6 Hong Kong, China

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Executive Summary

Although the debt market in Hong Kong, China had a slow start, lagging behind the rapid development of the banking and equities markets in the late 1970s, it had reached a total of approximately HK$414 billion (US$53 billion)[1] by the end of the third quarter of 1999.

However, after years of fiscal surpluses, Hong Kong, China suffered a fiscal deficit of HK$23.2 billion (US$3 billion) following the Asian financial crisis, which underscored the need for further development of the debt market.

A well-developed debt market can diversify funding sources and reduce maturity mismatch by channeling long-term savings to long-term investments. However, Asian governments have traditionally invested most of their reserves outside the region, mainly in the Organisation for Economic Co-operation and Development (OECD) markets. Asia as a whole has a high saving rate of about 30 percent, and a mature debt market can serve as an additional and stable investment channel for investors.

In all highly developed financial markets, companies routinely raise funds through the issuance of debt instruments, and investors generally regard these as a conventional investment. However, Asia in general suffers from a marked absence of deep and liquid debt markets and the alternative source of business finance that these markets can provide. In his speech for the 1999 to 2000 budget, the Honorable Donald Tsang, the Finance Secretary, stressed that the Government regards further development of the bond market as a pressing priority.

In the current market, Exchange Fund papers, issued by the Hong Kong Monetary Authority (HKMA), the de facto Central Bank, account for about a quarter of the debt market, with private sector papers accounting

1. The Hong Kong dollar is linked with the US dollar through the Central Bureau of Statistics. For illustration purposes, the exchange rate of US$1: HK$7.75 was used throughout this paper.

for the remaining three quarters. Issuance of debt securities in the private sector during the first three quarters of 1999 was very active.

Since the launch of the Exchange Fund Bills and Notes Program in 1989, the tenor of Exchange Fund papers has been lengthened to 10 years through a gradual issuance process. This lengthening of the maturity of the papers has provided a reliable benchmark for the issuance of debt securities. Recently, the Government has decided that, as part of the measures to strengthen the Currency Board system, new issuance of Exchange Fund papers will be limited to an inflow of foreign funds to directly provide the corresponding currency backing. This allows the size of the Exchange Fund papers to grow gradually. The success of the Exchange Fund Paper Program has facilitated the development of the debt market in Hong Kong, China. Since August 1999, the Exchange Fund notes (EFNs), the papers with the longer tenor, have been listed on the Stock Exchange of Hong Kong (SEHK).

Through the continued efforts of the HKMA, an infrastructure for the clearing and settlement of debt securities has also been put in place. The Central Moneymarkets Unit (CMU) is now linked to Euroclear, Cedel, the Reserve Bank Information and Transfer System (RITS), and Austraclear in Australia and New Zealand. A bilateral link with Korea Securities Depository was also set up at the end of 1999. Such important linkages have helped promote Hong Kong dollar debt securities overseas.

With its existing infrastructure, Hong Kong, China has an important role to play as a regional financial center for the bond market in the region. The government bond market is liquid, with a daily turnover of about 10 percent of the total outstanding amount. Tenors of papers have been extended up to 10 years, creating a reliable benchmark yield curve for Hong Kong dollar debt. The CMU, which is operated by the HKMA, is linked up to major Asian and European clearing houses, thereby providing an efficient means of transacting debt papers both domestically and across borders.

Hong Kong, China is also well positioned to be a leading regional financial center for listed foreign currency debt papers. Currently, however, all listed debt papers denominated in foreign currencies have to be cleared and settled outside the Central Clearing and Settlement System (CCASS) operated by the Hong Kong Securities Clearing Company (HKSCC), as it is not yet capable of handling foreign currencies. The HKSCC has undertaken to allow the clearing and settlement of securities in foreign currencies under the Real Time Gross Settlement System (RTGS). It was envisaged that this would have been implemented in the middle of 2000, providing a major step forward in stimulating trading of debt securities listed on the SEHK.

Bond market development in Hong Kong, China has another great advantage in the form of the Government's policy of providing a free, open, and competitive environment for the development of the local economy. The Government provides the necessary infrastructure and a stable legal and administrative framework under which businesses flourish with minimum intervention, having implemented a set of prudential fiscal, monetary, and regulatory policies to enhance economic growth.

However, a number of factors have been identified for the further development of the debt market, particularly to improve liquidity and depth. While over-the-counter (OTC) debt market activity has grown satisfactorily in Hong Kong, China, trading activity in the listed debt market remains low. Secondary market trading in debt securities is generally low relative to that in the equities market, even in more established debt capital markets such as New York and London. However, the level of secondary market activities for debts is negligible when compared with the activities for equities.

Improve Information Flow. Market information relating to the papers traded in the OTC market is available through information vendors such as Reuters and Bloomberg. An improvement in the flow of information between the OTC and the SEHK should be considered to enhance transparency.

Market-Making and Credit Rating. A market-making system, similar to the one in the OTC market, should be introduced on the SEHK to encourage trading, and improvements made in credit rating and market infrastructure.

Widen the Investor Base. Widening of the investor base should result from the Government's decision to launch the Mandatory Provident Fund (MPF) in December 2000. It has been estimated that annual pension fund contributions will amount to more than HK$10 billion (US$1.3 billion), or around one percent of gross domestic product (GDP) initially, growing to around HK$60 billion (US$7.74 billion) when the scheme matures. The establishment of MPF funds will significantly increase the demand for long-term Hong Kong dollar debt securities. To further encourage the participation of retail investors in the debt market, more efforts should be made in public education on debt securities.

Modernize Legal Framework. The existing legal framework for regulation of debt securities has become outdated in certain aspects, as it is based on United Kingdom legislation dating from 1929. The Securities and Futures Commission (SFC) formed a working group in November 1999, comprising issuers, practitioners, and advisers in the capital market, to study these deficiencies with a view to creating a framework more able to facilitate market development.

Introduce Short-Selling. While short-selling of Exchange Fund papers is permitted, other debt securities listed on the SEHK cannot be short sold. Consideration may also be given to permit short-selling for other debt securities to help develop debt market liquidity in Hong Kong, China.

Introduce More Derivatives Products. The derivatives market is very active and has been growing in both volume and products. The futures contract on Hong Kong Inter-Bank Offer Rate (HIBOR) is the only derivative product on interest rate, which is listed on the Hong Kong Futures Exchange (HKFE). However, it is not very actively traded. Consideration may be given to introducing more derivative products on the Exchange Fund papers (either futures or options), if the market demands it, to help increase hedging opportunities, and thereby the marketability of debt securities.

I. Fiscal Policy and Management

Government policy provides a free, open, and competitive environment for the development of the local economy. The Government provides the necessary infrastructure and a stable legal and administrative framework under which businesses flourish with minimum intervention, having implemented a set of prudent fiscal, monetary, and regulatory policies to enhance economic growth.

A set of fiscal guidelines have been followed, with the aim of fostering a flexible and competitive environment for the private sector. These guidelines are essentially: (i) prudential budgetary management, with minimal deficits; (ii) a simple tax system and low tax policy; (iii) a small government and strong private sector; (iv) sufficient social, physical, and regulatory infrastructure; (v) social services programs, and (vi) a stable exchange rate.

Between 1991 and 1998, Hong Kong, China established an outstanding record of budgetary performance. During this period, a budget deficit of HK$3.1 billion (US$400 million) occurred only once (in 1995/96)[2] due to huge spending on the airport project. In the remaining years, budgets

2. In Hong Kong, the fiscal year is from 1 April to 31 March.

were in surplus, ranging from 1 percent to 6.5 percent of GDP (HK$10.8 billion [US$1.39 billion] in 1994/95 to HK$86.9 billion [US$11.2 billion] in 1997/98). The Government had a reserve balance of HK$457.5 billion (US$59 billion), representing 34 percent of GDP, by the end of the fiscal year 1997/98.

TABLE 1
Government's Reserve Balances (General Revenue Accounts and Funds)
(HK$ million)

Year	Opening Reserve Balances	Revenue	Expenditure	Subtotal	Change in Net Worth of Land Fund	Surplus/ Deficit	Closing Reserve Balances
1989	45,448	72,577	56,592	16,066	—	16,006	65,514
1990	61,514	82,430	71,367	11,063	—	11,063	72,577
1991	72,577	89,524	85,557	3,967	—	3,967	76,544
1992	76,544	11,4701	92,192	22,509	—	22,509	99,053
1993	99,053	13,5311	113,332	21,979	—	21,979	121,032
1994	121,032	166,602	147,438	19,164	—	19,164	140,196
1995	140,196	174,998	164,155	10,843	—	10,843	151,039
1996	151,039	180,045	183,158	(3,113)	—	(3,113)	147,926
1997	147,926	208,358	182,680	25,678	—	25,678	173,604
1998	370,676[a]	275,220	194,360	80,860	6,006	86,866	457,542

Note: Figures exclude transfers between the General Revenue Account and Funds.
[a] Including net worth of HK$197,072 million received from Trustee of the former SAR Government Land Fund at 1 July 1997.

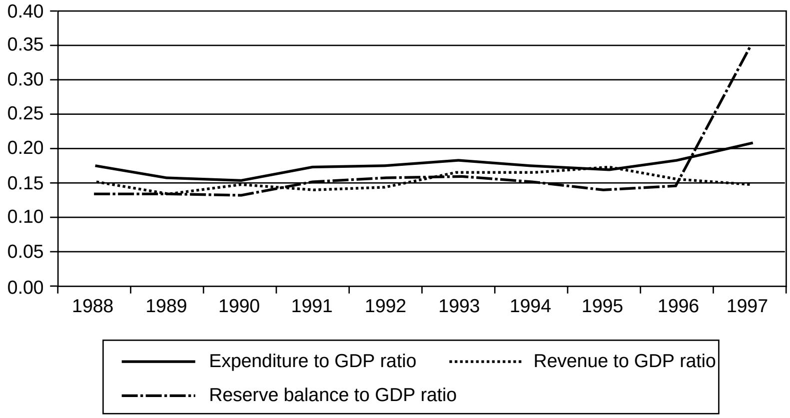
Sources: *Annual Digest Hong Kong of Statistics*, Statistics and Census Department, Hong Kong, China.

Following the Asian financial crisis, however, the government budget recorded a HK$23.2 billion (US$3 billion) deficit in the fiscal year 1998/99. To relieve –the burden on taxpayers, the Government provided a number of tax concessions, including a rebate of 10 percent on 1997/98 salaries, profits, and property taxes; a 50 percent reduction in the rates payable for the July to September 1999 quarter; and a freeze on government fees and charges.

The economy is now in the process of recovery. The economic growth rate is estimated to be 1.8 percent for 1999, while a budget deficit of HK$36.5 billion (US$4.7 billion) is estimated for the fiscal year 1999/2000.

As the Finance Secretary announced in his budget speech in March 2000, the forecast for 1999 to 2000 is a deficit of HK$1.6 billion (US$200 million). He also estimated a budget deficit of HK$6.2 billion (US$800

FIGURE 1
Government's Reserve Balances
Revenue and Expenditure



Sources: *Hong Kong Annual Digest of Statistics*, Census and Statistics Department, Hong Kong, China.

million) for 2000 to 2001. However, he had stressed in both the 1999 to 2000 and 2000 to 2001 budgets that Hong Kong, China must return to balanced budgets in the medium term, and resume its normal fiscal behavior in the post-recession period.

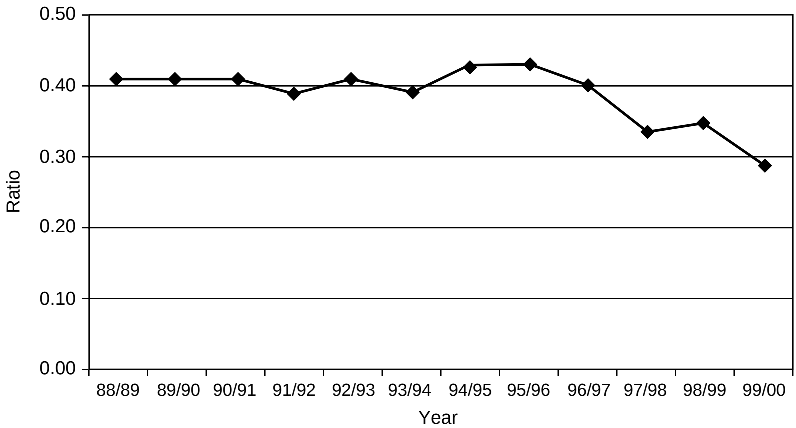
A. Government Revenue

The prudential budgetary management approach has enabled the Government to build up substantial fiscal reserves to help support investor confidence and stabilize the economy. The basic approach with regard to taxation is to maintain a simple tax system and a low tax policy. The tax system has, over the years, generated enough revenue to meet budgetary demand, and maintained a healthy level of fiscal reserves to bolster business confidence.

From 1991 to 1998, salaries and profits taxes, the two main sources of revenue, accounted for about 40 percent of total revenue. The standard rates of tax are currently 15 percent for salaries and 16 percent for profits generated by corporations. In a territorial tax system, only income generated in Hong Kong, China is subject to tax. No tax is levied on capital gains, dividends, or interest income (except for interest income to corporations).

This tax system works well, although some argue that the tax base is too narrow. In the case of an economic downturn, government revenue would be affected because of the decline in taxpayers' earnings and corporation profits.

FIGURE 2
Ratio of Earnings and Profits Tax to Total Government Revenue



Source: *Hong Kong Annual Digest of Statistics.*

B. Government Expenditure

The Government has long advocated that public sector spending in Hong Kong, China should be kept small to control the size of the public sector. Spending on this sector, defined as the ratio of the public expenditure to GDP, has been kept under 20 percent since 1961.

C. Deficit Financing

The Asian financial crisis highlighted the need for a mature debt market to diversify funding sources and reduce maturity mismatch by directing long-term savings to long-term investments. With the region's high saving rate of about 30 percent, it would seem that Hong Kong, China could take advantage of this, to divert back to Asia funds invested outside the region. Further debt market development would allow the

Government to borrow long term for the long-term investments needed to recover from the crisis. Corporations can also issue papers in foreign currencies, since Hong Kong, China has historically been an attractive trade and money center. Thus, the Government should hasten the development of a mature and liquid debt market.

II. Monetary Policy and Management

In contrast with other economies in the region, some of which have had central banks for half a century, the HKMA, which functions as the de facto Central Bank, was established only on 1 April 1993, merging the Office of Commissioner of Banking and the Office of the Exchange Fund. Before this, the currency was issued by private commercial banks.

HKMA is the supervisory body which regulates the banking sector, manages the monetary system, and aims to maintain exchange rate stability within the linked exchange rate system, which has been in effect since 17 October 1983. Under this system, the Hong Kong dollar is linked to the US dollar at the rate of HK$7.80 to one US dollar. This exchange rate stability helps promote a stable environment for achieving other macroeconomic goals such as economic growth.

The linked exchange rate system in Hong Kong, China is a Currency Board system, which requires both the stock and flow of the monetary base to be fully backed by foreign reserves. This means that any change in the monetary base is fully matched by a corresponding change in foreign reserves at a fixed exchange rate. In Hong Kong, China the monetary base comprises: (i) the Certificates of Indebtedness (as backing for banknotes) and coins issued; (ii) the net balance of clearing accounts (known as the Aggregate Balance) of the licensed banks held with the HKMA for the purpose of effecting the clearing and settlement of transactions between the banks themselves and also between the HKMA and the banks, and (iii) the outstanding amount of Exchange Fund bills and notes.

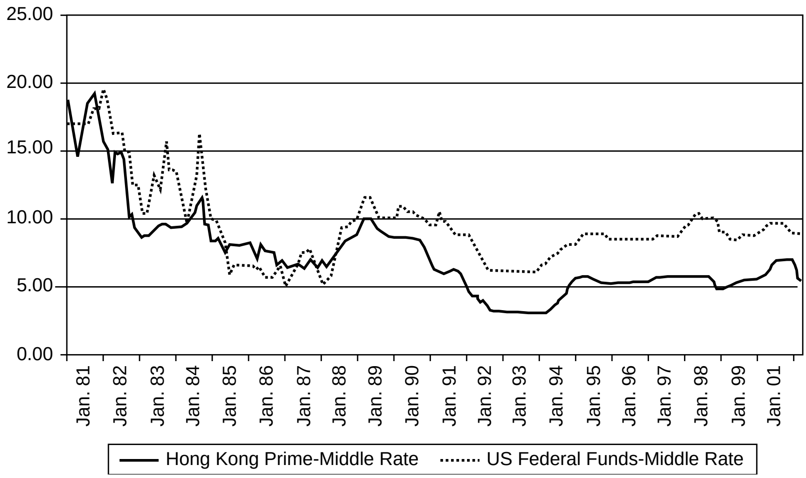
Banknotes are issued by three note-issuing banks. Note-issuing banks are required to purchase Certificates of Indebtedness, which serve as backing for the banknotes issued, by submitting an equivalent amount of US dollars to the HKMA for the account of the Exchange Fund. The Hong Kong dollar banknotes are therefore fully backed by US dollars held by the Exchange Fund. Operating under the rule-based currency board system, the aggregate balance varies in accordance with the flow of funds into and out of the Hong Kong dollar. The proceeds from the issue of Exchange Fund bills and notes have been switched over time into US dollar assets.

A. Monetary Policy Tools

Interest Rates and Exchange Rates. Currently, interest rates on current accounts, savings accounts, and time deposits of less than seven days are set by the Hong Kong Association of Banks. The fixed exchange rate of the Hong Kong dollar against the US dollar implies that Hong Kong, China's interest rates have to be kept in line with the US. Indeed, since 1990, the Hong Kong, China prime rate has been in line with the US Federal Funds rate. The difference between the Hong Kong, China and US interest rates reflects the risk premium of holding Hong Kong dollars. Because of the Currency Board arrangements, the HKMA has relatively little freedom to use interest rates as a monetary management tool.

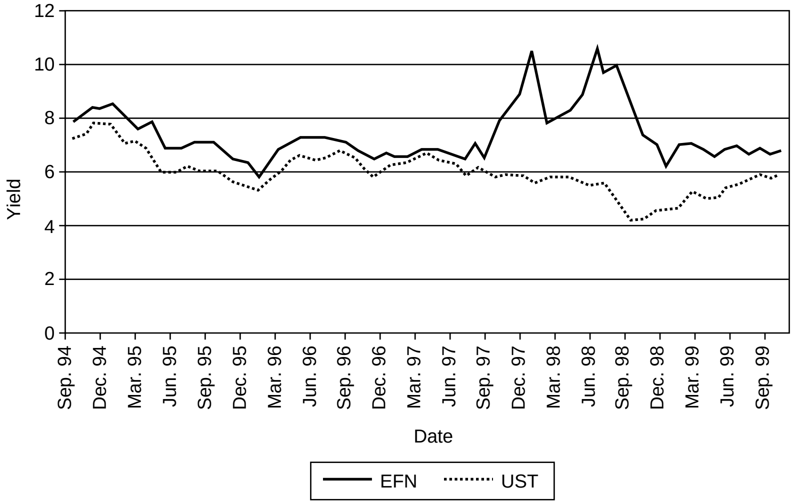
Under the Currency Board system, the stability of the Hong Kong

FIGURE 3
Movements of the US Federal Funds Rate and Hong Kong Prime Rate (1981–2001)



Sources: *Hong Kong Monetary Authority Monthly Statistical Bulletin* and U*S Federal Reserve Statistical Bulletin.*

FIGURE 4
Comparison of Five-Year EFN versus US Treasury



Sources: Reuters and *Hong Kong Monetary Authority Monthly Statistical Bulletin*.

dollar exchange rate is maintained through the interest rate adjustment mechanism. The monetary base increases when the foreign currency (in this case US dollars), to which the domestic currency is linked, is sold to the Exchange Fund for the domestic currency (capital inflow). It contracts when the foreign currency is bought from the Exchange Fund (capital outflow). Expansion or contraction in the monetary base causes interest rates for the domestic currency to fall or rise, respectively, creating the monetary conditions that automatically counteract the original capital movement, thereby stabilizing the exchange rate.

Strengthening the Currency Board. The HKMA has made it clear that there will be no foreign exchange controls in the Hong Kong Special Administrative Region (HKSAR). Article 112 of the Basic Law clearly specifies that no foreign exchange control policies shall be applied in the HKSAR. Furthermore, the Government is fully committed to the maintenance of the linked exchange rate system and the adherence to the discipline of the Currency Board arrangements under that system.

To further strengthen the Currency Board arrangements and make them less susceptible to manipulation by speculators, the HKMA announced a package of seven technical measures on 5 September 1998 (Appendix 3).

The HKMA has also pledged to work towards producing an Exchange Fund balance sheet showing Currency Board operations, which will be published as frequently as technically feasible.

The seven technical measures, along with the move towards greater disclosure, have been approved by the Exchange Fund Advisory Committee (EFAC), upon the recommendation by its Subcommittee on Currency Board Operations. The subcommittee has been set up recently to oversee the operation of the Currency Board arrangements in Hong Kong, China.

III. Overview of the Bond Market

The debt market in Hong Kong, China was a relatively late starter, lagging behind the rapid development of the banking and equities markets in the late 1970s. During the 1980s, Hong Kong, China developed an active market for Hong Kong dollar certificates of deposit. Listing of debt securities did not take place until 1988, when the Mass Transit Railway Corporation listed its debt securities.

As at the end of September 1999, the size of the Hong Kong dollar debt securities market was approximately HK$414 billion (US$53 billion), of which HK$100 billion (US$12.9 billion) were Exchange Fund papers. This included approximately HK$66 billion (US$8.5 billion) of Exchange Fund bills (EFBs) and HK$34 billion (US$4.39 billion) of Exchange Fund Notes (EFNs).

The whole debt market represented approximately 32 percent of GDP,[3] 11.9 percent of the total stock market capitalization,[4] 15 percent of Hong Kong dollar-denominated assets of the banking system,[5] and 13 percent of Hong Kong dollar money supply (M3).[6]

In the course of the last decade, the HKMA has taken a number of

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3. GDP for 1998 was HK$1,285.880 billion (US$165.9 billion). Sources: *Hong Kong Annual Digest of Statistics*, Statistics and Census Department, Hong Kong, China.

4. Stock market capitalization on 30 September 1999 was HK$468.61 trillion (US$447.56 billion). Source: Stock Exchange of Hong Kong Ltd. *Monthly Statistical Bulletin* for October 1999.

5. Hong Kong dollar-denominated assets in the banking system for September 1999 totaled HK$2,760 billion (US$356 billion). Source: *HKMA Monthly Statistical Bulletin*.

6. M3 for August 1999 was HK$3,231.99 billion. (US$417 billion). Source: *HKMA Monthly Statistical Bulletin*.

steps to develop the infrastructure and assist in the growth of the debt market in Hong Kong, China, including: (i) the introduction of the Exchange Fund Bills and Notes Program; (ii) the creation of a benchmark yield curve extending to 10 years; (iii) the establishment of an efficient central clearing and custodian system for debt securities (the CMU) and the linking of this to Euroclear, Cedel, and other central securities depositories in the Asian and Pacific region; (iv) the granting of tax exemption for debt securities issued by specified multilateral agencies, and tax concessions for qualifying debt securities; (v) the extension of the market-making system for Exchange Fund paper to debt securities issued by statutory corporations; (vi) the use of Exchange Fund paper as margin collateral for trading in stock options and futures; (vii) the listing and trading of Exchange Fund Notes on the Stock Exchange of Hong Kong Ltd. (SEHK); (viii) the implementation of the RTGS System; and (ix) the establishment of the Hong Kong Mortgage Corporation.

The issuance of Exchange Fund papers facilitates the development of the local bond market by providing a regular supply of high-quality Hong Kong dollar papers to local and foreign investors and establishing a reliable benchmark yield curve for Hong Kong dollar debt. Exchange Fund papers are attractive to investors because they have virtually no credit risk, and are highly liquid and exempted from profits tax. Furthermore, they can be used by banks as collateral to obtain liquidity through the discount window operated by the HKMA and for intraday repos under the RTGS system. They are also attractive to banks because of their favorable weighting in the calculation of capital adequacy ratio (CAR) and liquidity ratio.[7]

Exchange Fund papers are actively traded in the OTC market. Average daily turnover dropped substantially as a result of the Asian financial turmoil from approximately HK$16 billion (US$2.1 billion) during 1997 to approximately HK$9 billion (US$1.16 billion) during 1998. Recent turnover of papers has shown a recovery, however, with average daily turnover reaching approximately HK$14 billion (US$1.8 billion) during the first three quarters of 1999. Prior to 16 August 1999, all trading of EFNs and EFBs took place in the OTC market. Since then, EFNs have been listed on the SEHK—a clear sign that the debt market has taken off.

While trading is still low, this listing will no doubt enlarge the investor base to include not just banks and large institutional investors, but also retail investors, thus allowing greater participation in the market.

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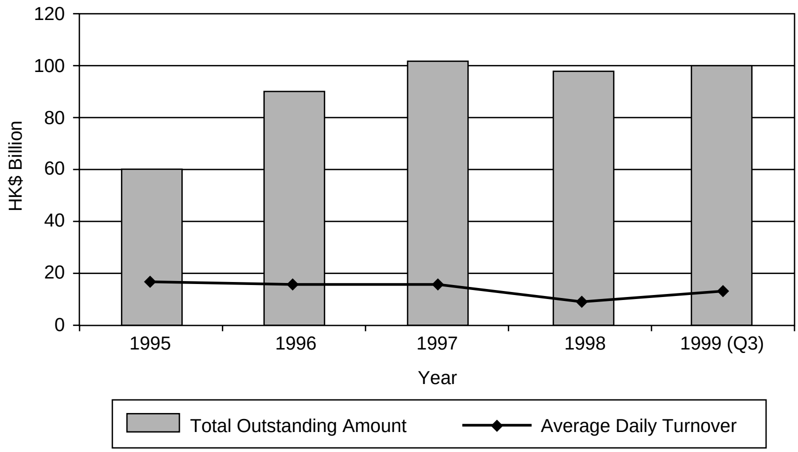
7. In accordance with international practice, 10 percent risk weighting is assigned to EFNs and EFBs for the purpose of assessing capital requirement for banks. This percentage of risk weighting is consistent with the Basle framework.

Figure 5
Average Daily Turnover of Exchange Fund Papers (1995–1999)



Source: *Hong Kong Monetary Authority Monthly Statistical Bulletin.*

(In the OTC market, the presence of market makers helps to boost active trading. There is no market maker for EFNs in the SEHK.) This will help mobilize savings, which appear to be very high in Hong Kong, China.

A. The Role of Hong Kong, China as an International Center for the Bond Market

In all highly developed financial markets, companies routinely raise funds through the issuance of debt instruments, and investors generally regard this as a conventional form of investment. However, Asia in general suffers from a marked absence of deep and liquid debt markets and the alternative source of business finance that these markets can provide. In his speech for the 1999 to 2000 budget, the Honorable Donald Tsang, the Financial Secretary, stressed that the Government regards further development of the bond market as a pressing priority.[8]

Hong Kong, China has traditionally been very strong in banking. It

8. "Onward with New Strengths", by the Finance Secretary, moving the second reading of the Appropriation Bill 1999, dated 3 March 1999.

is the world's sixth largest international banking center in terms of external assets of banks. The strength of the market has also attracted a critical mass of the world's top financial services firms. About 500 banking institutions from more than 40 countries, including about 80 of the world's 100 largest, have a presence in Hong Kong, China. External liabilities and assets accounted for an average of 48 percent and 53 percent, respectively, of the total liabilities and assets of all authorized institutions.[9]

With existing infrastructure and a liquid government bond market, Hong Kong, China thus has an important role to play as a regional financial center for the bond market in the region. The government bond market is liquid, with a daily turnover of about 10 percent of the total outstanding amount. Tenors of papers have been extended up to 10 years, creating a reliable benchmark yield curve for Hong Kong dollar debt. The CMU, which is operated by the HKMA, is linked up to major Asian and European clearing houses, thereby providing an efficient means of transacting debt papers both domestically and across borders.

Hong Kong, China is also well positioned to be a leading regional financial center for listed foreign currency debt papers. Currently, all listed debt papers denominated in foreign currencies have to be cleared and settled outside the CCASS operated by the HKSCC, as it is not yet capable of handling foreign currencies. The HKSCC has undertaken to allow the clearing and settlement of securities in foreign currencies under RTGS. It is envisaged that this will be implemented in the middle of 2000, providing a major step forward in stimulating trading of debt securities listed on the SEHK.

With the local presence of the top US and European investment banks, Hong Kong, China has traditionally been a place where funds from the US and Europe find investment opportunities in equities, capital market papers, and many other financial products. Coupled with the numerous professionals working in the field of capital market who are capable of raising funds speedily and efficiently, Hong Kong, China is well-qualified to act as the regional financial center for capital market transactions.

As part of the Government's efforts to increase the investor base, EFNs have been listed on the SEHK since August 1999 and Exchange Fund papers are allowed as collateral for trading in the stock options and futures markets. The Government has indicated that it is important for Hong Kong, China to encourage reputable overseas companies, especially mainland enterprises, to obtain funding through the issue of debt papers denominated in Hong Kong dollars or foreign currencies. The Government is promoting the integration of various clearing and settle-

9. Data as at last quarter of 1998.

ment systems in the region to further improve efficiency and reduce transaction costs. It also stresses the importance of credit rating capabilities within the region to establish fair and reliable market benchmarks for the full range of Asian debt instruments.

B. Secondary Mortgage Market

The Hong Kong Mortgage Corporation (HKMC), incorporated in March 1997, is mandated to develop the secondary mortgage market. The ground is fertile for the development of such a market in Hong Kong, China as illustrated by the strong increase in outstanding residential mortgage loans from 8 percent of GDP in 1980 to 40 percent in 1998. A properly developed secondary mortgage market can play a useful role in channeling long-term funds, such as insurance and pension funds, to meet the rising demand for long-term home financing. The establishment of the HKMC will also help banks to reduce their exposure to real estate financing, and thereby to achieve a more diversified loan portfolio in the longer term.

The HKMC is wholly owned by the Government through the Exchange Fund. Its initial phase of development involved the purchase of mortgage of loans for its own portfolio, funding the purchase largely through the issuance of unsecured debt securities. The second phase, currently in progress, involves the securitization of mortgages into mortgage-backed securities and the offering of these for sale to investors.

On 31 December 1998, the HKMC had a mortgage portfolio totaling HK$11.4 billion (US$1.5 billion), made up of 90 percent floating rate mortgages and 10 percent fixed rate mortgages. The HKMC has very high selection criteria to ensure its mortgage portfolio remains of the highest quality.[10] The historical default rate is very low, in the last quarter of 1999 being reported at only about 0.07 percent.

The HKMC successfully issued a total of HK$5.2 billion (US$0.7 billion) of unsecured debt in 1998 through its HK$20 billion Note Issuance Program (NIP) and HK$20 billion (US$2.6 billion) Debt Issuance Program (DIP), making it the second most active issuer of Hong Kong dollar fixed rate securities for the year. On 22 October 1999, seven outstanding issues of its notes were listed on the SEHK with an aggregate issue amount of HK$3.5 billion (US$0.5 billion). Issue maturities ranged from 1.5 years to three years. The HKMC debt securities were well-received by banks and institutional investors. Notes issued under the NIP were

10. The historical default rate is very low. The figure reported in the last quarter of 1999 was about 0.07 percent.

oversubscribed by an average of 4.5 times. The papers issued by HKMC are considered to be of low risk as they are effectively quasi-government papers.

The HKMC intends to launch a multicurrency medium note issuance program and the inaugural issue of mortgage backed securities.

C. Corporate Funding Behavior and Debt Market

Even with regular issuance of papers under the Exchange Fund Program, the debt market in Hong Kong, China consists predominantly of papers issued by issuers in the private sector. At the end of September 1999, the total outstanding amount of debt securities from the private sector was HK$314 billion (US$40.5 billion), which comprised floating or fixed rate bonds or certificates of deposit (CDs). This market is about three times the size of the government bond market.

The latter half of 1998 and the first nine months of 1999 were a very active period for issuers and arrangers in the private sector debt market. Issuance during the first nine months of 1999 totaled approximately HK$109 billion (US$14.1 billion), over 570 deals. If extrapolated over a 12-month period, this would exceed the 1998 issuance by 1.67 times and the number of deals for 1998 by 1.8 times.

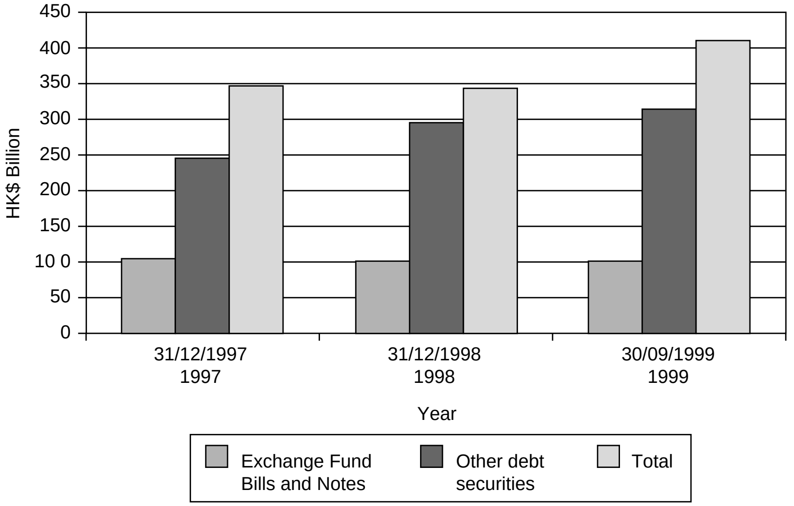
Traditionally, floating-rate instruments are popular investments among bankers and investment funds all over the world, since they offer an effective alternative to plan and syndicate loans, and provide greater liquidity and potential for appreciation than traditional loans.

D. Types of Securities

The Exchange Fund Bills Program was introduced in March 1990, when the first batch of 91-day bills was issued. Over the ensuing years, the Exchange Fund Program expanded in terms of size and tenor. Following the successful introduction of the 91-day bills, 182-and 364-day bills were launched in October 1990 and February 1991, respectively. Two-and three-year EFNs were introduced in May l993 and October 1993, respectively. These were followed by the inaugural issue of five-year EFNs in September 1994, seven-year EFNs in November 1995, and 10-year EFNs in October 1996. The gradual lengthening of the maturity of the papers has provided a benchmark for issuance of debt instruments with longer tenors, further facilitating the development of the debt market in Hong Kong, China. As mentioned earlier, the Hong Kong, China benchmark yield curve tracks US Treasuries closely.

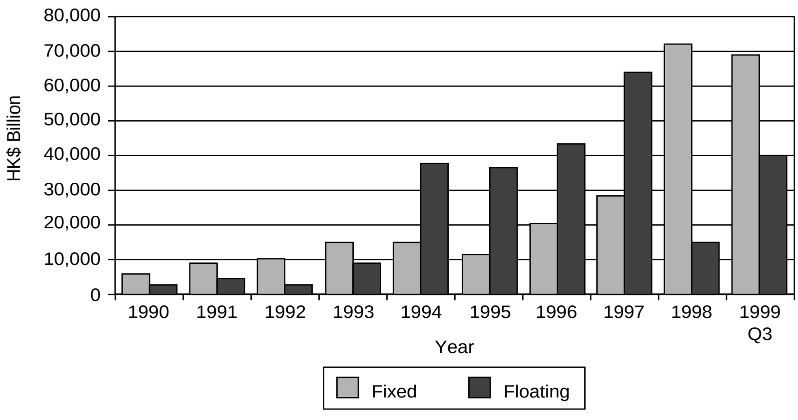
The issuance of Exchange Fund paper has facilitated the development

FIGURE 6
Outstanding Amounts of Nongovernment Debt Securities versus Government Debt Securities (1997–1999)



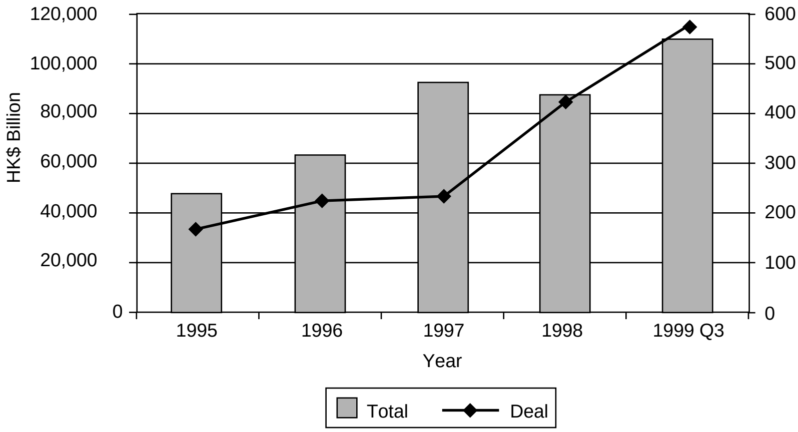
Source: *Hong Kong Monetary Authority Monthly Statistical Bulletin.*

FIGURE 7
New Issues of Nongovernment Debt Securities (1990–1999)



Source: Hongkong Shanghai Banking Corporation Markets.

FIGURE 8
New Issues of Nongovernment Debt Securities (1995–1999)

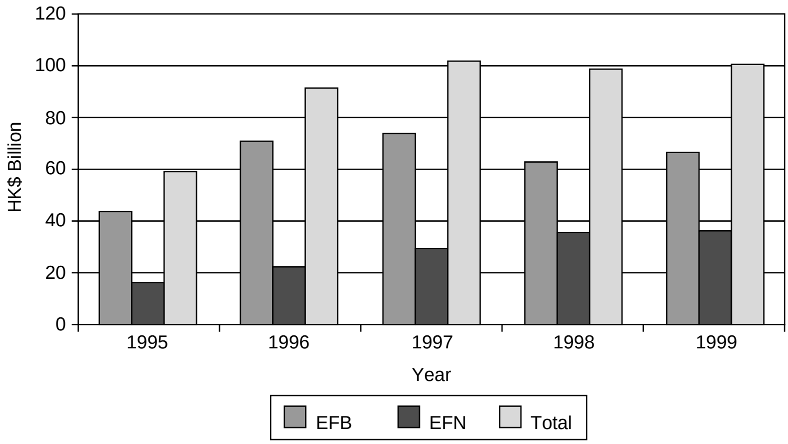


Source: HongKong Shanghai Banking Corporation Markets.

of the local bond market by providing a regular and stable supply of high-quality marketable Hong Kong dollar paper to local and foreign investors. Exchange Fund papers are attractive due to their being low risk, highly liquid, and tax-exempt. They can also be used to obtain financing from the HKMA discount window, and have a favorably high-risk weighting for the purpose of assessing capital adequacy/liquidity of banks in accordance with the Basle standards.

EFBs and EFNs were issued regularly to the market until September 1998. As one of the measures announced on 5 September 1998 to strengthen the Currency Board arrangements (Appendix 3) new Exchange Fund bills and notes will now only be issued when there is an inflow of funds. This enables new issues of Exchange Fund bills and notes to be fully backed by foreign reserves. Existing issues are rolled over as they mature, although the replacement issue may not necessarily have the same term to maturity. In addition, new Exchange Fund papers have been issued in line with interest payments on existing Exchange Fund papers since 1 April 1999. This arrangement allows the size of the Exchange Fund papers to grow gradually and is conducive to the steady development of the debt market.

FIGURE 9
Outstanding Exchange Fund Notes and Bills (1995–1999)



Source: *Hong Kong Monetary Authority Monthly Statistical Bulletin.*

E. Investor Base

The investor base in Hong Kong, China is more institutional-based than in other more developed debt markets, such as the US or the UK. Currently, banks are the major investors in Exchange Fund papers, holding more than 80 percent of the outstanding amount.

Other investors in debt securities are predominately pension funds and insurance companies which have predetermined future repayment obligations on their balance sheets. Debt instruments with fixed interest payment and set principal repayment terms satisfy their liability profile. Other major local investors of debt securities include government agencies with Hong Kong dollar reserves.

Widening of the Investor Base—Mandatory Provident Fund. The MPF scheme was implemented on 1 December 2000, and demand for long-term Hong Kong dollar debt securities is expected to grow significantly through mobilization and institutionalization of private sector savings. The necessary legislation for the effective operation of the MPF system was enacted in August 1995. As at the end of 1997, there was about HK$129 billion (US$16.6 billion) worth of retirement funds in the market. It is estimated that annual MPF contributions will initially amount to more than HK$10 billion (US$1.29 billion), or around 1 percent of GDP, growing to around HK$60 billion (US$7.74 billion) per year when the system matures after 30 years. The MPF funds will generate demand for instruments that can produce a steady stream of investment income over the medium to long term to match underlying retirement liabilities. Debt securities are expected to meet such demand.

Participation of Retail Investors. Hong Kong, China traditionally has very high retail participation in the stock market. A recent SEHK study reported that local retail investors contributed to about 45 percent of the total stock market turnover. However, retail participation in the debt market is insignificant, due to: (i) the lack of familiarity with products which are interest rate-sensitive; (ii) the usual custom of investors to invest in equity securities (which provide greater volatility to investors with higher risk appetite); (iii) the limited transparency of the debt market; (iv) the lack of investment knowledge about debt, and (v) the previously large board lot sizes and higher transaction costs.

Public education on debt securities could promote a better understanding of debt instruments as a safe, low-risk form of investment, which generates a steady stream of income to investors. Industry associations, such as the Hong Kong Capital Market Association, have indicated their support for more public education work. The SEHK could also offer more public seminars to advertise the trading, clearing, and settlement arrangements of the market.

IV. Bond Market Infrastructure

Hong Kong, China is well ahead of the other developing member countries in terms of its efforts to develop bond market infrastructure.

A. Primary Dealer System

To enhance secondary market liquidity, the HKMA has put an effective market making system in place for EFNs and EFBs. A number of recognized dealers have been additionally appointed as market makers, who are obliged to maintain a market in the Exchange Fund papers by quoting bid and offer yields for the papers during normal money market hours.[11] Market makers are expected to take an active part in the primary and secondary markets, and are obliged to quote bid and offer prices of Exchange Fund papers to ensure liquidity and marketability. In addition, they are also expected to promote the Exchange Fund Bills and Notes Program

11. Between 9:00 to 12:00 a.m. and 2:00 to 4:00 p.m., Monday to Friday.

to broaden the investor base. At the end of September 1999, there were 161 recognized dealers and 28 market makers for the Exchange Fund papers.

B. Issuance Methods and Procedures

In the primary market, EFBs and EFNs are issued through competitive tender bids. Bills are issued on a bid-yield basis with a minimum denomination of HK$500,000 (US$64,516), or in integral multiples thereof. Notes are issued on a bid-price basis with a minimum denomination of HK$50,000 (US$6,452), or in integral multiples thereof. Tenders are open to all recognized dealers or market makers appointed by the HKMA. EFBs and EFNs are allocated to the highest successful bidders (lowest yield in case of bills and highest price in case of notes). The Exchange Fund papers are very popular, with an average oversubscription rate of around 2.5 times for EFBs (for June 1999) and 2.33 times for EFNs (for the year from July 1998 to June 1999). With the listing of the EFNs on the SEHK in August 1999, tenders for new issues of EFNs from members of the public can be submitted through the market makers or recognized dealers in an amount of HK$50,000 or integral multiples thereof.

There has been no significant change in the outstanding amount of Exchange Fund papers since 1997, as new Exchange Fund paper is only issued in line with interest payments on existing Exchange Fund paper if there is an inflow of funds into Hong Kong, China.

C. Secondary Market Trading Systems

Secondary market trading in debt securities is generally low relative to that in the equities market, even in more established debt capital markets such as New York[12] and London.[13] However, in Hong Kong, China, the level of secondary market activities for debts is negligible when compared with

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12. The average daily trading volume of government bonds and corporate bonds on the American Stock Exchange for 1996 amounted to US$204 million and US$2 million, respectively. These represented approximately 0.22 percent and 0.002 percent of the average daily trading volume of US$91.33 billion for equities. (Source: *1997 Amex Factbook of the American Stock Exchange*). The average daily trading volume of bonds on the New York Stock Exchange amounted to US$20 million, which represented approximately 0.0003 percent of average daily trading volume of US$5.78 billion for equities (Source: New York Stock Exchange).

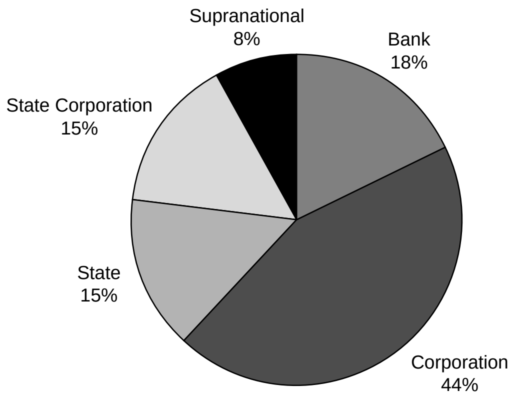
13. Gilts transactions are reported to the London Stock Exchange by the Gilts Edged Market Makers (GEMMs), because they are also members of the London Stock Exchange. The actual transactions in fact take place OTC rather than in the London Stock Exchange trading system.

the activities for equities. To stimulate secondary market activity, it is important to increase the liquidity and depth of the debt market.

While OTC debt market activity has grown satisfactorily in Hong Kong, China, trading activity in the listed debt market remains low. Usually, a listing status is acquired by an issuer to enhance the marketability of the securities to funds which are mandated to be invested in listed debts only. In Hong Kong, China, even with a listing status, debt securities are transacted in the preferred OTC market, however. Most of the issues are denominated in foreign currencies. At the end of August 1999, the SEHK had 391 listed issues by 99 issuers.

From the historical records maintained by the SEHK between 1994 and 1998, only a small amount of the securities traded was issued by corporations (Appendix 2). Turnover of debt securities on the SEHK in the first 10 months of 1999 amounted to only to HK$122 million[14] (US$15.7 million, and about HK$12 million per month), which represented less than 0.01 percent of total market turnover.

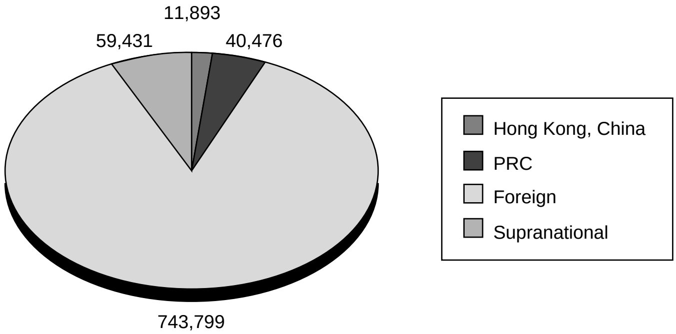
FIGURE 10
Classification of Listed Debt Securities



Source: *Stock Exchange of Hong Kong Ltd.*

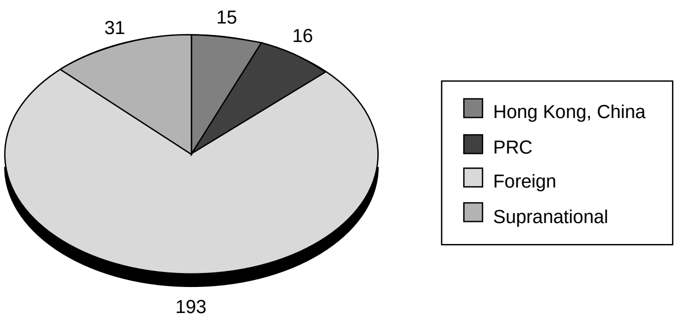
14. If trading of HKR International Ltd 6 percent Subordinated bonds—which was the debt security with the highest turnover—was disregarded, the turnover for the first 10 months would be only HK$9 million.

FIGURE 11
Country Origin of Listed Issuers (End 1998)
(nominal amounts in HK$ million)



Source: *Stock Exchange of Hong Kong Ltd. Factbook 1998.*

FIGURE 12
Number of Issues by Country of Origin (End 1998)



Source: *Stock Exchange of Hong Kong Ltd. Factbook 1998.*

Exchange Trading of EFNs. The HKMA listed all the 57 outstanding issues of EFNs, amounting to HK$34.1 billion (US$4.4 billion), on the SEHK on 16 August 1999 with the intention of boosting the development of a local debt market by enlarging the investor base to include retail investors. The SEHK provides a marketplace where retail investors can more readily participate in the market for EFNs, and the high saving rate of local people suggests that there may be money seeking a home in a secure, medium-to long-term investment which the EFNs are able to provide.

Table 2
Comparison of Trading of Exchange Fund Notes between Stock Exchange of Hong Kong Ltd. and Over-the-Counter

Specification	SEHK (Exchange EFN Market)	OTC (Professional EFN Market)
Target Investors	Retail investors	Financial institutions
Market Intermediaries	Members of SEHK	Recognized dealers and market makers of the HKMA
Trading System	AMS[15]	Propriety systems
Transaction Size	Minimum of HK$50,000 for a board lot	Minimum of HK$50,000
Market Maker	None	Yes. Total of 28 market makers
Minimum Spread Size	0.10 percent of EFN[16]	Negotiable; commonly 0.05 percent
Transaction Levy	0.011 percent	None
Brokerage	0.10 percent with a minimum charge of HK$50	Negotiable
Stamp Duty	None	None
Shorting	Not possible[17] provided that a net long	Possible for market maker
position is maintained by	EFN	at CMU.
Settlement	CCASS[18]	CMU provides both real-time and end-of-day delivery versus payment
Settlement Period	T + 2	Negotiable: T + 0 in general, but trades concluded before 11:00 are settled on the same day, while trades concluded after 11:00 are settled by
	15:00 the next day.	
Evidence of Ownership	Scriptless	Scriptless

15. Automatic Matching System is used for trading all equities and debt securities on the SEHK.

16. 0.125 percent for other debt securities.

17. The law has been amended to facilitate short selling of EFNs on the SEHK by market makers. Other investors are prohibited from shorting EFNs.

18. Transfer between CCASS and CMU is possible to provide free-of-payment transfers between participants of CMU and CCASS. The linkage is aimed solely at the delivery of the EFN between CMU and CCASS accounts and is not intended for settlement of intermarket trades for which the SEHK does not provide a market.

The level of trading activities of the EFNs on the SEHK has so far remained minimal compared with trading in the traditional OTC market. This is principally because local investors traditionally favor equity securities which provide greater upside opportunities. There is also an apparent lack of knowledge about investment in fixed interest papers.

Stock Options and Futures Trading. Trading in the stock options and futures markets can now use EFNs as collateral, subject to certain haircut requirements in addition to cash. The CMU has established the infrastructure to enable the Stock Exchange Options Clearing House and the HKFE Clearing Corporation (i.e. the clearing house for futures contracts) to make use of Exchange Fund papers as common margin collateral for trading in the stock options and futures market. The cross margining is exercised through a triparty link between the CMU and the two clearing houses. Both clearing houses have become recognized dealers of Exchange Fund papers. This will allow them to hold and settle Exchange Fund papers on behalf of their members. This cross-margining arrangement will promote marketwide use of the Exchange Fund papers, thus increasing the liquidity of the fixed-income market.

Market Making. Market making for debt securities is not practiced at the SEHK. It is interesting to note that the HKMA requires that securities to be cleared through the CMU have at least two market makers. The purpose behind this requirement is to ensure minimal liquidity in these securities. Bona fide market making, which is used in the OTC debt market, can encourage dealing in the security through the publication of bid and offer prices. Both the stock options and the one-day rolling currency futures contracts have market making systems to ensure liquidity and a certain degree of transparency. It may be argued that the same system ought to be adopted for trading of debt securities on the SEHK to encourage secondary market activity.

Short-Selling of Debt Securities. Exchange Fund papers are approved for short-selling in Hong Kong, China, but such activities are confined to market makers (as designated by the HKMA). Provided that a market maker has an overall net long position when taking into account all his/her EFBs and EFNs of other maturities, then it is permissible to short-sell any Exchange Fund papers. Consideration may be given to extending short-selling to other debt securities to help develop the market.

International Trade Linkages. To enlarge the investor base, in December 1997 the CMU linked up with the CSD in Australia. In other words, the

HKMA has become a member of Reserve Bank Information and Transfer System (RITS) (for Australian Government securities) and Austraclear (for private sector debt securities in Australia). Through this linkage, the HKMA enables all CMU members to hold and trade securities in RITS and Austraclear through HKMA's membership in both systems.

D. Repo Market

Under a Real Time Gross Settlement (RTGS) system, it is necessary to address how liquidity can be provided to the banks to reduce the chance of gridlock, since every payment has to be settled on an individual and gross basis. A discount window (previously known as the liquidity adjustment facility) arrangement has been set up by the HKMA, whereby banks can borrow overnight funds from the HKMA in its role as the Central Bank, by entering into agreements for repurchase (repo), using eligible securities as collateral.

Using intraday repo, banks can obtain interest-free intraday liquidity using EFNs and EFBs as collateral. Intraday repo that fails to be reversed before the close of the business day will be carried into overnight borrowing[19] through the discount window. Up to the end of June 1999, 49 private sector issues with a total value of approximately HK$74.9 billion (US$9.67 billion) (accounting for about 33 percent of the total value of private sector issues currently cleared by the CMU) were eligible for repos under the discount window.

E. Other Aspects of Bond Market Infrastructure

1. Benchmark Yield Curve

By providing regular issues of government securities with varying maturities, the Exchange Fund Bills and Notes Program helps build up a reliable Hong Kong dollar benchmark yield curve. The Hong Kong dollar benchmark yield curve tracks closely that of the US Treasuries, reflecting the credibility of the linked exchange rate regime under the Currency Board system.

Benchmark interest rates are essential for pricing of risks by issuers

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19. A two-tier structure of discount rates has been adopted: Banks are charged the base rate for the first 50 percent of their holding of EFBs and EFNs, and for the next 50 percent base rate plus 5 percent, or the overnight Hong Kong Inter-Bank Offer Rate of the day, whichever is the higher. Base rate is defined as the simple five-day average of overnight and one-month HIBORs, or the US Federal Fund's target rate plus a premium of 150 basis points, whichever is the higher.

in the primary market and traders in the secondary market. A reliable benchmark yield curve signals true costs and provides valuable market information to help investors allocate risks efficiently. The yield differentials between the 10-year Exchange Fund Notes and the US Treasuries once widened to a high of nearly 500 basis points at end-June 1998 as a result of the Asian financial turmoil. After the implementation of technical measures in September 1998, however, the spread gradually narrowed, and was down to 192 basis points at end-June 1999. The spread appeared to have further narrowed to around 147 basis pints by the end of September 1999.

2. Tax Treatment

Tax on bond interests is a cost to investors, who have a choice of tax-free bank deposits. Accordingly, an issuer needs to provide a higher coupon to attract investors. This makes such borrowing more expensive to the issuer.

Hong Kong, China has always enjoyed a simple territorial tax system. Only profits actually arising in the SAR are subject to tax. The profits tax rate for corporations is currently 16 percent (lowered from 16.5 percent from 1998/99) and is one of the lowest in Asia.

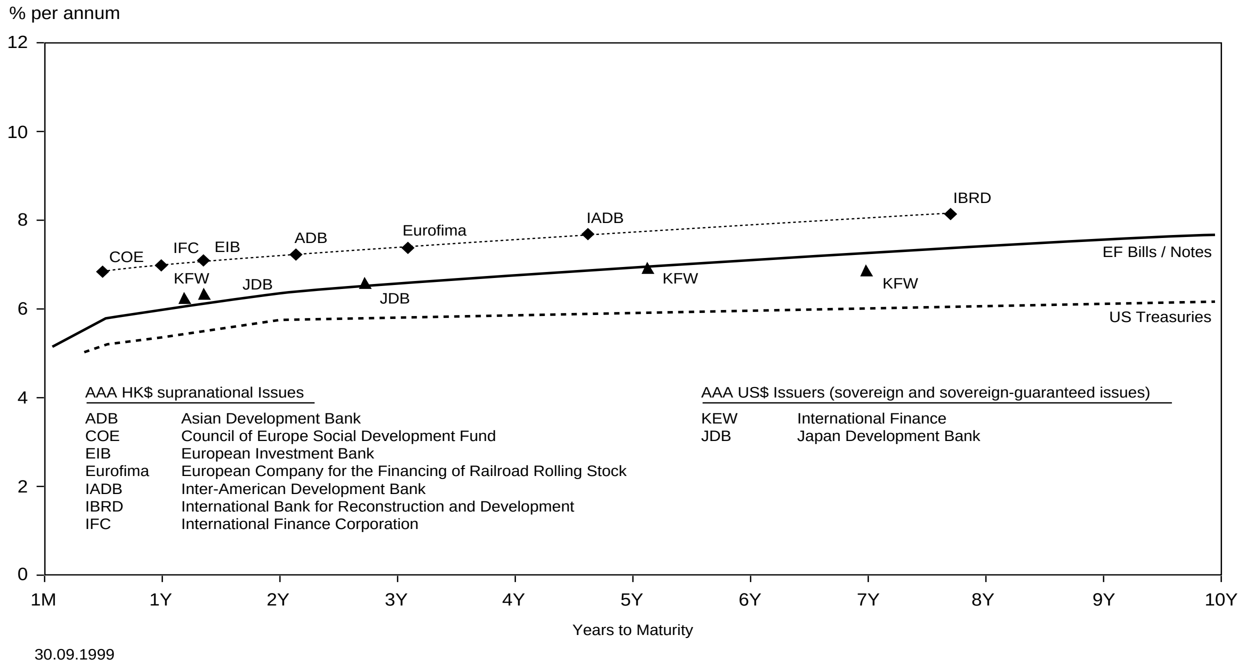
Exchange Fund papers are exempt from all taxes (taxes on interest income, trading profits, and stamp duties). Initiated by the HKMA to encourage the supply of high-quality debt issues in Hong Kong, China, profits tax exemption has also been granted to Hong Kong dollar debt securities issued by 10 multilateral agencies,[20] such as the World Bank and the Asian Development Bank.

In 1996, to facilitate further development of the market, the Government announced that interest income and trading profits derived from eligible debt securities would enjoy a concessionary profits tax rate equal to 50 percent of the profits tax rate. A number of conditions are required to qualify as eligible debt securities, including: (i) a credit rating acceptable to the HKMA;[21] (ii) an original maturity of not less than five years; (iii) a minimum denomination of HK$500,000 or its equivalent in a foreign currency if issued before 1 April 1999 and HK$50,000 or its equivalent

20. The 10 multilateral agency issuers are: the ADB, the International Bank for Reconstruction and Development, the International Finance Corporation, the European Investment Bank, the European Bank for Reconstruction and Development, the Inter-American Development Bank, the Nordic Investment Bank, the European Company for the Financing of Railroad Rolling Stock, the Council of Europe Social Development Fund and the African Development Bank.

21. The HKMA has advised that the following ratings are acceptable for the purposes of this provision: BBB– from International Bank Credit Analysis, BBB+ from the Japan Bond Rating Institute, Baa3 from Moody's, or BBB–from Standard and Poor's.

FIGURE 13
Hong Kong Dollar Yield Curve versus US Dollar Yield Curve
(30 September 1999)



Source: Hong Kong Monetary Authority.

in foreign currency if issued after 1 April 1999; (iv) to be cleared under the HKMA's clearing system (i.e. the CMU), and (v) the debt securities must be issued to the public in Hong Kong, China.

In the past few years, the Government has made concessions to increase the yield to investors by lowering or exempting interest income from profits tax. However, it has been said that the introduction of the tax concession in 1996 still does not level the playing field. While certain foreign issuers of debt (namely the supranational) are able to attain exemption, Hong Kong, China issuers are only able to enjoy a 50 percent profits tax concession. It has therefore been argued that, for the debt market to develop further, the Government should introduce tax exempt status to corporate debt issues. Nevertheless, a balance must be struck between developing the debt market and avoiding further narrowing of the tax base.

3. Credit Rating

This is important to the development of the bond market. Bonds are often selected by the market on the basis of the ratings assigned by credit rating agencies, while investors do not carry out any credit risk assessment of their own.

Hong Kong, China does not have a home-grown credit rating agency, but utilizes international ones. Moody's, Standard and Poor's, and Thomson Bank Watch have recently opened offices.

For the continued development of the market, both international and domestic credit rating agencies should take an active part in the credit risk assessment exercise.

4. Transparency

Unlike the equities market, information relating to transacted prices and volume in the OTC market is not generally recorded and widely disseminated to the public. Even though certain information vendors such as Reuters and Bloomberg provide indicative bid and offer prices of benchmark issues of the Exchange Fund papers, these are not necessarily an accurate reflection of the position of the market.

Transacted prices of the OTC market are not disseminated to participants of the listed market.[22] Improvements in the flow of information between the OTC and the SEHK should thus be considered to enhance transparency.

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22. Only the previous day's closing yields for OTC trade conducted among financial institutions and settled through the CMU system will be displayed on the teletext (SEHK's screen for dissemination of information).

5. Liquid Derivative Instruments

Derivative instruments are important tools for risk management. Proactive risk management assumes a new dimension with the advent of interest rate futures, options, swaps, caps, and floors. These instruments enable money managers to alter the interest rate sensitivity of a bond portfolio economically and quickly. Derivative instruments offer money managers a risk-and- return pattern previously unavailable or too costly. A mature and liquid derivative market is important for the development of a bond market.

The derivatives market is very active, and has been growing in both volume and products. A number of derivative products which are mostly stock or index-related exist at the HKFE and the SEHK. The futures contract on HIBOR is the only derivative product on interest rate which is listed on the HKFE, although it is not actively traded. If the market demands it, consideration may be given to introducing more derivative products on EFNs and EFBs (either futures or options) to help increase hedging opportunities, and thereby the marketability of debt securities.

6. Clearing and Settlement

Central Moneymarkets Unit (CMU). During the last decade, the HKMA has been developing and improving the infrastructure of the debt market. The CMU service operated by the HKMA was set up in 1990 to provide computerized clearing and settlement facilities for the Exchange Fund papers. In December l993, the HKMA extended the CMU service to other Hong Kong dollar debt securities. CMU offers an efficient, safe, and convenient clearing and custodial system for Hong Kong dollar debt instruments. Since December 1994, the CMU has been linked to such international clearing systems as Euroclear and Cedel. This helps promote Hong Kong dollar debt securities to overseas investors, who can make use of the link to participate in the Hong Kong dollar debt market. The CMU Service was further extended to non-Hong Kong dollar debt securities from January 1996. All debt instruments cleared through the CMU are either immobilized or dematerialized, and transfer of title is effected in computer book entry form. At the end of September 1999, the CMU had 223 members with 869 issues amounting to HK$243 billion (US$31.4 billion) lodged with it.

HKMA has also been promoting the linkage of CMU with other central securities depositories (CSDs) in the Asian and Pacific region through a network of bilateral links that facilitates cross border trades of securities in the Asian time zone. These linkages will facilitate trading and holding of various Asian bonds by investors in Hong Kong, China and overseas, thereby enlarging the investor base of CMU instruments. They will also help reduce the settlement risk by facilitating delivery versus payment (DvP) settlement for cross border trades in debt securities.

In December 1997, the CMU linked up with the CSD in Australia. In other words, the HKMA has become a member of Reserve Bank Information and Transfer System (RITS) (for Australian government securities) and Austraclear (for private sector debt securities in Australia). Through this linkage, the HKMA enables all CMU members to hold and trade securities in RITS and Austraclear through HKMA's membership in both systems.

Following the establishment of linkages with Australia, the HKMA and the Reserve Bank of New Zealand (RBNZ) have set up a bilateral securities linkage on a reciprocal basis between CMU and Austraclear New Zealand, a clearing system for both government and private sector debt issues operated by RBNZ. The linkage was set up in April 1998, and has since enabled investors in both Hong Kong, China and New Zealand to hold and settle the debt securities cleared in either of these two systems.

Furthermore, a bilateral linkage between the CMU and the Korea Securities Depository (KSD) was set up on a reciprocal basis in the last quarter of 1999.

As part of the HKMA's continuing efforts to expand a network of bilateral linkages with other CSDs in the region, it is making good progress in preparation for linking the CMU to the Government's Securities Book-Entry System (GSBS), in Mainland China.

Real Time Gross Settlement System. The RTGS launched in Hong Kong, China in December 1996 is one of the most advanced inter-bank payment settlement systems in Asia. It provides Hong Kong, China with a modern, efficient, and robust inter-bank payment system with reduced settlement risk. For a truly liquid bond market, it is essential that the inter-bank payment system be as smooth and safe as possible. With the RTGS system providing a seamless interface with the CMU, both real time and end-of-day DvP capability is achieved for all debt securities transactions cleared and settled with the CMU. In May 1998, the HKMA also developed and implemented DvP facilities for share transactions, after building an interface between the RTGS system and the clearing and settlement system for shares operated by the CCASS. The HKMA has also reached an agreement in principle with the People's Bank of China to establish a payment versus payment (PvP) link between the payment systems of Hong Kong, China and the People's Republic of

China. A PvP link will reduce the settlement risk in foreign exchange transactions arising from the time differences in the final settlement of the two currencies involved.

Discount Window. Under the RTGS system, it is necessary to address how liquidity can be provided to the banks to reduce the chance of gridlock, since every payment has to be settled on an individual and gross basis. A discount window (previously known as the liquidity adjustment facility) has been set up by the HKMA, whereby banks can borrow overnight funds from the HKMA in its role as the Central Bank, by entering into repo agreements, using eligible securities as collateral.

Using intra-day repo, banks can obtain interest-free intraday liquidity using EFNs and EFBs as collateral. Intraday repo that fails to be reversed before the close of the business day will be carried into overnight borrowing through the discount window. Up to the end of June 1999, 49 private sector issues with a total value of approximately HK$74.9 billion (US$9.67 billion) (accounting for about 33 percent of the total value of private sector issues currently cleared by the CMU) were eligible for repos under the discount window.

Non-Hong Kong Dollar-Denominated Securities. The HKSCC is currently enhancing its CCASS to provide for the clearing of non-Hong Kong dollar-denominated securities. Upon completion, scheduled for 2000, this will make it possible to trade and settle transactions in foreign currencies in Hong Kong, China hopefully encouraging the trading of non-Hong Kong dollar debt securities listed on the SEHK.

V. Regulatory Structure

Present law and regulations governing the debt securities market in Hong Kong, China can be found under the Banking Ordinance, which deals with the supervision of banks; and the Companies Ordinance, the Protection of Investors Ordinance, the Securities Ordinance, and the SEHK Listing Rules,[23] which regulate the offering of securities and other investments.

The task of administrating the Banking Ordinance rests with the HKMA. The Exchange Fund Bills and Notes Program has not brought about additional supervisory issues relating to the dealers, as all recog-

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23. The SEHK Listing Rules include the Rules Governing the Listing of Securities on the Stock Exchange of Hong Kong Ltd. and on the Growth Enterprises Market.

nized dealers are regulated by either the HKMA (in the case of banks) or by the SFC (in the case of securities dealers).

Under the Companies Ordinance, public offerings of securities require the issuance of a prospectus, which is subject to authorization by the SFC and registration with the Companies Registry. The Companies Ordinance requires the prospectus to disclose information about the issuer, including the issuer's background and financial position, and terms and conditions of the securities to be issued.

Listing Rules. In 1994, the SEHK streamlined its rules for the listing of debt securities intended for selective marketing to professionals, thus ensuring that the rules are competitive in relation to other major stock exchanges for debt securities and that the application procedures are efficient. To reduce the processing time for a new listing and to assist debt issuers with tight timetables, the head of the listing division (which is the operational division in the role of the front line regulator of listed companies), was delegated as the authority to approve the listing of selectively marketed debt securities,[24] rather than having the matter referred to the Listing Committee, which would cause inevitable delay. No changes to the listing rules for debt securities have been introduced since 1994. The rules have worked well to facilitate the listing of debt securities targeted at the professional market.

Deficiencies of the Present Framework. Present law relating to the offering of securities and other investments is found principally in the Companies Ordinance, derived from the UK Companies Act 1929, and in part from the UK Companies Act 1948. While the UK has moved forward, modernizing its own legislation, legislation in Hong Kong, China has not been substantially reviewed since 1971, and is generally considered outdated in today's market.

Remaining legislation dealing with the debt market is scattered throughout different ordinances besides the Companies Ordinance. Due to the different dates of enactment, the layout is not logically set out, which makes referencing difficult.

Currently, the Companies Ordinance only governs the offering of shares and debentures to the public, and the Protection of Investors Ordinance governs the offering of securities and other investment arrangements.

24 . Selectively marketed debt securities are referred to as debt securities marketed to or placed with registered dealers or financial institutions either with a view to reselling them as principals off-market, or placing them with the limited number of investors who are knowledgeable in investment matters.

Increasingly, it is difficult to fit the various types of investment products offered into specific categories under the existing laws. It is also sometimes difficult to justify why shares and debentures are treated differently from securities and other investment arrangements. There is therefore a need to reexamine how the investment products should be governed by prospectus regulations, and the basis of classification of these products.

There are also anomalies in the Companies Ordinance in areas such as providing overseas incorporated issuers with professional investors' exemption from prospectus registration requirements, but requiring the registration of a prospectus by incorporated issuers in Hong Kong, China, even when distributing shares or debentures to professionals. Such inequality is out-of-date in today's business environment.

Launching debt securities requires critical timing to utilize any window of opportunities. The current process for authorizing and registering a prospectus is time consuming and cumbersome, costly to issuers, and has not been reviewed to any extent in light of present market conditions. With the increasing trend in globalization of markets, the proliferation in the use of derivatives, and the fine distinctions between debt instruments, the present regulatory framework must be thoroughly reviewed for Hong Kong, China to maintain its competitiveness in the international market. In November 1999, the SFC formed a working group, comprising issuers, practitioners, and advisers in the capital market, to review the law and regulations relating to offers of securities and other investments. The aim was to create a framework that would modernize the current legislation and make it more business-friendly, and to look at ways of reducing costs to issuers in bringing new issues to the market. The working group met for the first time in mid-November 1999, and commenced a review which was to continue into 2000.

VI. MAJOR POLICY ISSUES AND RECOMMENDATIONS

In meeting the challenges of debt market development, Hong Kong, China regulators must continue to pursue the following initiatives to improve market infrastructure and expand the investor base:

A. Depth and Liquidity of the Market

While OTC debt market activity has grown satisfactorily in Hong Kong, China, trading activity in the listed debt market remains low. Secondary market trading in debt securities is generally low relative to that in the equities market, even in more established debt capital markets such as New York and London. However, in Hong Kong, China, the level of secondary market activities for debts is negligible when compared with the activities for equities. In considering suitable measures to stimulate secondary market activity, one must look at ways to increase the liquidity and depth of the debt market. The following factors ought to be considered:

Market Transparency. Unlike the equities market, information relating to transacted prices and volume in the OTC market is not generally recorded and widely disseminated to the public. Even though certain information vendors such as Reuters and Bloomberg provide indicative bid and offer prices of benchmark issues of the Exchange Fund papers, these are not necessarily an accurate reflection of the position of the market.

Since active transacted prices of the OTC market are not disseminated, participants of the listed market do not have general access to them. Improvements in the flow of information between the OTC and the SEHK should be considered to enhance transparency of the general debt market.

Market Making. Market making for debt securities is not practiced at the SEHK. It is interesting to note that the HKMA requires that securities to be cleared through the CMU have at least two market makers. The purpose behind this requirement is to ensure minimal liquidity in these securities. Bona fide market making, which is used in the OTC debt market, can encourage dealing in the security through the publication of bid and offer prices. Both the stock options and the one-day rolling currency futures contracts have market making-systems to ensure liquidity and a certain degree of transparency. The same system ought to be adopted for trading of debt securities on the SEHK to encourage secondary market activity.

Short-Selling of Debt Securities. Exchange Fund papers are approved for short-selling in Hong Kong, China, but such activities are confined to market makers (as designated by the HKMA). Provided that a market maker has an overall net long position when taking into account all his/her EFBs and EFNs of other maturities, then it is permissible to short-sell any Exchange Fund papers. Consideration may be given to extending short-selling to other debt securities to help develop the debt market in Hong Kong, China.

B. Credit Rating

Credit rating is important for the development of the bond market. It can be said that bonds are often selected by the market on the basis of the ratings assigned by credit rating agencies, while investors do not carry out any credit risk assessment of their own. For the continued development of this market, it is essential that both international and domestic credit rating agencies take an active part in the credit risk assessment exercise.

C. Widening of the Investor Base

The MPF scheme was implemented on 1 December 2000. Demand for long-term Hong Kong dollar debt securities will grow significantly through mobilization and institutionalization of private sector savings. The necessary legislation for the effective operation of the MPF system was enacted in August 1995. As at the end of 1997, there was about HK$129 billion (US$16.6 billion) worth of retirement funds in the market. It is estimated that annual MPF contributions will initially amount to more than HK$10 billion (US$1.29 billion), or around 1 percent of GDP, growing to around HK$60 billion (US$7.74 billion) per year when the system matures after 30 years. The MPF funds will generate demand for instruments that can produce a steady stream of investment income over the medium- to long-term to match underlying retirement liabilities. Debt securities are expected to meet such demand by MPF funds.

Participation of retail investors. Hong Kong, China traditionally has a very high retail participation in the stock market, but retail investors' participation in the debt market is insignificant. Against this background, there is scope for increasing the market size by enticing more retail investors into the investor base.

To this end, public education on debt securities should be undertaken to promote a better understanding of debt instruments as a safe, low risk form of investment which generates a steady stream of income to investors. Industry associations, such as the Hong Kong Capital Market Association, have indicated their support for more public education work. The SEHK can also offer more public seminars to advertise the trading, clearing, and settlement arrangements of the market.

D. Regulatory Requirements on Issuers

The majority of the regulatory framework governing the debt market is based on a 1929 law, which has not been subject to any major overhaul. The present system of prospectus authorization and final registration has not been reviewed to any extent in light of present market conditions. The SFC formed a working group in November 1999 to undertake a review of the regulatory framework, with a view to modernizing the current legislation and making it more business-friendly. The working group will also look at ways to reduce costs to issuers in bringing new issues to the market.

E. Liquid Derivative Instruments

Derivative instruments are important tools for risk management. Proactive risk management assumes a new dimension with the advent of interest rate futures, options, swaps, caps, and floors. These instruments enable money managers to alter the interest rate sensitivity of a bond portfolio economically and quickly. Derivative instruments offer money managers a risk-and- return pattern previously unavailable or too costly. A mature and liquid derivative market is important for the development of a bond market.

The derivatives market in Hong Kong, China is very active, and has been growing in both volume and products. A number of derivative products which are mostly stock or index-related exist at the HKFE and the SEHK. The futures contract on HIBOR is the only derivative product on interest rate which is listed on the HKFE, although it is not actively traded. If the market demands it, consideration may be given to introducing more derivative products on EFNs and EFBs (either futures or options), to help increase hedging opportunities, and thereby the marketability of debt securities.

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Appendix 1

TABLE A1.1
Outstanding Hong Kong Dollar Debt Securities
(HK$ million)

During	Exchange Fund Bills and Notes	Other debt securities	Total
1990	7,540	N/A	N/A
1991	14,040	N/A	N/A
1992	20,340	N/A	N/A
1993	28,060	N/A	N/A
1994	52,340	N/A	N/A
1995	58,730	138,326	197,056
1996	91,850	187,557	279,407
1997 Q1	95,230	193,423	288,653
1997 Q2	98,050	214,298	312,348
1997 Q3	99,850	232,662	332,512
1997 *Q*4	**101,650**	**243,858**	**345,508**
1998 Q1	103,450	256,173	359,623
1998 Q2	105,250	275,220	380,470
1998 *Q*3	**97,450**	**293,368**	**390,818**
1998 Q4	97,450	292,660	390,110
1999 Q1	97,450	305,006	402,456
1999 Q2	98,806	308,278	407,084
1999 *Q*3	**100,363**	**313,885**	**414,248**

Note: N/A - no available data for “other debt securities” prior to 1995.
Source: *HKMA Monthly Statistical Bulletin.*

TABLE A1.2
New Issues of Hong Kong Dollar Debt Instruments,
Other Than Exchange Fund Bills and Notes
(HK$ million)

During	Fixed Rate	Floating Rate	Total
1995	15,524	43,159	58,683
1996	21,083	49,631	70,714
1997 Q1	2,982	9,850	12,832
1997 Q2	4,586	25,950	30,536
1997 Q3	6,745	25,369	32,114
1997 Q4	12,726	11,332	24,058
Total for 1997	**27,039**	**72,501**	**99,540**
1998 Q1	17,834	1,980	19,814
1998 Q2	26,059	4,265	30,324
1998 Q3	22,674	7,655	30,329
1998 Q4	10,504	4,775	15,279
Total for 1998	**77,071**	**18,675**	**95,746**
1999 Q1	22,034	8,751	30,785
1999 Q2	14,984	11,520	26,504
1999 Q3	26,237	17,770	44,007
Total for *Q*1-3 1999	**63,255**	**38,041**	**101,296**

Note: No available data prior to 1995.
Source: *HKMA Monthly Statistical Bulletin.*

TABLE A1.3
Exchange Fund Bills and Notes Outstanding Amounts of EFBs and EFNs and Average Daily Turnover
(HK$ million)

During	Outstanding Amount			Average Daily Turnover		
	Bills	**Notes**	**Total**	**Bills**	**Notes**	**Total**
1990	7,540	–	**7,540**	1,459	–	**1,459**
1991	14,040	–	**14,040**	4,903	–	**4,903**
1992	20,340	–	**20,340**	7,541	–	**7,541**
1993	26,260	1,800	**28,060**	14,243	1,107	**14,981**
1994	43,940	8,400	**52,340**	19,516	2,795	**22,311**
1995	44,330	14,400	**58,730**	13,408	3,785	**17,194**
1996	70,250	21,660	**91,850**	11,571	4,749	**16,320**
1997 Q1	71,830	23,400	95,230	18,806	5,344	24,150
1997 Q2	72,850	25,200	98,050	18,051	4,160	22,211
1997 Q3	72,850	27,000	99,850	9,507	2,037	11,545
1997 Q4	72,850	28,800	101,650	7,864	420	8,283
Average for 1997				***13,557***	***2,990***	***16,547***
1998 Q1	72,850	30,600	103,450	8,119	665	8,784
1998 Q2	72,850	32,400	105,250	9,877	904	10,781
1998 Q3	63,850	33,600	97,450	7,364	662	8,026
1998 Q4	63,850	33,600	97,450	7,740	419	8,159
Average for 1998				***8,275***	***663***	***8,938***
1999 Q1	63,850	33,600	97,450	11,157	325	11,482
1999 Q2	64,706	34,100	98,806	12,419	236	12,655
1999 Q3	66,263	34,100	100,363	18,929	304	19,233
Average for 1999				***14,168***	***288***	***14,457***

Source: *Hong Kong Monetary Authority Monthly Statistical Bulletin.*

Appendix 2

Listed Debt Securities on the Stock Exchange of Hong Kong Limited

TABLE A2.1
Debt Securities Trading by Type of Issue
(HK$ million)

Year	Bank	Corporation	State	State Corporation	Supranational	Total
1994	0.00	1.33	0.00	0.00	0.00	1.33
1995	0.00	365.31	0.00	0.00	0.00	365.31
1996	0.00	316.59	0.00	0.00	0.00	316.59
1997	0.00	179.79	0.00	0.00	0.00	179.79
1998	0.00	109.61	0.00	0.00	0.00	109.61

TABLE A2.2
Classification of Listed Debt Securities as at the end of 1998

Major group	No. of issuers	No. of issues	Nominal amount (HK$ mn)
Bank	21	28	83,122.74
Corporation	50	117	218,543.24
State	17	50	406,433.12
State Corporation	17	29	88,068.93
Supranational	9	31	59,430.84
Total	114	255	855,598.87

Table A2.3
Listed Debt Securities, 1994 to 1998

Country	1994		1995		1996		1997		1998	
	No. of Issues	Nominal Amount	No. of Issues	Nominal Amount	No. of Issues	Nominal Nominal	No. of Issues	Nominal Amount	No. of Issues	Nominal Amount
Hong Kong, China	10	9,359.55	16	14,696.61	17	15,673.23	18	18,370.56	15	11,892.88
People's Rep. of China	10	17,753.62	12	19,952.02	15	29,312.02	17	34,811.02	16	40,476.06
Foreign	81	402,071.69	129	499,559.46	196	592,662.02	222	714,280.76	193	743,799.09
Supra-national	28	35,947.34	27	40,749.00	28	41,969.00	29	49,094.59	31	59,430.84
Total	129	465,132.21	184	574,957.09	256	679,616.27	286	813,556.93	255	855,598.87

Source: *SEHK Factbook 1998.*

Appendix 3

Strengthening of Currency Board Arrangements in Hong Kong, China

The Hong Kong Monetary Authority (HKMA) strongly reiterates that there will be no foreign exchange controls in the Hong Kong Special Administrative Region (HKSAR). Article 112 of the Basic Law clearly specifies that no foreign exchange control policies shall be applied in the HKSAR. Furthermore, the HKSAR Government is fully committed to the maintenance of the linked exchange rate system and the adherence to the discipline of the currency board arrangements under that system.

To further strengthen the currency board arrangements and make them less susceptible to manipulation by speculators, producing extreme conditions in the interbank market and interest rates, the HKMA had announced a package of seven technical measures on 5 September 1998:

1. Providing a clear undertaking to all licensed banks in Hong Kong, China to convert Hong Kong dollars in their clearing accounts into US dollars at the fixed exchange rate of HK$7.75 to US$1. This explicit Convertibility Undertaking is a clear demonstration of the Government's commitment to the linked exchange rate system. It is the intention of the HKMA to move the rate of the Convertibility Undertaking to HK$7.80 when market circumstances permit;
2. Removing the bid rate of the Liquidity Adjustment Facility (LAF). As the improved efficiency of the interbank payment system has facilitated liquidity management of licensed banks, the need for the LAF deposit facility to facilitate orderly interbank market activities has fallen away;
3. Replacing LAF by a Discount Window with the Base Rate (formerly known as the LAF Offer Rate) to be determined from time to time by the HKMA. In determining the Base Rate, the HKMA will ensure that interest rates are adequately responsive to capital flows, while allowing excessive and destabilizing interest rate volatility to be dampened;
4. Removing the restriction on repeated borrowing in respect of the provision of overnight Hong Kong dollar liquidity through repo transactions using Exchange Fund bills and notes. Allowing for freer access to day end liquidity through the use of Exchange Fund paper, which is fully backed by foreign currency reserves, will make Hong Kong's monetary system less susceptible to manipulation and dampen excessive interest rate volatility without departing from the discipline of the Currency Board arrangement;
5. Issuing new Exchange Fund paper only when there is an inflow of funds. This will ensure that all new Exchange Fund paper will be fully backed by foreign currency reserves;
6. Introducing a schedule of discount rates applicable for different percentage thresholds of holdings of Exchange Fund paper by the licensed banks for the purpose of accessing the Discount Window. This will ensure that the interest

rate adjustment mechanism kicks in fully when the Hong Kong dollar is under significant pressure;

7. Retaining the restriction on repeated borrowing in respect of repo transactions involving debt securities other than Exchange Fund paper. No new issues of paper other than Exchange Fund paper will be accepted at the Discount Window. This will prevent significant liquidity being provided to licensed banks against paper not backed by foreign currency reserves.

In addition to the above measures, the HKMA will work towards producing an Exchange Fund balance sheet showing Currency Board operations, and have this published as frequently as technically feasible.

The seven technical measures and the move towards greater disclosure have been approved by the Exchange Fund Advisory Committee, upon the recommendation by its Subcommittee on Currency Board Operations. The Subcommittee has been set up recently to oversee the operation of the currency board arrangements in Hong Kong, China.

Source: Press announcement, HKSAR Government website.