of those financial centres that served it.

The suggestion conveyed by this look at Hong Kong and Shanghai as international banking centres in the last century is that Hong Kong was generally more populated with international banking units and more connected to other international banking centres than Shanghai. More strikingly, however, is the suggestion of complementarity between the two centres. Hong Kong seemed to have done better as an international banking centre when Shanghai was open for business. The next section turns to the current comparison of Hong Kong and Shanghai, in which Shanghai is handicapped by the substantial restrictions on international capital mobility between China and the rest of the world.

III. Hong Kong and Shanghai as international financial centres today

This section extends and updates the quite comprehensive comparative profile of Hong Kong and Shanghai as financial centres provided by Jao (2003). It starts with Professor Jao's profile based on 2002 data and adds to it some data from the triennial central bank survey compiled by the BIS, mostly concerning over the counter derivatives. It then updates the extended profile to end-2005 (except the data from the triennial survey, which cover April 2004).

Jao's conclusion from his profile was stark: "Here, all indicators show that Shanghai was dwarfed by Hong Kong". One could footnote this conclusion, for example, by noting that

Hong Kong has no counterpart to Shanghai's commodity exchanges, which could eventually challenge the London-based commodity exchanges. It is hard, however, to argue against Professor Jao's assessment. Indeed, when the comparison is broadened in what follows to include derivative trading, his conclusion actually gains strength. For instance, while billions of dollars worth of interest rate swaps were traded every day in Hong Kong in April 2001 and 2004, the first renminbi swap had not yet been contracted then.[3]

But the question arises, particularly after the celebrated increase in the market capitalisation of the Shanghai stock exchange over the past year or so, how firmly does this conclusion hold today? It turns out that the updating of Professor Jao's comparison to 2005 does little damage to his conclusion.

As an international banking centre, Shanghai lags Hong Kong (Table 2). It must be admitted that broad, mostly domestic, banking aggregates, like the deposits and loans on the first and third rows of Table 2, grew at a much faster rate in Shanghai than in Hong Kong over the years 2002-2005, as one would expect given the more rapid economic growth on the mainland. However, such growth tells more about Shanghai as a domestic financial centre than as an international financial centre.[4] Even using China-wide data on cross-border interbank positions, Shanghai engagement with the international interbank markets remained moderate in 2005, at levels only about a third of those observed in Hong Kong (see rows "Due to" and "Due from banks abroad in Table 2). On this showing, Shanghai has a way to go to become a major international banking centre.

[3] The first renminbi interest rate swap was contracted in connection with the Asian Development Bank's sale of a so-called panda bond denominated in renminbi to Chinese investors in October 2005. The ADB reportedly exchanged its 10-year fixed coupon payments for floating rate payments based on the one-year deposit rate in China.

[4] Liu and Yang (2005) argue that Shanghai's performance as a domestic financial centre can be judged as unsatisfactory by the low ratio of loans to deposits n the Chinese banking system. It is certainly true that nominal lending rates well below the Chinese economy's growth rate suggest that domestic financial intermediation has serious problems. But by Liu and Yang's criterion, Hong Kong banks would be judged to have done a great job amid rising asset prices in the early to mid-1990s (with a loan to deposit ratio in excess of one) and a poor job since (with a low loan to deposit ratio).

Table 2: Banking assets and liabilities in Hong Kong and Shanghai

In billions of US dollars

	Hong Kong		Shanghai	
	2002	2005	2002	2005
Deposits	425.5	524.6	169.6	289.0
Foreign currency deposits	189.4	250.1	20.7	23.9
Loans	266.4	298.1	127.5	208.1
Foreign currency loans	66.2	83.9	14.3	30.0
Loans abroad	31.2	39.4	n.a.	n.a.
Due to banks abroad	180.9	200.7	n.a.	n.a.
Due from banks abroad	257.0	325.6	n.a.	n.a.
Clearing house turnover	39.5	79.0	n.a.	n.a.
Interbank market turnover	20.6	31.8	5.7	11.5
Memo: no. of depository institutions	*224*	*199*	*72*	*130*
Domestic	*99*	*77*	*18*	*46*
Foreign	*125*	*122*	*54*	*84*

Sources: Hong Kong: Hong Kong Monetary Authority (HKMA) *Annual Report, Quarterly Bulletin*, and *Monthly Statistical Bulletin*; *Hong Kong Monthly Digest of Statistics*; *Hong Kong Annual Report*; Hong Kong Stock Exchange *Fact Book;* Hong Kong Securities and Futures Commission *Annual Report*. Shanghai: *Shanghai Statistical Yearbook*; *Shanghai Economy Yearbook*; *China Statistical Yearbook*; *China Securities and Futures Statistical Yearbook*; BIS.

From the comparison of banking positions, the spotlight shifts to the trading of foreign exchange and derivatives (Table 3). At the outset it should be recognised that it is possible for an international financial centre to operate largely on the basis of foreign currencies: consider the position of London before the abolition of exchange controls on sterling in 1979. But London was well established as an international financial centre before the imposition of those controls and policy sought to revive that role even under the capital controls. In contrast, policy drove practically all international banks out of Shanghai in the years after the founding of the People's Republic. For instance, Lu (2007) tells the story of the strained relations between the Hong Kong Shanghai Bank and the mainland authorities.

Whatever the possibilities in principle, in practice the gap between Hong Kong and Shanghai in trading foreign exchange and derivatives is wider than that in banking (Table 3). The modal transaction in the exchange-traded Shanghai spot currency market in 2004 must have been the purchase of dollars against renminbi by the authorities. Most trading by non-residents occurred offshore in the non-deliverable forward market, with no connection to payment flows on the mainland by construction (Ma et al (2004), Ho et al (2005), Debelle et al (2006)). Currency options and swaps were absent.

Table 3: Foreign exchange and derivatives turnover in Hong Kong and Shanghai

In billions of US dollars

	Hong Kong		Shanghai	
	2002	2005	2002	2005
Foreign exchange daily turnover [a,b]	66.823	102.162	n.a.	0.61 [c,d]
Spot	18.968	35.648	0.34	0.61 [c,d]
Forward/swaps	47.855	66.514	n.a.	n.a.
Options	1.030	2.846	n.a.	n.a.
Cross-currency swaps	0.498	0.971	n.a.	n.a.
Of which, domestic currency	24.578	27.234	n.a.	0.61 [c]
Spot				
Forward/swaps				
Options				
Cross-currency swaps				
Over-the-counter fixed income derivatives [a,b]	2.641	11.217	n.a.	n.a.
Forward rate agreements	0.531	0.318	n.a.	n.a.
Interest rate swaps	1.895	9.594	n.a.	n.a.
Interest rate options	0.215	1.305	n.a.	n.a.
Exchange traded derivatives				
Stock index futures (no. of contracts, daily average)	19,602 [e]	40,205 [e]	Nil	Nil
Commodity futures	Nil	Nil	1.98	3.24

[a] April 2001 for 2002. [b] April 2004 for 2005. [c] China figures. [d] Ho et al (2004) estimated that the daily Renminbi turnover would be USD 3.6 billions, in which USD 2.9 billions would be spot turnover, if the unreported bank-customer transactions were taken into account. [e] Hang Seng Index futures.

Sources: Hong Kong Stock Exchange *Fact Book*; *Shanghai Statistical Yearbook*; BIS Triennial Survey (2002, 2005).

Moreover, the development of derivatives markets in fixed income and equity in China has been inhibited by a cautious official approach that reflects a bad experience with bond futures trading in the 1990s. Stock index futures remained to be introduced in 2005. As noted, only in commodity futures did Shanghai have an edge on Hong Kong. Indeed, since China represents the fastest growing and probably most volatile source of demand for commodities, it is not inconceivable that Shanghai traders might have some informational advantages over their commodity-trading counterparts in London and New York. For now, however, derivatives are more studied than traded in Shanghai.

Turning from foreign exchange and derivatives to capital market development, Shanghai has yet to derive the full measure of advantage over Hong Kong from its very large government debt (Table 4). Turnover of government paper other than People's Bank bills remained low, with trading awkwardly divided between the stock exchange and an over-the-counter interbank market. Fixed income mutual funds' and insurers' holdings of bonds were growing very rapidly but from a low base. As noted, fixed income derivatives were absent in 2005, although the development of repo markets had allowed the possibility of short-sales. As for

the international profile of the Chinese bond market, policy generally prevented foreign investment in renminbi-denominated bonds.[5]

Table 4: Capital market indicators in Hong Kong and Shanghai

	Hong Kong		Shanghai	
	2002	2005	2002	2005
Debt market (US$ billion)				
Outstanding debt instruments	68.3	99.2	366.3 [a]	910.9 [a]
Government	16.4	17.7	215.2	610.7
Foreign	11.5	15.7	0.0	1.2
Other				
Turnover	2.9	3.5	15.5 [a]	3.2 [a]
Stock market (US$ billion)				
Market capitalisation	456.4	1,046.3	306.4	286.2
Daily turnover	0.83	2.35	0.84	0.99
Equity funds raised	13.0	38.5	0.67	0.37
Memo: no. of listed firms	*812*	*934*		
Domestic	*802* [b]	*925* [b]	*715*	*834*
Foreign	*10* [c]	*9* [c]	*n.a.*	*n.a.*
Fund management				
Assets under management	342.1	667.6	n.a.	n.a.
Memo: no. of unit trusts or mutual funds	*1,965* [d]	*1,998* [e]		
Domestic	*91* [d]	*103* [e]	*25*	*26*
Foreign	*1,874* [d]	*1,895* [e]	*n.a.*	*n.a.*
Insurance				
Premium income (US$ billion)	11.4	17.7	2.9	4.1
No. of insurance companies	195	175	36	70
Domestic	96	89	21	46
Foreign	99	86	15	24

[a] China figures. [b] All China incorporated enterprises with H shares listed in the Hong Kong Stock Exchange are included. [c] Counted as foreign companies if incorporated overseas and have a majority of business outside Hong Kong SAR and China. [d] March 2003. [e] March 2006.

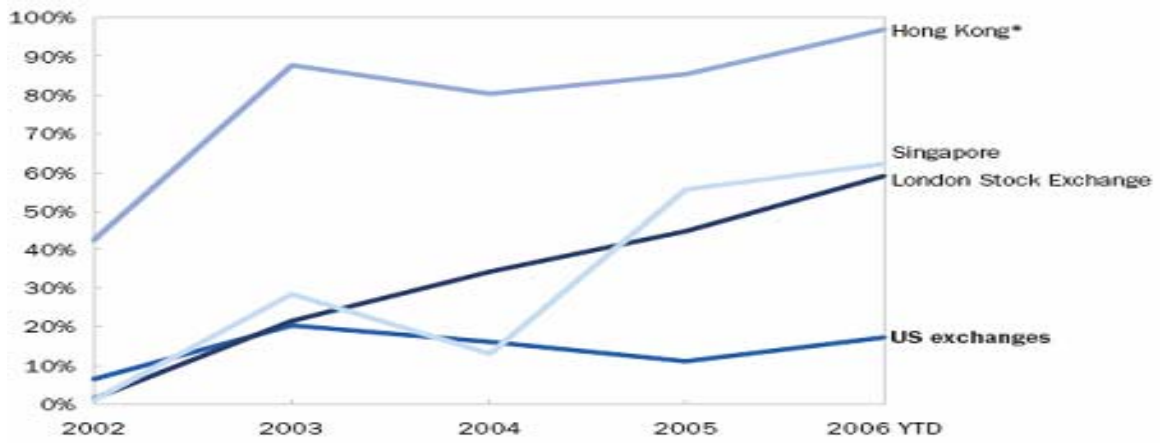
Sources: Hong Kong: Hong Kong Monetary Authority (HKMA) *Annual Report, Quarterly Bulletin*, and *Monthly Statistical Bulletin*; *Hong Kong Monthly Digest of Statistics*; *Hong Kong Annual Report*; Hong Kong Stock Exchange *Fact Book*; Hong Kong Commissioner of Insurance *Annual Report*; Hong Kong Securities and Futures Commission *Annual Report*. Shanghai: *Shanghai Statistical Yearbook*; *Shanghai Economy Yearbook*; *China Statistical Yearbook*; *China Securities and Futures Statistical Yearbook;* Asian Development Bank; BIS.

[5] A limited exception was the Pan Asia Index Fund (EMEAP (2006), Ma and Remolona (2005)). Another exception to the non-internationalised nature of the Chinese bond market was the issuance of the panda bond by the Asian Development Bank in October 2005.

Given the headlines this year that the market capitalisation of the Chinese stock exchanges had surpassed those of the rest of Asia, Table 4 offers a reminder of how things were less than two years ago. The market capitalisation of the Shanghai exchange was about a quarter of that of the Hong Kong exchange and turnover was less than half. Fund-raising in the market through 2005 remained negligible. Again, the Chinese equity markets were very insular, with only about $10 billion of Qualified Foreign Institutional Investor inflow permitted. Table 4 classifies the listings of mainland firms on the Hong Kong Stock Exchange as domestic. If these are taken to be foreign listings, then the primary market offerings on the Hong Kong Stock Exchange emerge as the most international in the world (Graph 2).

Graph 2: Share of IPOs by foreign companies in major stock exchanges

Percent of total IPO value

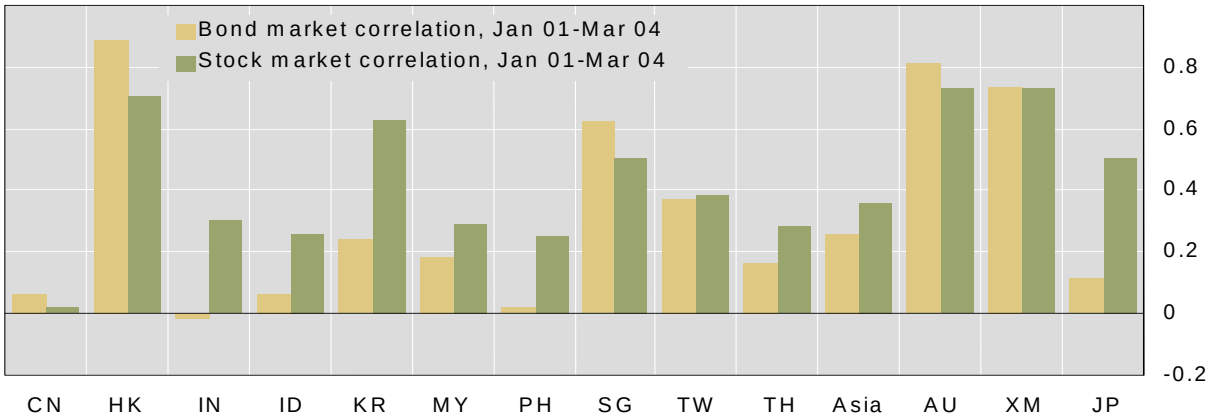


* Mainland Chinese IPOs considered 'foreign' for Hong Kong purposes. Year-to-date data complied as of 11/02/2006.

Source: McKinsey (2006, 47).

In terms of price action, both the mainland equity and bond markets moved without reference to global markets, as represented by the Standard and Poor's 500 or US Treasury bonds (Graph 3). In striking contrast is the high correlation of Hong Kong bond and stock markets with global movements.

Graph 3: Bond and stock market correlations with the US markets



CN denotes China; HK, Hong Kong; IN, India; ID, Indonesia; KR, Korea; MY, Malaysia; PH, the Philippines; SG, Singapore; TW, Taiwan, China; TH, Thailand; Asia, Asia local bond index of HSBC; AU, Australia; XM, the euro area; JP, Japan. Bond market correlation is based on weekly changes in benchmark yields at Thursday closing for Asia and Wednesday closing for US Treasuries. Stock market correlation is based on weekly changes in stock market price indices at Thursday closing fro Asia and Wednesday closing for the S&P 500. The period is from January 2001 to March 2004.

Source: McCauley and Jiang (2004).

In sum, extension and update of Jao's comparison confirm his finding that Shanghai hardly registers as an international banking centre. Still, Shanghai's role as a domestic financial centre is growing rapidly and the surge over the past couple of years of equity prices has drawn international attention, if not international funds or listings, to its stock exchange. Less remarked has been the recent increase in the value of cross-border deposits and loans held by Chinese banks, especially vis-à-vis banks. The next section considers the implications for Shanghai and Hong Kong were such deposits and loans to grow in line with China's output and trade.

IV. The future of Shanghai and its implications for Hong Kong

At present, the international financial position of China reflects the history and the continued efficacy of capital controls (Ma and McCauley (2007)). Even though cross-border bank flows, especially those between banks, have been less regulated than portfolio flows, nevertheless the stock of international bank claims and liabilities of China is smaller than it would be without various restrictions.

How much larger? This section addresses this question by estimating the relationship between the sum of crossborder bank assets and liabilities in relation to GDP, on the one hand, and the level of income and the openness of the underlying economy, on the other. Following Lane (2000) and Cheung et al (2006), the sample of economies on which this relationship is estimated is that of the OECD economies on the ground that these economies generally have reduced or eliminated controls on the international mobility of capital. The estimated relationship is then used as a benchmark for how China's stocks of international bank assets and liabilities might be expected to evolve as capital controls are removed.

How would Hong Kong share in China's deepened financial relations with the rest of the world? Cheung et al (2006) used a gravity model to estimate the Hong Kong stock market's attraction to portfolio outflows from the mainland. Here, a simpler approach is taken, relying on the level and trend of the Hong Kong share in the BIS reporting bank claims and liabilities vis-à-vis China. In short, the current high share of Hong Kong in China's international

banking assets and liabilities suggests that China's international opening would benefit Hong Kong to a disproportionate extent.

The following subsection reports the results of the benchmark regression of international banking positions on a small set of economic variables for the OECD countries. Then data on China's income level and openness are used to produce an estimate of the size of China's unconstrained international banking positions in 2005 and 2012. Finally, data from the Hong Kong Monetary Authority and the Bank for International Settlements are combined to produce a projection of the Hong Kong share of China's international banking assets and liabilities.

IV.1 International banking positions in the OECD

How large would China's international banking position be were policy as liberal as those found in the advanced economies? This question can be approached by relating international banking positions to income and economic openness in the OECD economies.

Following Lane (2000), the dependent variable is defined as the sum of cross-border banking loans and deposits in relation to GDP. Independent variables are taken to be the log of GDP per capita, measured at market prices, economic openness, defined as the sum of imports and exports as a fraction of GDP, domestic credit as a share of GDP, and the interest differential between the relevant currency and the US dollar at the three-month maturity. In addition are entered dummy variables for financial centres (Luxembourg, Switzerland and the United Kingdom) and for the euro area. The latter dummy is to take into account the sharp rise in the cross-border banking positions that took place after the introduction of the euro as a result of the unification of the area-wide short-term money market. Data for the dependent variable are obtained from the BIS and the IMF and for the other variables from the IMF.

In common with other such analyses, the results are much improved excluding Luxembourg from the sample (Table 5). For the resulting sample, GDP per capita and openness, as well as the dummies for the euro area and for the financial centres, all come in as significant, and showing the expected signs. Neither interest rates nor the depth of domestic credit market enter significantly. Excluding the lower income countries, namely Mexico, Slovakia and Turkey, does not materially affect the results, though it does raise the coefficient on GDP per capita noticeably. Overall, the goodness of fit is comparable to that of the more inclusive regression analysis of the total international investment position as reported by Lane (2000, p 522).[6]

As a check for robustness, we repeated the exercise excluding Ireland from the sample as well (Annex 2). The results were similar with regard to the sign and significance of the estimated coefficients. The somewhat lower estimated coefficient on GDP per capita implies somewhat smaller growth of China's cross-border bank deposits and loans, but leaves the broad result qualitatively similar.

[6] That Lane's goodness of fit for the total international investment position than for direct investment or portfolio positions may suggest that his implied goodness of fit for the major non-direct investment, non-portfolio position item, namely bank flows, is as high or higher than the level reported in Table 5.

Table 5: Estimated determinants of cross-border bank deposits and loans in the OECD

Stock of deposits plus loans in relation to GDP at end 2005

	Full sample		Sample without Luxembourg		Sample without Luxembourg, Mexico, Slovakia, Turkey	
	(1)	(2)	(3)	(4)	(5)	(6)
Intercept	-2431.183*	-1091.584	-521.626*	-471.462**	-577.918*	-692.508**
	(0.068)	(0.272)	(0.052)	(0.019)	(0.062)	(0.013)
Openness	2.675	2.478	0.995***	0.848**	1.075***	1.028***
	(0.117)	(0.133)	(0.005)	(0.012)	(0.007)	(0.007)
GDP/Capita	233.507	89.993	46.010*	45.553**	50.793*	65.672**
	(0.088)	(0.349)	(0.091)	(0.019)	(0.102)	(0.013)
Euro area	223.546*	189.860	55.050**	46.444*	46.542	45.536*
	(0.088)	(0.137)	(0.037)	(0.068)	(0.107)	(0.079)
Financial centre	899.985***	909.721***	280.171***	283.936***	273.562***	280.447***
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
Interest rate	29.370	-	5.184	-	0.492	-
	(0.187)	-	(0.232)	-	(0.939)	-
Domestic credit/GDP	-1.314	-	0.261	-	0.283	-
	(0.338)	-	(0.332)	-	(0.319)	-
Adjusted R^2	0.533	0.521	0.691	0.680	0.684	0.698
Number of observations	30	30	29	29	26	26

Note: * Significant at the 10% level. ** Significant at the 5% level. *** Significant at the 1% level.

Source: IMF, *Direction of Trade, International Financial Statistics, World Economic Outlook;* BIS; authors' calculations.

IV.2 China's projected international banking position

Were China's international banking balance sheet to respond to its growing real income in line with the tendency in the OECD, it could experience very rapid growth. In particular, if the nominal GDP of China were to grow by 13%, with 10% nominal growth reinforced by a trend nominal appreciation of the renminbi against the dollar of 3%, then dollar GDP per capita could grow at 12.5%. In Table 6, this scenario (given the coefficient of less than one-half estimated in column 4 of Table 5) would produce a 5.4% per annum growth in international bank positions in relation to GDP. If trade is assumed to decelerate from a rate of growth of 20% by 2% per annum, then it at first contributes to additional international bank positions and then reduces them. On these assumptions, the mainland's cross-border bank position could quintuple over seven years to half of GDP, or $2.6 trillion.

Table 6: Projection of China's external bank positions

Sum of cross-border bank assets and liabilities

	GDP per capita (US dollars)	Trade/ GDP (percent)	Change in cross-border bank assets and liabilities in relation to GDP due to		China's external bank positions		*Memo: Hong Kong's external positions vis-a-vis China (Billions of US dollars)*
			GDP per capita growth	Trade/GDP growth	Percent of GDP*	Billions of US dollars	
2005	1,716	63.4			10.0	224.6	*103.3*
2006	1,930	67.3	5.4	3.3	18.7	474.3	*189.7*
2007	2,172	70.3	5.4	2.5	26.6	762.0	*304.8*
2008	2,443	72.2	5.4	1.6	33.5	1,086.0	*434.4*
2009	2,749	72.8	5.4	0.5	39.5	1,443.3	*577.3*
2010	3,092	72.2	5.4	-0.5	44.3	1,830.1	*732.1*
2011	3,479	70.3	5.4	-1.6	48.0	2,242.8	*897.1*
2012	3,914	67.1	5.4	-2.6	50.7	2,678.4	*1,071.4*

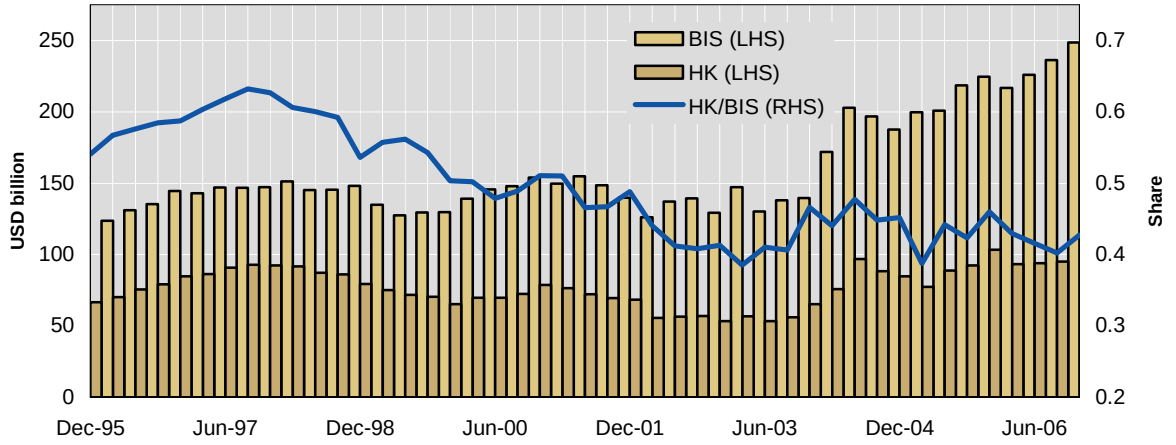
* Change is sum of two columns to the left.

Sources: IMF, Hong Kong Monetary Authority; BIS; authors' calculations.

IV.3 Hong Kong's share of China's projected international banking position

Such an outcome could represent a lot of business for banks in Hong Kong. To see this, consider what share that Hong Kong might end up with of the $2.7 trillion in China's international banking assets and liabilities projected for the end of 2012. While Cheung et al had to estimate how investment in Hong Kong would depend on the size of the market and its distance from the investor, the present estimation is much more straightforward. Inspection of Hong Kong's share of China's external assets and liabilities suggests that Hong Kong's share, after a prolonged decline from the time of the Asian financial crisis until early 2003, has stabilised at about 40% (Graph 4).

Graph 4: External loans and deposits vis-à-vis China



Sources: Hong Kong Monetary Authority; BIS; authors' calculations.

It remains to be demonstrated how such an increase in Hong Kong's international balance sheet would affect its standing vis-à-vis New York and London.[7] At this stage, suffice it to say that China's rapid growth and further financial integration with the world economy, like rapid growth and further financial integration in East and South Asia in general, can be expected to boost the region's financial centres, including Hong Kong.

V. Conclusion

It is easy journalism to write the story of the return of Shanghai as an international financial centre as a threat to Hong Kong's status as one. To be sure, Hong Kong may well enjoy some advantages that should be seen as transitory. For instance, the propensity of big Chinese firms to list their shares in Hong Kong may appear in retrospect as dependent on particular policies. The analogy might be the once-predominant position of the port of Hong Kong in China's external trade, which depended on political decisions rather than practical economics. But to write that Shanghai will eat Hong Kong is just dog bites man journalism.

The man-bites-dog argument of this paper is that the return of Shanghai might boost Hong Kong as an international financial centre. A certain plausibility attaches to this view when it is realised that Hong Kong ranked higher as an international banking centre in the last century when Shanghai was in the running than when it was kept out of the game by international war or national politics. With regard to international banking, at least, China's financial integration into the global economy can be expected to bulk up Hong Kong's balance sheet more than that of any other economy outside the mainland. There is a good prospect that Shanghai's re-integration into the global financial system will not only narrow the gap between itself and Hong Kong but also narrow the gap between Hong Kong and New York and London.

[7] The effect would be indirect in the case of poll-based ratings like that of Mainelli and Yeandle (2007), which puts Hong Kong third after London and New York.

Annex 1: Reed's measures of international banking pre-eminence

Reed depends on the following five variables:

1. ***Local bank headquarters***: the number of large internationally active commercial banks headquartered in the centre.
2. ***Local bank direct links***: The number of foreign international financial centres with direct links to the international financial centre through the large internationally active local banks headquartered in the centre.
3. ***Private banks***: The number of private (merchant or investment banks) with an office in the centre.
4. ***Foreign bank offices***: Large internationally active foreign commercial banks with an office in the centre.
5. ***Foreign bank direct links***: Foreign international financial centres with direct links to the international financial centre through the large internationally active foreign banks with an office in the centre.

Sources: adapted from Reed (1981, p 10), who cites as sources the *Rand McNally international Bankers Directory* (Chicago, Rand McNally, various issues beginning in 1901) and *The bankers almanac and year book* (London, various issues beginning in 1901) and *Moody's bank and finance manual* (New York: various issues beginning in 1901).

Annex 2: Robustness check: excluding Ireland from the regression

As a robustness test we estimate our model by excluding Ireland, which is not considered a financial centre in our sample but nonetheless as a low-tax host to multinational corporate treasuries has a sizable stock of external deposits and loans in relation to GDP. The estimated results are consistent with our previous findings, with GDP per capita, openness, as well as the dummies for the euro area and for the financial centres all being statistically significant and showing the expected signs, while interest rates and the depth of domestic credit market being insignificant. These results still hold when we leave out the lower income countries.

Table A1: Estimated determinants of cross-border bank deposits and loans in the OECD

Stock of deposits plus loans in relation to GDP at end 2005

	Full sample		Sample without Ireland and Luxembourg		Sample without Ireland, Luxembourg, Mexico, Slovakia and Turkey	
	(1)	(2)	(3)	(4)	(5)	(6)
Intercept	-2431.183*	-1091.584	-376.310**	-349.185***	-399.858**	-491.194***
	(0.068)	(0.272)	(0.024)	(0.007)	(0.033)	(0.005)
Openness	2.675	2.478	0.805***	0.696***	0.886***	0.849***
	(0.117)	(0.133)	(0.001)	(0.002)	(0.001)	(0.001)
GDP/Capita (log)	233.507	89.993	33.541**	34.279***	35.289*	47.054***
	(0.088)	(0.349)	(0.046)	(0.006)	(0.060)	(0.005)
Euro area	223.546*	189.860	36.669**	30.247*	29.216*	29.293*
	(0.088)	(0.137)	(0.026)	(0.059)	(0.093)	(0.065)
Financial centre	899.985***	909.721***	286.705***	290.233***	281.506***	287.585***
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
Interest rate	29.370	-	3.495	-	-0.248	-
	(0.187)	-	(0.186)	-	(0.948)	-
Domestic credit/GDP	-1.314	-	0.204	-	0.220	-
	(0.338)	-	(0.213)	-	(0.193)	-
Adjusted R^2	0.533	0.521	0.855	0.842	0.860	0.861
Number of observations	30	30	28	28	25	25

Note: * Significant at the 10% level. ** Significant at the 5% level. *** Significant at the 1% level.

Source: See Table 5.

Using the estimated coefficients in Table A1 as well as our previous assumptions on growth in GDP per capita and trade, we project that China's dollar GDP per capita would generate a 4% per annum growth in the country's international bank positions in relation to GDP (Table A2). This would boost the mainland's cross-border bank positions to 41% of GDP, or US$2.2 trillion, by 2012.

Table A2: Projection of China's external bank positions

Sum of cross-border bank assets and liabilities

	GDP per capita (US dollars)	Trade/ GDP (percent)	Change in cross-border bank assets and liabilities in relation to GDP due to		China's external bank positions		*Memo: Hong Kong's external positions vis-a-vis China (Billions of US dollars)*
			GDP per capita growth	Trade/GDP growth	Percent of GDP*	Billions of US dollars	
2005	1,716	63.4			10.0	224.6	*103.3*
2006	1,930	67.3	4.0	2.7	16.8	425.5	*170.2*
2007	2,172	70.3	4.0	2.1	22.9	655.9	*262.3*
2008	2,443	72.2	4.0	1.3	28.2	913.9	*365.6*
2009	2,749	72.8	4.0	0.4	32.7	1,196.6	*478.7*
2010	3,092	72.2	4.0	-0.4	36.3	1,500.6	*600.2*
2011	3,479	70.3	4.0	-1.3	39.0	1,822.0	*728.8*
2012	3,914	67.1	4.0	-2.2	40.9	2,157.8	*863.1*

* Change is sum of two columns to the left.

Source: See Table 6.

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