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Hong Kong SAR as a Financial Center for Asia: Trends and Implications

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Hong Kong SAR as a Financial Center for Asia: Trends and Implications

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Abstract

We document Hong Kong SAR's evolving role as an international financial center in the Asia region, the importance of the growing special link with China as well as supply-side advantages, and outline the scope for future financial services growth. Hong Kong SAR has a long established track record as Asia's premier center for cross-border financial transactions. Further financial opening of China is likely to consolidate Hong Kong SAR's leading position as Asia's international financial center over the medium term. However, preserving Hong Kong SAR's first-mover advantage in the long-term calls for a development strategy that balances reaping the benefits from the special China role with the need to transcend into a truly international center in the long run.

JEL Classification Numbers: F2, F3, G1, G2

Keywords: Financial integration, financial centers, international capital flows

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I. Introduction

This paper aims to document Hong Kong SAR's evolving role as an international financial center in the Asia region, with a special emphasis on its contribution to financial integration within Asia. Comparing Hong Kong SAR's performance with other financial centers, the paper identifies key factors that will determine the success of the authorities' declared strategy to consolidate Hong Kong SAR's position in the Asia region as an international financial hub, and as the financial services gateway for Mainland China. Based on this analysis, the paper also outlines the scope for future financial services growth, in particular from deepening financial links with Mainland China.

The findings of this paper can be summarized as follows. Hong Kong SAR has a long established track-record as Asia's premier center for cross-border financial transactions, particularly if account is taken of its relatively small domestic base. Its preeminence derives from its special link with Mainland China, in particular with respect to FDI flows, but supply-side factors, notably the availability of skilled labor, strong regulatory environment and the quality and depths of business services, have also been important. Further financial opening of China is thus likely to consolidate Hong Kong SAR's leading position as Asia's international financial center over the medium term. However as its competitive advantage in China-related intermediation over centers in the Mainland diminishes with financial-system modernization there, Hong Kong SAR's long-term standing as a financial center will increasingly depend on its ability to build a geographically diverse base for financial services that relies less on a domestic economy or hinterland.

II. Financial Centers and Integration: Trends from an Asian Perspective

There does not appear to be a universally accepted definition of the term "international financial center." Nor is there a unique framework of quantitative measures that would document their activities and relative performance. Earlier studies (e.g., Cheng, 1976; Johnson, 1976; Kindleberger, 1974) are also mostly nonquantitative and descriptive, combining aspects of urban and regional economics, and financial market development. On the other hand, more recent quantitative studies on financial centers and financial integration, often only cover vaguely related aspects such as the size of financial markets or indicators of activity. However it is unclear, to what extent these result from domestic activity rather than constituting an international financial service, i.e., intermediation between international 3rd parties.[2] It is this type of transaction that appears to be particularly relevant to analyze trends and policies for a small open city-economy such as Hong Kong SAR.

Hong Kong SAR has a long track record as a leading international banking center in Asia. A study by Reed (1981) based on five banking sector variables that, broadly speaking, combines the number of banks in a financial center and their links to other financial centers, identifies Hong Kong SAR as leading center in Asia, ahead of Tokyo from 1900−1925, and

[2] For a recent comprehensive overview of indicators of financial activity and Hong Kong SAR's ranking in the world, see Cheung and Yeung (2007).

again after the war until 1960.[3] At the same time, Reed's study puts London and New York consistently in the top positions. All this suggests, that the preeminence of certain financial centers over others is related to enduring and lasting structural factors, such as language, legal system, infrastructure, and proximity to markets. While the Reed study is unique in its long horizon, it is limited in its focus on banking sector activities. In what follows, we aim to overcome this limitation by looking at a more comprehensive set of cross-border financial transactions, including foreign direct investment, portfolio investment, and banking activities. In doing so, our focus to the extent possible is on bilateral data which helps to identify special country factors and linkages in explaining the preeminence of certain financial centers over others. The data and country samples are described further in Appendix I.

Table 1. Ranking Score of Selected Top Ten International Banking Centers

	London	New York	Hong Kong	Tokyo	Singapore
1900	100	87	77	--	--
1915	99	100	84	--	--
1930	100	93	74	70	--
1947	100	92	78	--	76
1960	100	97	78	80	--
1970	100	99	76	86	--
1980	100	100	89	90	--

Source: Reed (1981).

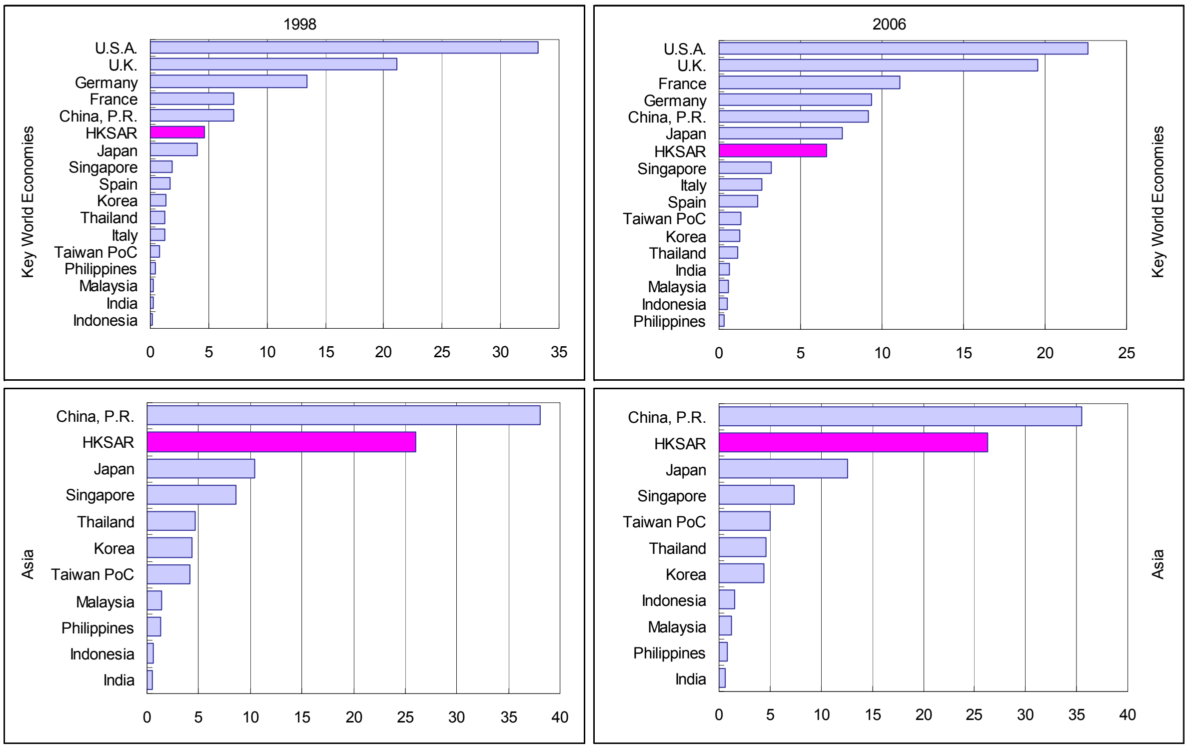
[3] Interestingly, Hong Kong SAR's preeminence is also surpassed by Shanghai, but only in 1925 and 1947.

Foreign Direct Investment

Hong Kong SAR's role as an intermediary of FDI flows seems small on a global scale, but it appears to be by far the dominant player within Asia (Figure 1).[4]

Figure 1. Foreign Direct Investment Flows

(In percent of total)



Sources: UNCTAD; EIU; and IMF staff estimates.

- Between 1998 and 2006 Hong Kong SAR's share in FDI flows involving key world regions in our sample gradually rose, but remained below 7 percent in 2006. In part, this is due to the fact that FDI flows involving largest five EU countries and the United States, exclusive of Asia, are dominant, accounting for 66 percent of global FDI flows in 2006 (Table 2).

[4] For the purpose of this paper, a country's share in bilateral flows is calculated as the sum of all outflows from and inflows into this country over the total of gross inflows and outflows. By this convention, a given flow is attributed twice, i.e., as an outflow from the source country and an inflow to the destination country. As a result, the share of bilateral inflows and outflows accounted for by a country is half the share of actual flows to which this country is a party.

- Within Asia, bilateral FDI flows involving Hong Kong SAR are only second to China. In 2006, Hong Kong SAR accounted for 26 percent of intra-Asian FDI flows, compared with China's 36 percent, while Japan was a distant third at 13 percent (Table 3A). In fact, the two single-largest flows by far in 2006 were recorded from Hong Kong SAR to China (US$27.8 billion; 15 percent), and from China to Hong Kong SAR (US$13.2 billion; 7 percent).

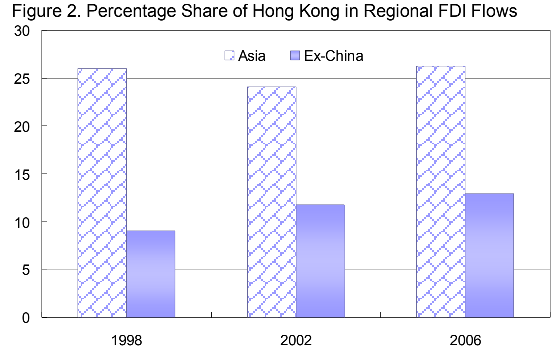
Table 2. Share of FDI Flows in 2006, Total US$2.7 trillion

		Investment from:				Total
		Asia	U.S.	EU5	Others	Outflows
		(In percent)				
Investment in:	Asia	3.4	0.6	0.9	2.4	7.2
	U.S.	1.0	--	2.5	3.4	6.9
	EU5	0.4	2.7	3.7	5.4	12.3
	Others	1.0	6.8	8.8	7.1	23.7
Total inflows		5.8	10.1	15.9	18.2	50.0
Overall flows		13.0	16.9	28.2	41.9	100.0

Sources: UNCTAD; EIU; and IMF staff estimates.

- Hong Kong's leading role within Asia as an intermediator of FDI flows thus rests on the China link. Excluding all China-related flows, Hong Kong SAR's share in intra-regional FDI flows drops by half to 13 percent in 2006 (Figure 2). However, this reflects a steady increase from 9 percent in 1998. If China is excluded, Hong Kong SAR only appears twice amongst the top ten FDI links in the region, compared with six times for Japan—the major source country of FDI in Asia—and five times for Singapore—both a major source and destination of FDI flows within Asia.[5]

Figure 2. Percentage Share of Hong Kong in Regional FDI Flows



Sources: UNCTAD; EIU; and IMF staff estimates.

[5] The practice of round tripping, driven by the differences in treatment of foreign and domestic investors, appears to be an important factor for the dominance of the Hong Kong SAR-China FDI link in the data (see UNCTAD, 2007). From a statistical point of view, round tripping may inflate FDI flows, which should actually be classified as domestic investment. However, to the extent that these flows require the same services (e.g., legal, consulting, financial, advisory) as other FDI flows channeled through Hong Kong SAR, they matter in measuring Hong Kong SAR's status as a financial center.

Table 3. Bilateral Cross-Border Transactions Within Asia

A. Share of FDI Flows in 2006, Total US$183 billion 1/

		Investment from:											Total
		HKG	CHN	IND	IDN	JPN	KOR	MYS	PHL	SGP	TWN	THA	Outflow
		(In percent)											
Investment in:	HKG	--	7.3	--	--	1.8	0.1	--	--	0.7	0.3	--	10.2
	CHN	15.2	--	--	0.1	4.1	3.0	0.3	0.2	1.8	2.9	0.2	27.8
	IND	--	--	--	--	0.4	0.1	--	--	0.2	--	--	0.6
	IDN	0.0	--	--	--	1.1	0.2	0.0	--	--	--	--	1.3
	JPN	0.1	0.0	0.0	0.0	--	0.0	0.0	0.0	0.0	0.1	0.1	0.3
	KOR	0.0	0.2	--	--	0.3	--	0.0	--	0.1	--	--	0.7
	MYS	0.0	0.1	0.0	0.0	0.1	0.1	--	--	0.3	0.1	--	0.7
	PHI	0.0	0.0	0.0	--	0.5	0.0	0.0	--	0.1	0.0	0.0	0.7
	SGP	0.2	0.0	0.0	0.1	1.4	0.2	--	--	--	0.5	0.0	2.5
	TWN	0.0	--	--	0.0	0.5	--	0.1	0.0	0.3	--	0.0	0.9
	THA	0.4	0.0	0.0	0.0	2.1	0.1	0.0	0.0	1.4	0.2	--	4.4
Total inflows		16.1	7.6	0.0	0.3	12.3	3.7	0.5	0.2	4.9	4.1	0.3	50.0
Overall flows		26.3	35.5	0.6	1.6	12.6	4.4	1.2	0.8	7.4	5.0	4.6	100.0

1/ Absolute values of flows are used in the calculation.

B. Share of Portfolio Investment in 2005, Total US$401 billion

		Investment from:											
		HKG	CHN	IND	IDN	JPN	KOR	MYS	PHL	SGP	TWN	THA	Total
		(In percent)											
Investment in:	HKG	-	-	0.0	0.0	2.2	0.3	0.0	0.0	3.4	-	0.0	6.0
	CHN	10.3	-	-	0.0	1.0	0.0	0.0	0.0	0.8	-	0.0	12.2
	IND	0.5	-	-	0.0	0.7	0.1	0.0	0.0	0.6	-	0.0	1.9
	IDN	0.1	-	0.0	-	0.1	0.0	0.0	0.0	1.6	-	0.0	1.9
	JPN	4.2	-	0.0	0.0	-	0.4	0.0	0.0	2.2	-	0.0	6.8
	KOR	3.1	-	-	0.0	1.9	-	0.0	0.0	2.3	-	0.0	7.2
	MYS	1.0	-	0.0	-	0.3	0.1	-	0.0	4.2	-	0.0	5.6
	PHL	0.3	-	0.0	0.0	0.3	0.0	0.0	-	0.2	-	0.0	0.9
	SGP	1.8	-	0.0	0.1	1.1	0.1	0.2	0.0	-	-	0.0	3.3
	TWN	1.1	-	-	0.0	0.3	0.0	0.0	-	0.8	-	-	2.3
	THA	0.6	-	0.0	0.0	0.2	0.0	0.0	0.0	1.1	-	-	1.9
Total		22.9	-	0.0	0.1	8.3	0.9	0.3	0.1	17.2	-	0.2	50.0
Overall investment		28.9	12.2	1.9	2.0	15.1	8.1	5.9	1.0	20.5	2.3	2.1	100.0

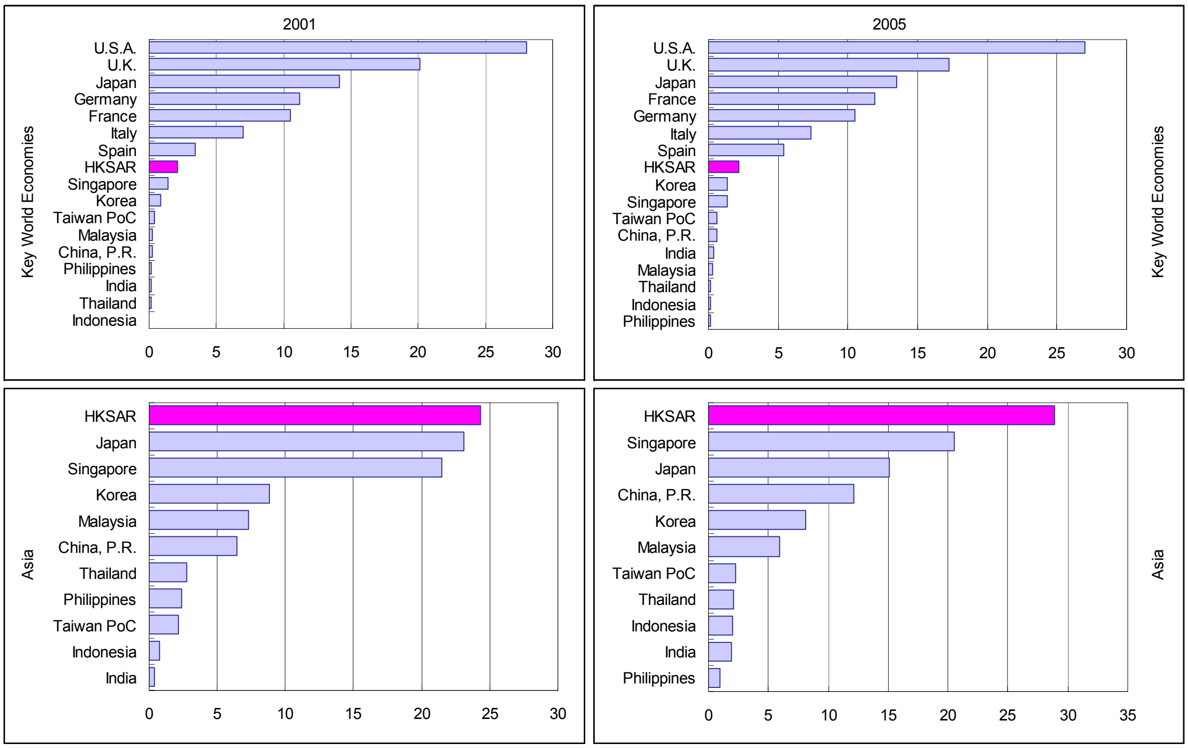
Sources: UNCTAD; EIU; and IMF staff estimates.

Portfolio Investment

Unlike for FDI, Hong Kong SAR plays a lead role inside Asia in intermediating portfolio investments, even if links with Mainland China are excluded (Figure 3).

Figure 3. Portfolio Investment

(In percent of total)



Sources: IMF, CPIS; and IMF staff estimates.

- From a global perspective, the United States and EU5 again account for the bulk of cross-border portfolio assets and liabilities, with portfolio assets and liabilities involving them but not Asia accounting for over two thirds of all holdings in 2005, a share that has remained roughly stable since the first survey in 2001. Similarly, of the total portfolio assets held by foreigners in Asia, some US$2.2 trillion in 2005, holdings by Asian countries only account for 9 percent, while the U.S. accounts for 40 percent and the EU5 for 20 percent (Table 4).

Table 4. Share of Portfolio Investment in 2005, Total US$52 trillion

		Investment from: Asia	U.S.	EU5	Others	Total
		(In percent)				
Investment in:	Asia	0.4	1.7	0.9	1.2	4.2
	U.S.	1.7	-	2.1	6.5	10.2
	EU5	1.2	2.8	4.5	7.3	15.8
	Others	2.1	4.4	6.7	6.5	19.7
Total		5.4	8.9	14.2	21.5	50.0
Overall investment		9.7	19.1	30.0	41.2	100.0

Sources: IMF, CPIS; and IMF staff estimates.

- Regarding cross-border holdings within Asia, Hong Kong SAR's share in assets and liabilities was 29 percent in 2005, followed by Singapore (20 percent) and Japan (15 percent) (Table 3B). Even if assets held in China are excluded, Hong Kong SAR's share was still over 24 percent, up from 22 percent in 2001.[6]

- Regarding Hong Kong SAR's role as an intermediator of portfolio investment from/to outside the Asia region, in 2005 it accounted for 6 percent of U.S. and EU5 investments in the region, and 10 percent of Asian investments in the United States and EU5. On the outflow side, this was the largest share after Japan (83 percent). On the inflow side, Japan (61 percent), South Korea (12 percent) ranked before, and Taiwan POC (6 percent) was on par with Hong Kong SAR.

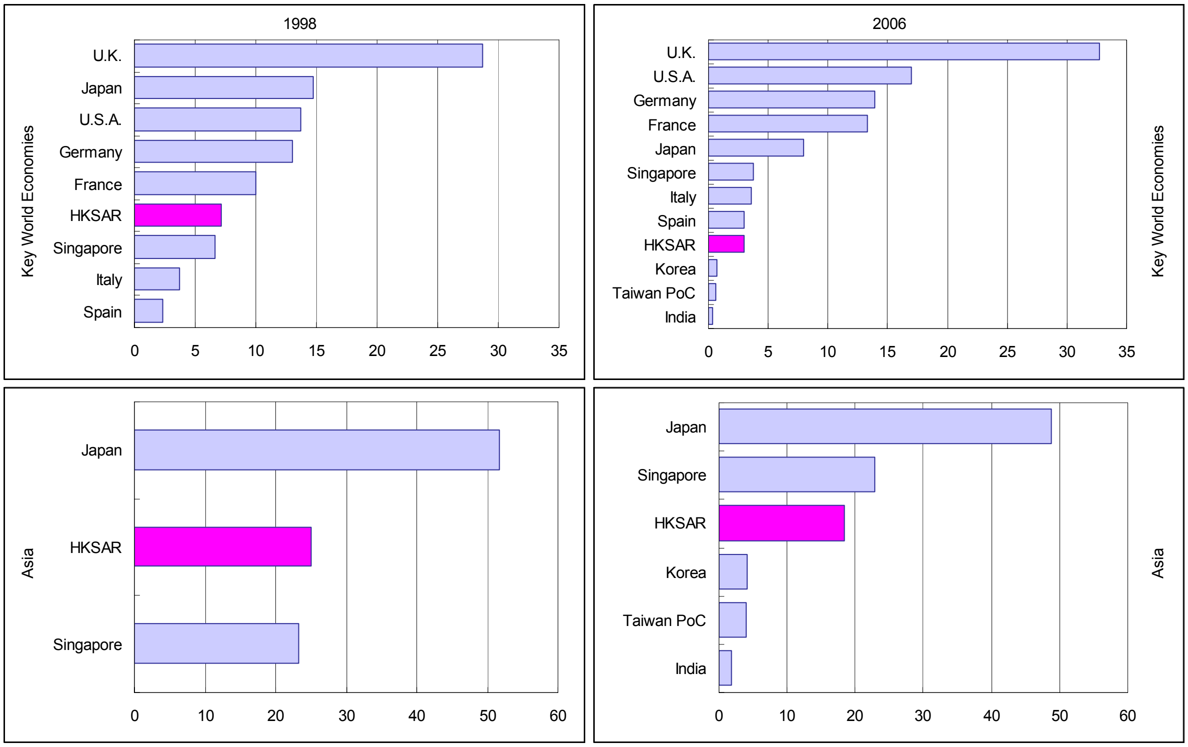
Banking Activities

Based on the international banking statistics of the BIS, Hong Kong SAR plays a less prominent role in cross-border banking than as an intermediator of FDI and portfolio investment (Figure 4). Its total share in gross external positions reported by Asian banks was 18 percent at end-2006, down from 25 percent in 1998. Japan and Singapore, have been playing more prominent roles in bank intermediation, accounting for 49 percent and 23 percent, respectively, of Asian banks external assets and liabilities in 2006. Unlike the data used for FDI and portfolio investment, BIS banking statistics do not permit a bilateral breakdown. Nevertheless, the risk that activities with China skew results appears rather small.[7]

[6] China does not participate in the CPIS, so there are no data on liabilities vis-à-vis China. Nevertheless, given existing tight controls on capital flows, amounts are believed to be small and to not change the thrust of trends presented here. For example, under the QDII program for retail investors, financial institutions are reported to have invested less then US$1 billion on behalf of their customers by mid-2007.

[7] According to BIS, Table 6A (external positions of banks in all currencies vis-à-vis all sectors vis-à-vis individual countries) total assets and liabilities vis-à-vis China were US$280.2 billion at end-2006, equivalent to 0.6 percent of the aggregate external positions of all reporting banks in the BIS system.

Figure 4. Banking Activities
(In percent of total)



Sources: BIS; and IMF staff estimates.

Gauging 3rd Party Flows

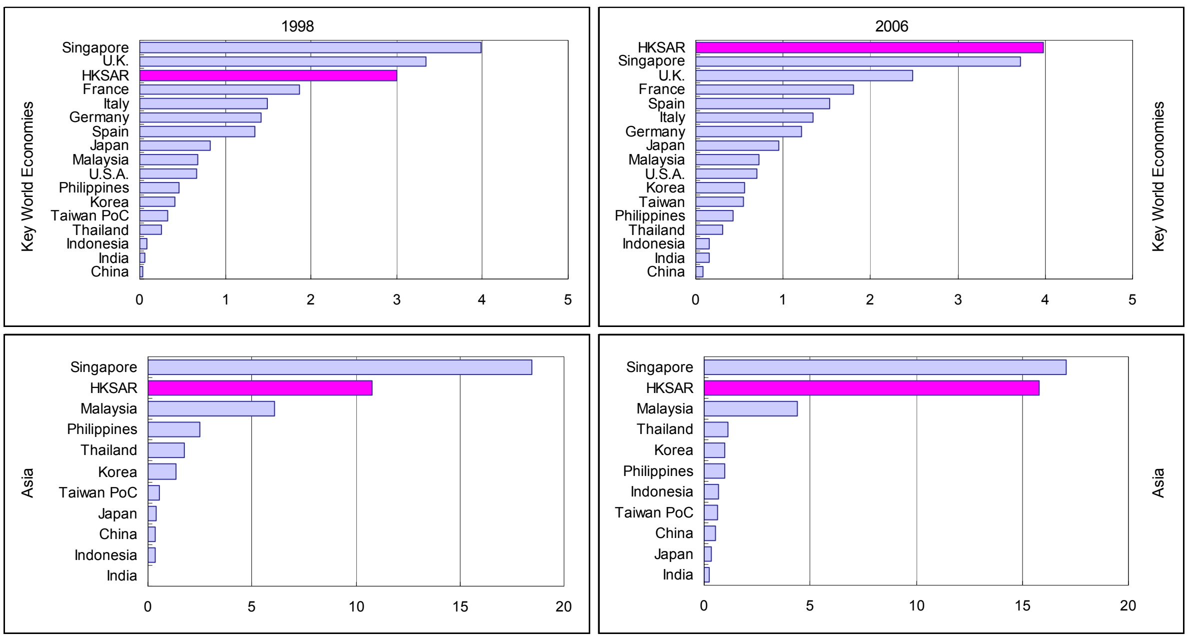
The presence of countries in international financial markets arises either from the need to satisfy domestic demand or to provide services to other countries. It is the latter activity that reflects the role of a country as an international financial center, narrowly defined. In this sense, comparing a country's share in world capital flows with its share in world GDP, thereby controlling for domestic demand, provides a first gauge for its status as an international financial center. On this count, Hong Kong SAR, Singapore, and the United Kingdom consistently stand out on all types of capital flows (Figures 5, 6, and 7).

- Regarding FDI, Hong Kong SAR appears to be the leader with its share in FDI flows of the key world regions in our sample in 2006 12 times larger than its share in GDP, followed by Singapore (8 times larger) and the United Kingdom (3 times larger). By contrast the United States, the world's largest economy (and leading source as well as recipient of FDI), has a ratio of less than 1 in 2006. While the top rankings have shown little change since 1998, the ratios have nearly doubled for Hong Kong SAR and Singapore, but remained stable for the United Kingdom.

- On portfolio investment, Hong Kong SAR has narrowly overtaken Singapore as an intermediator in 2005 as the ratio of its share in cross-border investments relative to its GDP-share rose to 4 (from 3 in 2001), while Singapore's has fallen slightly below 4. However, if only intra-Asian positions are taken into account, Singapore still holds a small edge over Hong Kong SAR, but the gap has been narrowing rapidly. In 2005, both cities' presence in cross-border portfolio investments with Asia was 15 times larger than their share in the region's GDP. Taken together, this suggests, that while Hong Kong SAR plays a somewhat bigger role than Singapore as an intermediator of portfolio flows to and from outside the Asia region, its rapidly growing presence inside Asia is also boosting its role at the global level.

- By contrast, Singapore has consistently held a leadership role in banking over Hong Kong SAR. In 2006, the ratio of Singapore's world share in cross-border banking positions relative to its share in global GDP was about 10, nearly twice the level observed for Hong Kong SAR.

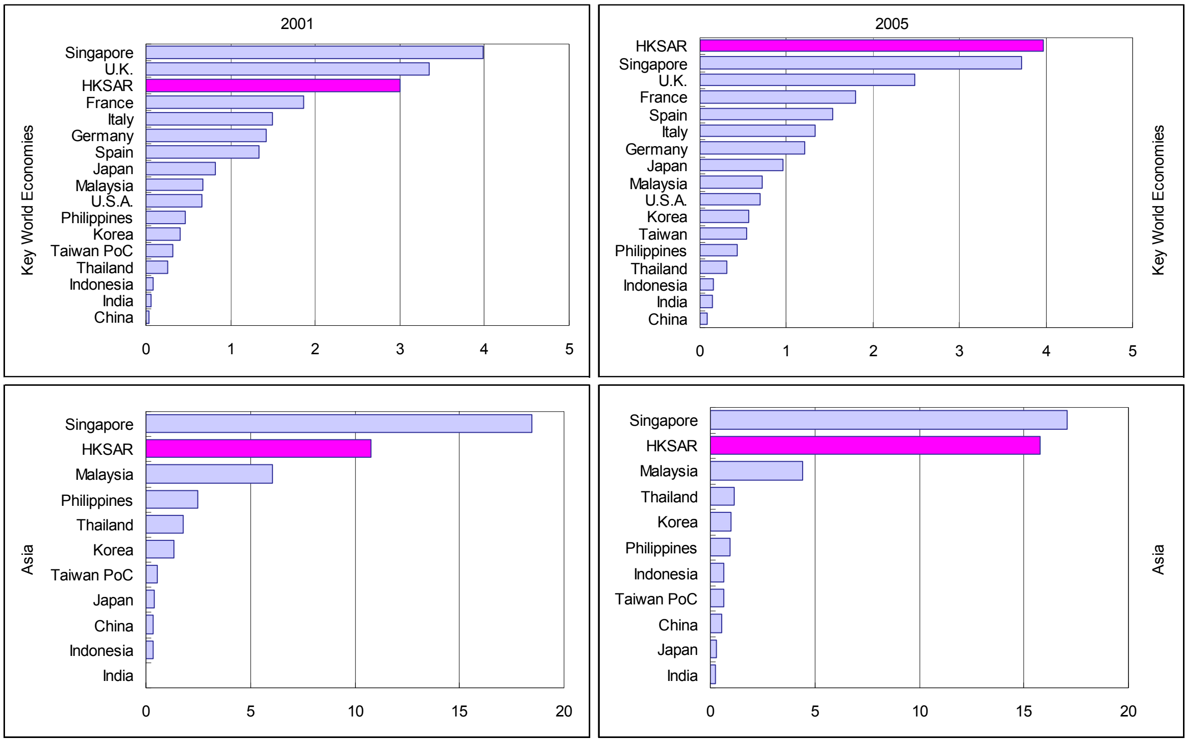
Figure 5. Intensity of Foreign Direct Investment 1/



Sources: UNCTAD; EIU; and IMF staff estimates.

1/ Ratio of share in cross-border transactions to share in GDP.

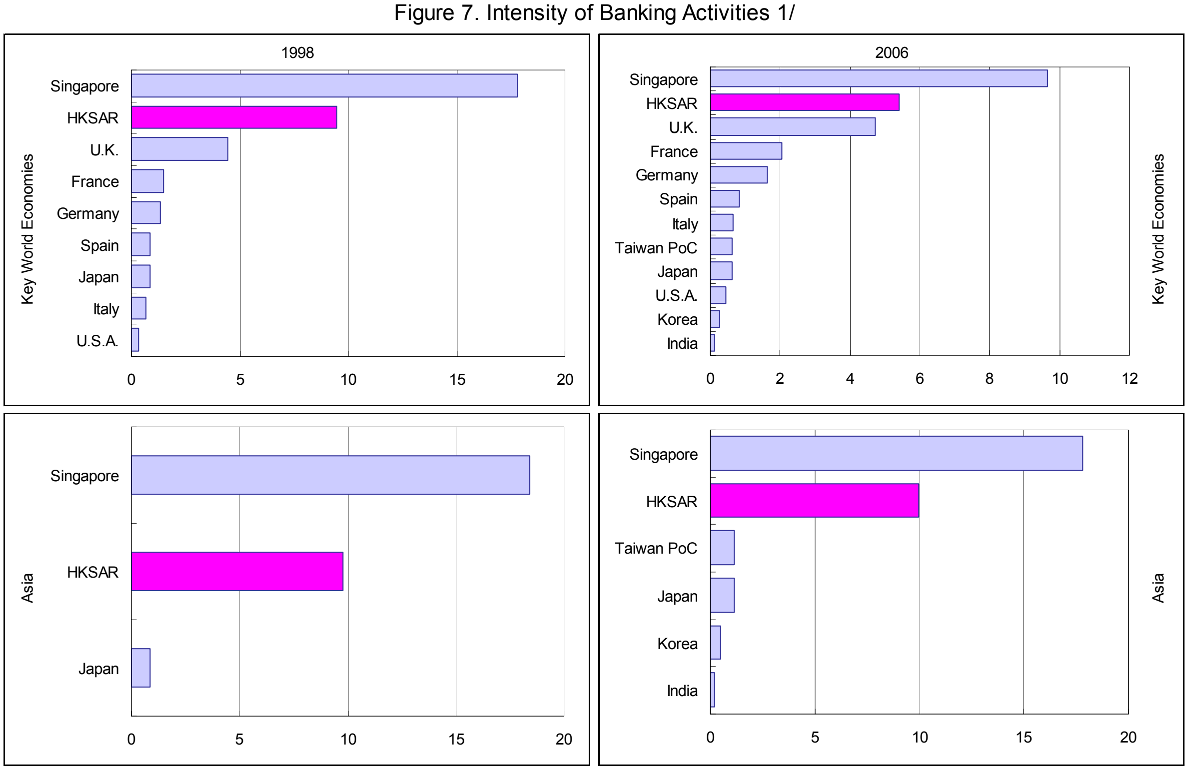
Figure 6. Intensity of Portfolio Investment 1/



Sources: IMF, CPIS; and IMF staff estimates.

1/ Ratio of share in cross-border transactions to share in GDP.

Figure 7. Intensity of Banking Activities 1/



Sources: BIS; and IMF staff estimates.

1/ Ratio of share in cross-border transactions to share in GDP.

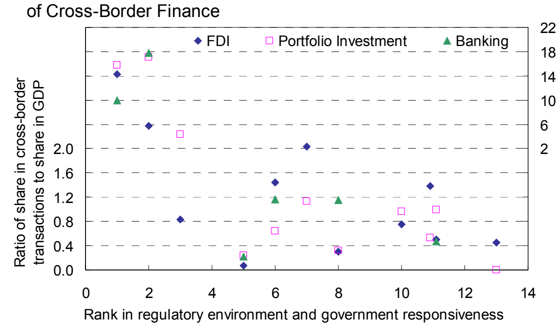
III. Implications

Demand and Supply Factors

Hong Kong SAR in some ways resembles more other international financial centers with a large domestic economy, such as New York, than those without one, such as Singapore or London. As a small open city-economy, Hong Kong SAR derives its presence in international finance primarily from its ability to offer services to nonresident 3rd parties. However, unlike Singapore, its leading role as an international financial center in Asia stems from bilateral flows with the Mainland, particularly in FDI where the process of China's gradual capital account opening is more advanced than for other types of capital flows.

Nevertheless, supply-side factors have also played an important role in establishing Hong Kong SAR as an international financial center. For example, the rapid growth of Hong Kong SAR as an asset management and hedge fund center in Asia in recent years rests on its already high concentration of financial institutions, well functioning legal and regulatory systems, and highly skilled and flexible labor force.[8] In a McKinsey survey of executives these were viewed as the most important of 18 factors defining the success of a financial center.[9] As shown in a study by the Securities and Futures Commission (SFC), Hong Kong SAR, and also Singapore, consistently top various competitiveness indicators for global financial centers on these dimensions.[10] For the Asian countries in our sample, rankings measuring the availability of skilled labor and professional services, the quality of regulations and government, and the business infrastructure, all are positively related to the intensity of cross-border FDI, portfolio investment and banking activities, which is proxied by the ratio of a country's share in Asian cross-border finance to its share in Asian GDP (Figures 8, 9, and 10). While these relations do not necessarily imply causality, they suggest a positive feedback mechanism whereby the standing as an international financial center and strong supply-side factors mutually reinforce each other.

Figure 8. Labor Competitiveness and Intensity of Cross-Border Finance



Sources: SFC; and IMF staff estimates.

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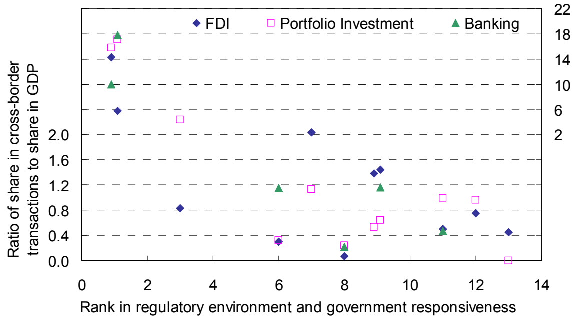
[8] See Box 1.4, IMF (2007).

[9] The results of the McKinsey Financial Services Senior Executive Survey are reported in the City of New York and the United States Senate (2006).

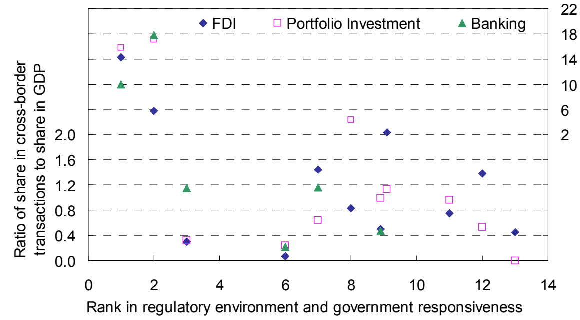
[10] SFC (2006) contains a detailed overview and analysis of competitiveness rankings and their relevance for financial centers based on the *World Competitiveness Yearbook*, *Global Competitiveness Report*, *Index of Economic Freedom*, *Economic Freedom of the World*, and the *Doing Business Report in 2006.*

Figure 9. Regulatory Environment and Intensity of Cross-Border Finance



Sources: SFC; and IMF staff estimates.

Figure 10. Business Infrastructure and Intensity of Cross-Border Finance



Sources: SFC; and IMF staff estimates.

Regression estimates broadly confirm the importance of supply-side factors in addition to domestic demand factors (Table 5). The estimates here are based on OLS regression using a sample of 47 advanced and emerging market economies. Their average share in global cross-border financial transactions—proxied by the sum of FDI, portfolio investment, banking and other investment flows during 2003−05 is the dependent variable. While a country's share in international capital flows rises with its share in world GDP, its level of development (proxied here by per capita income), which tends to correlate with supply-side factors such as the skills base, the strength of institutions and the rule of law, is at least as important. Both variables are statistically significant across the entire range of model specifications. While an increase in a country's GDP share tends to result in a less than proportional increase in its share in global capital flows, for each 10 percent increase in per capita GDP a country's share in international capital flows rises by about 12−14 percent.[11] A dummy for EU countries is statistically significant, suggesting that the common market is boosting financial integration. Interestingly, variables capturing structural factors directly, such as government effectiveness and regulatory quality, do only appear to matter when interacting with the EU dummy.[12] This suggests that the comparative advantage of international financial centers tends to be more sensitive to such factors at higher levels of development and regional integration.

[11] The estimation results also reveal that a country's share in international capital flows is not sensitive to the capital account openness. This could be due to difficulties in appropriately measuring capital account openness, or the explanatory power of the variable may also be captured by the level of development, as advanced economies tend to have more open capital accounts.

[12] A number of other structural factors (such as the World Economic Forum, *The Global Competitiveness Report*, and the World Bank, *Worldwide Governance Indicators*) were tried in the estimation without the interactive term. The results were not satisfactory, reflecting in part that these structural factors are highly correlated with each other and their explanatory power may be captured by the per capita GDP variable.

Table 5. Determinants of a Country's Share in Global Capital Flows

Independent Variables	Model 1 Estimated coefficient	Model 1 t-value	Model 2 Estimated coefficient	Model 2 t-value	Model 3 Estimated coefficient	Model 3 t-value	Model 4 Estimated coefficient	Model 4 t-value
	(Dependent variable: log of share in flows, 2003–2005) (Number of observations: 47)							
Log of GDP share	0.803	14.9	0.742	14.4	0.762	16.1	0.754	15.3
Log of per capita GDP	1.441	7.5	1.237	8.0	1.204	9.0	1.213	8.4
Capital account openness 2/	0.095	0.8	0.019	0.2	0.041	0.5	0.031	0.3
Dummy for EU			0.938	4.6				
Dummy for EU x regulatoryQ 3/					0.633	3.9		
Dummy for EU x BURQ 4/							0.254	4.3
Adjusted R-square	0.8556		0.8932		0.8951		0.8957	

Source: IMF staff estimates.

1/ Based on OLS (Newey-West heteroskedasticity consistent standard errors).
2/ Chinn-ito index of capital account openness.
3/ *World Bank Governance Indicators* database.
4/ *International Country Risk Guide:* Indicator for quality of bureaucracy.

Prospects for Future Growth

The combination of Hong Kong SAR's special relationship with the Mainland and its supply-side strengths are likely to be the key drivers of Hong Kong SAR's growth as an international financial center for some time. For example, one indication of potential growth can be derived from assuming that Hong Kong SAR's share in Chinese portfolio flows converges to its current share in FDI intermediation. Based on bilateral portfolio investment data for OECD countries, Cheung and others (2006) estimate that China's outward portfolio investment would have amounted to some US$340 billion at end-2005, or about three times the actual level, had its capital account been as open as in OECD countries. Taking Hong Kong SAR's share in China's FDI outflows as a benchmark, some 60 percent (excluding an estimated 50 percent of FDI outflows due to round tripping), the Chinese outward portfolio investments that Hong Kong SAR could capture, would amount to about US$200 billion. This would increase Hong Kong SAR's cross-border portfolio assets and liabilities by over 35 percent, from US$574 billion at end-2005. It would make Hong Kong SAR by far the dominant portfolio investment center in Asia, with cross-border investments at end-2005 within the region at some US$400 billion, and boost its world share from 1.1 percent to 1.5 percent.[13]

Moreover, recent administrative measures seem to underscore Hong Kong SAR's privileged role in China's gradual capital account liberalization for portfolio flows. Under the latest round of the Mainland and Hong Kong Closer Economic Partnership Agreement, Mainland fund management companies, with approval of the China Securities Regulatory Commission, will be allowed to establish subsidiaries in Hong Kong SAR to operate relevant businesses.

[13] In addition, it is conceivable that some form of "round tripping" may also occur with portfolio investments to the extent that investments through Hong Kong SAR-based firms and products offer advantages over direct domestic investments in the Mainland.

Moreover, the Qualified Domestic Institutional Investor (QDII) program is being expanded to allow investment in overseas stock markets (in addition to fixed income products previously), with Hong Kong SAR being an attractive destination given its preeminence in listings of Mainland companies. Finally, in mid-August, the Chinese authorities announced a pilot project under which local retail investors can directly invest in non-Mainland securities. With the pilot initially restricted to the Hong Kong SAR market (given the need to agree on a memorandum of understanding with the relevant Mainland regulators), trading activity should be bolstered here, although the modalities are still to be set. The first Chinese renminbi-based bond issuance in Hong Kong SAR in July offers another avenue of growth, although prospects are limited for now owing to a small renminbi deposit base.

As a result, Hong Kong SAR is likely to enjoy a first-mover advantage as the Mainland's financial system further integrates with the world, but how to preserve this momentum will be critical in the long run. Hong Kong SAR's traditional strengths vis-à-vis domestic centers in terms of a first-rate financial sector infrastructure and skills base could diminish over time relative to its disadvantage regarding cultural proximity, expert knowledge of the local economy, or access to local distribution networks for financial products. This calls for a development strategy that balances reaping the nearer-term benefits from the special China role with the need to transcend into a truly international center in the long run. In addition to expanding Hong Kong SAR's role in Mainland intermediation, developing a more geographically diverse base for financial services that relies less on a domestic economy or hinterland can be done, as evidenced by the examples of London at the global level, or Singapore in Asia. It would require maintaining Hong Kong SAR's competitive edge on skills, legal and institutional infrastructure, as well as regulation, thereby creating an environment that promotes both stability and innovation. Further improving English language skills will also be critical as English is not only the language of global finance, but also the lack of its use in other sectors of society would make it difficult to attract and retain a globally diversified pool of human talent. Similarly, quality of life issues, including cultural vibrancy and a clean environment, are likely to become increasingly important factors.[14] Developing new markets and instruments, including emissions trading or aging-related products, could bolster further Hong Kong SAR's role as a less China-centric and more international financial center.

[14] While quality of life has been ranked only 11th for a global financial centers index compiled by Mainelli and Yeandle (2007), this does not capture its indirect impact, e.g., by reducing the availability of skilled labor.

APPENDIX I: DATA ISSUES

Data on bilateral financial linkages cover the following countries: In Asia, China, Hong Kong SAR, India, Indonesia, Japan, South Korea, Malaysia, Philippines, Singapore, Taiwan (POC), and Thailand; in Europe the largest five EU member countries (EU5), i.e., Germany, France, Italy, Spain, and the United Kingdom; and the United States.

Regarding foreign direct investment (FDI), data on flows, which are preferred over stocks to avoid accounting for valuation changes and other adjustments (e.g., write-offs), are sourced from the UNCTAD, *Foreign Direct Investment Database* and *Economist Intelligence Unit* (EIU). IMF data are not available on a bilateral basis. The data are broadly compatible with the IMF BOPM5 definition of FDI, thereby combining three broad aspects, i.e., new equity flows, intra-company debt transactions, and re-invested earnings. While the data do not distinguish between M&A and greenfield investments, this shortcoming does not affect the findings in this papers, which is about any form of financial linkages. Both inflows and outflows are reported on a net basis, i.e., capital transactions credits less debits between a given direct investor and its foreign affiliate. To address bilateral discrepancies, which mainly arise from differences in reporting practices across countries, we rely on FDI inflow data reported in the host economies as they tend to be more complete and are available for all developing Asian economies under consideration.

Bilateral data on portfolio investment are only available as stocks and are obtained from the IMF's *Coordinated Portfolio Investment Survey* (CPIS). China (and also Taiwan POC) does not participate in the CPIS, so there are no data on liabilities vis-à-vis China. Nevertheless, given existing tight controls on capital flows, amounts are believed to be relatively small and not change the thrust of trends presented here.

To obtain a measure of cross-border banking activities, we use the *Locational Banking Statistics* of the BIS (Table 2a: External positions of banks in all currencies vis-à-vis all sectors in individual *reporting* countries). The *Locational Banking Statistics* are useful for measuring cross-border lending flows. However, reporting countries in the BIS only cover more advanced economies and as such the Asian sub sample only includes Hong Kong SAR, India, Japan, Singapore, South Korea and Taiwan (POC).

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