RECORD OF DISCUSSION OF THE EXCHANGE FUND ADVISORY COMMITTEE SUB-COMMITTEE ON CURRENCY BOARD OPERATIONS ON 2 NOVEMBER 2000

(Approved for Issue by the Exchange Fund Advisory Committee on 23 November 2000)

Currency Board Operations for the Period 1 - 21 October 2000

The Sub-Committee observed that the period under review had been a generally quiet and stable one: Hong Kong had not been adversely affected by the weaknesses elsewhere in the region, which, if anything, appeared to have led to a flow of funds into Hong Kong as a safe haven. As a result of strong demand for Hong Kong dollar assets, which was reportedly equity related, the Hong Kong dollar had appreciated in early October. The HKMA had, in response to bank offers, sold a total of HK$0.39 bn. The Aggregate Balance had risen to HK$0.79 bn, leading to a softening of local interest rates and an easing of the exchange rate, which had remained generally steady throughout the rest of the period.

Members noted that the negative spreads between Hong Kong dollar and US dollar interest rates had widened during the reporting period. They also noted that, largely as a result of net interest income, the backing ratio had seen a moderate increase, from 111.47% to 111.66%.

The Sub-Committee noted that, in accordance with the currency board principles, changes in the monetary base during the reporting period had been fully matched by corresponding changes in foreign reserves.

The report on Currency Board operations for the period under review is at **Annex A**.

Monitoring of Risks and Vulnerabilities

The Sub-Committee noted an information paper assessing risks and vulnerabilities in the external and domestic environments that might have an adverse impact on Hong Kong's financial stability. The assessment examined, among other scenarios, the risk of sharp reversals of capital flows, particularly in association with major realignments of international currencies; threats posed by higher oil prices; vulnerabilities in Asia's recovery; and the possibility of a scaling back of growth momentum within Hong Kong. The general conclusions of the assessment were that Hong Kong's economy was in good shape, that the recovery was well entrenched, and that, on present indications, the risks identified were unlikely to reach crisis dimensions.

Reserve Requirements as a Liquidity Buffer

The Sub-Committee considered a paper setting out the arguments for and against using reserve requirements as a tool for reducing interest rate volatility in Hong Kong. Members observed that, while the use of reserve requirements (whether for liquidity management, monetary control, prudential regulation, or central bank income) had markedly declined throughout the world, a thorough examination of this subject formed a useful part of the Sub-Committee's continuing consideration of the question of liquidity management.

Members noted that reserve requirements, even if set at a quite modest percentage of bank deposits, would add substantially to the Aggregate Balance, thus expanding the liquidity buffer available for reducing interest rate volatility. Members observed, however, that there were a number of analytical and practical problems associated with the use of reserve requirements for liquidity management. First, in order for reserve requirements to work effectively as a flexible buffer, an averaging provision would be necessary to enable the requirements to be met on average over a specified maintenance period: this arrangement might well add to interest rate volatility under certain conditions by encouraging banks to over- or under-react to market movements that changed expectations about the overnight interest rate. In addition, the room for manoeuvre in the reserve position would become increasingly inelastic towards the end of the maintenance period. As a result, the extent to which reserve requirements could effectively act as a liquidity buffer would decline during the period, thus risking additional interest rate volatility, particularly near the end of the period.

Members noted that a second problem arose from the fact that reserve requirements would be, in effect, a substantial tax on the banking system: this could well undermine Hong Kong's competitiveness as an international financial centre. Thirdly, Members observed that the increasing globalisation of financial markets and financial innovation had made it much easier for banks to circumvent reserve requirements in jurisdictions where reserve requirements were still imposed. There was no reason to expect that Hong Kong would avoid these difficulties.

The Sub-Committee concluded that, since the practical difficulties considerably outweighed any benefits, reserve requirements were not appropriate as a liquidity buffer for Hong Kong, particularly in view of the fact that the current system was working well.

REPORT ON CURRENCY BOARD OPERATIONS (1 OCTOBER - 21 OCTOBER 2000)

The Hong Kong dollar exchange and money markets remained stable despite corrections in local stock prices and volatility in some regional financial markets. The exchange rate stayed 20 - 40 pips stronger than the linked rate during most of the period, except for a brief strengthening to 7.7939 at the beginning of the period amid increased demand for Hong Kong dollar assets. The HKMA sold a total of HK$0.39 bn in the first week of October in response to bank offers, leading to an expansion in the Aggregate Balance. Interbank interest rates eased across the board, reflecting partly an increase in liquidity, and partly some shifts into Hong Kong dollar assets on the back of market perceptions that Hong Kong was a safe haven in the region. The monetary base contracted from HK$209.99 bn to HK$207.79 bn during the reporting period, mainly reflecting a reduction in the outstanding amount of Certificates of Indebtedness. In accordance with the currency board principles, changes in the monetary base were fully matched by corresponding changes in foreign reserves.

Hong Kong Dollar Exchange Rate

The Hong Kong dollar exchange rate moved between 7.7939 and 7.7981 during the reporting period. On the back of increased demand for Hong Kong dollar assets, reportedly equity related, the exchange rate briefly strengthened to 7.7939 on 4 October. The HKMA, in response to bank offers, sold a total of HK$0.39 bn. As a result, the Aggregate Balance rose to HK$0.79 bn, leading to a softening of local interest rates and an easing of the exchange rate. Thereafter, the exchange rate moved between 7.7973 and 7.7981, before closing at 7.7974 (Charts 1 and 2).

Chart 1
Hong Kong Dollar Exchange Rate (closing rate)

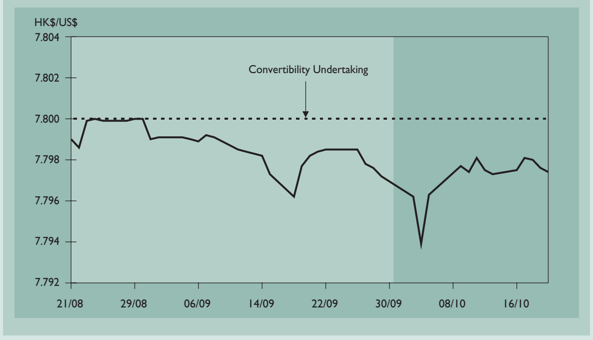


Chart 2
Effective Exchange Rate Index

Interest Rates

Interbank interest rates eased across the board during the period, reflecting partly an increase in liquidity, and partly increased demand for Hong Kong dollar assets. 1-month HIBOR eased from 6.31% at the beginning of October to 6.13% on 5 October, as the Aggregate Balance expanded. 1-month HIBOR firmed briefly in mid-October, but then eased again to reach a low of 5.63% at the end of the reporting period. This probably reflected some portfolio shifts into Hong Kong dollar assets as investors perceived Hong Kong as a safe haven amid volatility in some regional financial markets. **3-month HIBOR** also eased, albeit at a more moderate pace, from 6.40% to 6.06%. **12-month HIBOR declined from 6.63% to 6.44%** during the reporting period (Chart 3).

Measured in terms of the standard deviation of 1-month HIBOR, **interest rate volatility increased** from 0.08 percentage points in September to 0.19 percentage points in October (up to 20 October) (Chart 4).

Reflecting lower Hong Kong dollar interbank interest rates, **the negative spreads between Hong Kong dollar and US dollar interbank rates widened during the period.** The negative spread in respect of 1-month rates, which stood at 33 bp at the beginning of the reporting period, widened to 99 bp at the end. **The negative spread in terms of 12-month rates also widened,** from 20 bp to 27 bp during the period (Chart 5).

In line with the softening of local interest rates, the **Exchange Fund paper yield curve shifted down** during the period (Chart 6). In respect of 5-year and 10-year Exchange Fund Notes, yields decreased by 12 bp and 13 bp, to 6.56% and 7.04% respectively. **The**

Chart 3
HIBORs

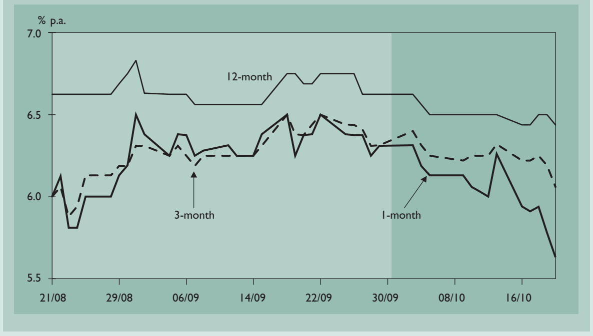


Chart 4
Standard Deviation of 1-month HIBOR

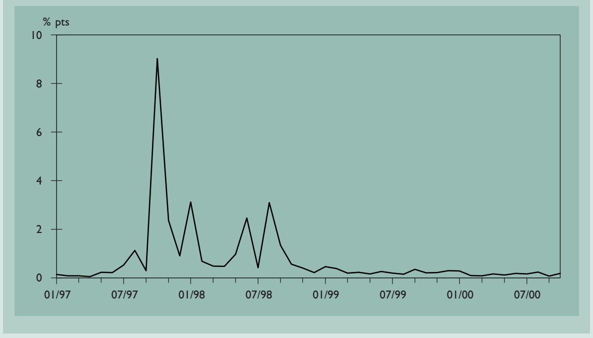


Chart 5
Hong Kong Dollar - US Dollar Interest Rate Differentials

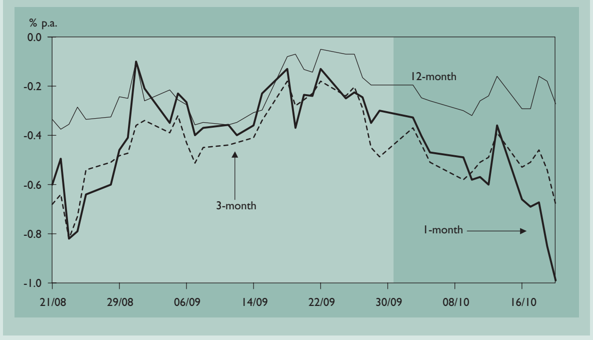
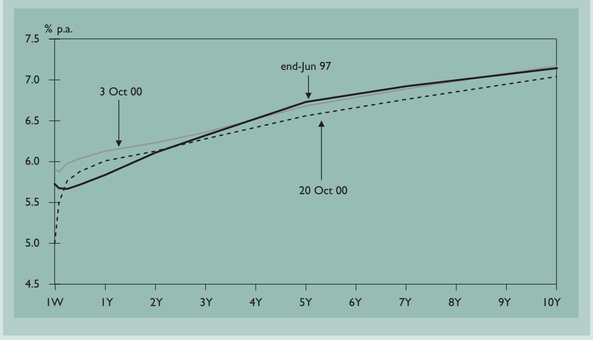


Chart 6
Exchange Fund Paper Yield Curves



yield spread between 5-year and 10-year Exchange Fund paper and US Treasuries, however, widened slightly by 3 bp and 7 bp, to 80 bp and 132 bp respectively on 20 October (Table 1).

The **Savings Rate** and **Best Lending Rate remained unchanged.** The weighted average deposit rate offered by 44 major authorized institutions for 1-month time deposits (which are outside the Interest Rate Rules) decreased from 6.18% on 29 September to 5.85% on 13 October. The effective deposit rate[1] increased marginally from 4.75% in August to 4.77% in September (Chart 7).

Base Rate

The **Base Rate remained unchanged at 8.0%** (150 basis points above the US Fed Funds Target Rate) (Chart 8).

Monetary Base

The monetary base, which comprises the outstanding amount of Certificates of Indebtedness, coins in circulation, the Aggregate Balance and the outstanding amount of Exchange Fund Bills and Notes, **decreased from HK$209.99 bn on 3 October to HK$207.79 bn on 20 October** (Table 2). Movements in individual components are discussed below.

Table 1

Yield Spreads between Exchange Fund Paper and US Treasuries (basis points)

	27-Jun-97	3-Oct-00	20-Oct-00
3-month	56	-37	-60
1-year	21	-3	-3
3-year	3	34	41
5-year	27	77	80
10-year	54	125	132

Chart 7

Effective Hong Kong Dollar Deposit Rate

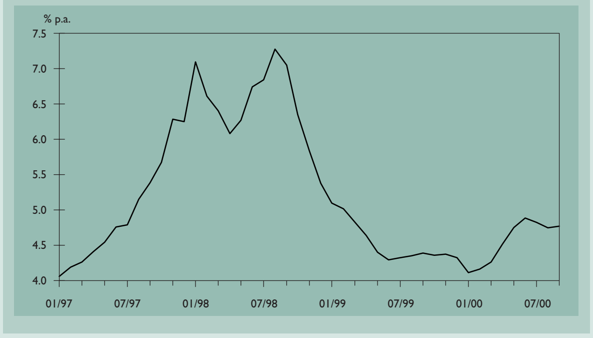


Chart 8

Base Rate and Overnight HIBOR

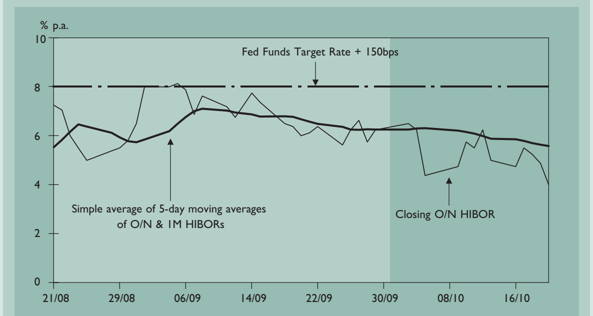


Table 2

Monetary Base

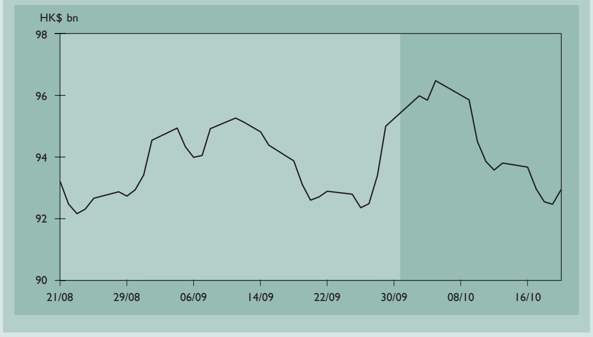
(HK$ bn)	3-Oct	20-Oct
CIs	95.99	92.95
Coins in Circulation	6.09	6.11
Aggregate Balance	0.43	0.81
Outstanding EFBNs	107.49	107.93
Monetary Base	209.99	207.79

1 This is the weighted average of the interest rates on demand deposits, savings and time deposits. As the banking statistics classify deposits by remaining maturities, we have used certain assumptions regarding the maturity distribution to compute the effective deposit rate.

Certificates of Indebtedness

The three Note Issuing Banks (NIBs) submitted to the HKMA a total of US$0.19 bn in exchange for HK$1.47 bn worth of Certificates of Indebtedness (CIs) between 1 October and 5 October. They then redeemed a total of HK$3.53 bn in exchange for US$0.45 bn in the rest of the reporting period. As a result, **the outstanding amount of CIs decreased** from HK$95.01 bn at the end of the last reporting period to HK$92.95 bn on 20 October (Chart 9).

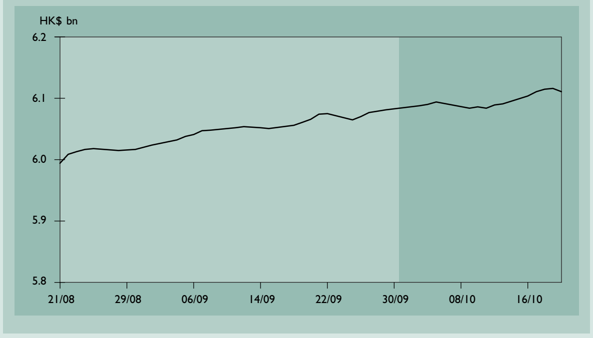
Chart 9
Certificates of Indebtedness



Coins

The total amount of **coins in circulation increased slightly from** HK$6.09 bn to HK$6.11 bn during the period (Chart 10).

Chart 10
Coins in Circulation



Aggregate Balance

Reflecting the sale of HK$0.39 bn by the HKMA in response to bank offers in early October, **the Aggregate Balance increased** to HK$0.79 bn on 4 October, and remained stable thereafter. (Table 3 and Chart 11).

During the period, **a total of HK$0.28 bn of interest payments on Exchange Fund paper were made. Taking into account the interest payments carried forward from the last reporting period, an additional HK$0.29 bn (market value) of Exchange Fund paper was issued to absorb these interest payments.**

Chart 11
Aggregate Balance
(before Discount Window Activities)

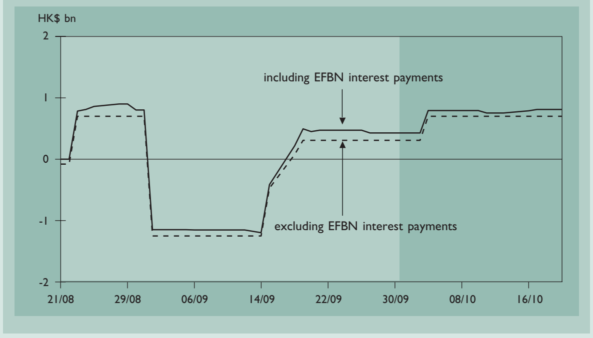


Table 3
HKMA Hong Kong Dollar/US Dollar Foreign Exchange Transactions*
(1 Oct – 21 Oct)

Trade Date	Net Hong Kong Dollar Purchase (+) / Sale (-) (HK$ mn)
4 Oct	-390
Total	**-390**

* *Foreign exchange transactions may be due for settlement today, on the next business day, or the day after, at which point they would affect the Aggregate Balance.*

Outstanding Exchange Fund Bills and Notes

During the reporting period, **the market value of outstanding Exchange Fund paper increased slightly from HK$107.49 bn to HK$107.93 bn.** The increase was mainly a result of additional net issues (refer to paragraph 12 above). All issues of Exchange Fund Bills and Notes were well received by the market (Table 4). **Holdings of Exchange Fund paper by the banking sector (before Discount Window activities) decreased during the period,** from HK$96.25 bn (or 89.5% of total) on 3 October to HK$95.08 bn (or 88.1% of total) on 20 October (Chart 12).

Discount Window Activities

Notwithstanding occasional increases in borrowings by individual banks, Discount Window activity generally fell in the period on the back of a more stable Aggregate Balance. For the period as a whole, **banks in total borrowed HK$3.05 bn** from the Discount Window, compared with HK$22.49 bn in the preceding period. All except one of the borrowings used Exchange Fund paper as collateral (Chart 13).

A total of 15 banks borrowed overnight funds through the Discount Window (Table 5). Most banks used the Discount Window facility only infrequently.

Table 4
Issuance of Exchange Fund Paper
(1 Oct – 21 Oct)

	No. of Issues Launched	Over-subscription Ratio
1-month EFB	2	2.76-6.80
3-month EFB	3	3.02-3.62
6-month EFB	2	5.46-6.15
3-year EFN	1	6.68

Chart 12
Exchange Fund Paper Held by Licensed Banks

Chart 13
Discount Window Borrowing

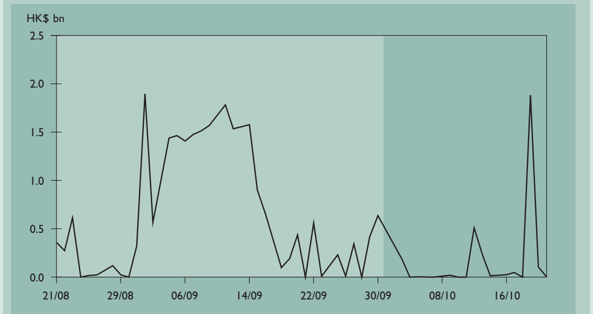


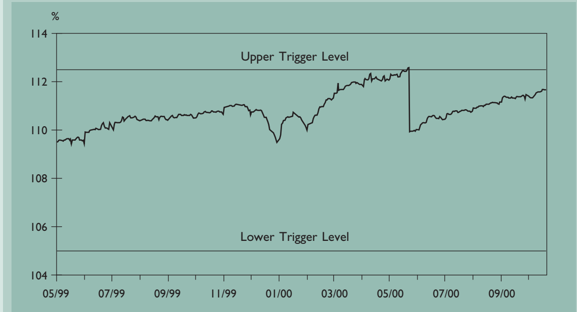
Table 5
Frequency of Individual Bank's Access to the Discount Window
(1 Oct – 21 Oct)

Frequency of Using Discount Window	No. of Banks
1	10
2	4
3	1
Total	**15**

Backing Portfolio

During the period, backing assets fell in line with the decrease in CIs outstanding. Nevertheless, the decline in backing assets was more moderate than that of the monetary base, partly due to positive net interest income. As a result, **the backing ratio increased from 111.47% on 30 September to 111.66% on 20 October** (Chart 14). Under the linked exchange rate system, although specific Exchange Fund assets have been designated for the Backing Portfolio, all Exchange Fund assets are available to support the Hong Kong dollar exchange rate.

Chart 14
Daily Movement of the Backing Ratio



REPORT ON CURRENCY BOARD OPERATIONS (22 OCTOBER - 25 NOVEMBER 2000)

The Hong Kong dollar exchange rate remained stable during the review period, apart from a brief strengthening in early November, which was probably due to equity-related activities. Reflecting stable liquidity conditions, local interbank interest rates remained soft relative to US rates. The monetary base increased marginally from HK$207.64 bn to HK$207.74 bn during the reporting period. In accordance with currency board principles, changes in the monetary base were fully matched by corresponding changes in foreign reserves.

Hong Kong Dollar Exchange Rate

The Hong Kong dollar exchange rate stayed close to the linked rate during the reporting period, except for a brief strengthening in early November. Probably due to share placement activities of a non-Hong Kong based listed company, demand for Hong Kong dollar assets increased and the exchange rate appreciated to 7.7962 on 2 November. The exchange rate soon eased as proceeds from the share placement exercise were switched out of the Hong Kong dollar. Thereafter, partly reflecting soft Hong Kong dollar interest rates, the exchange rate eased to a level very close to 7.8000 towards the end of the reporting period (Charts 1 and 2).

Interest Rates

Interbank interest rates were largely stable during the period, partly due to stable liquidity conditions. Probably reflecting increased volatility in regional financial markets, 1-month HIBOR briefly firmed from around 5.50% in mid-October to 5.88% on 31 October. It came down quickly, however, and moved within a narrow range between 5.44% and 5.75% for the rest of the period. **3-month and 12-month HIBORs remained stable, closing at 6.00% and 6.31%** respectively at the end of the reporting period (Chart 3).

Chart 1
Hong Kong Dollar Exchange Rate (closing rate)

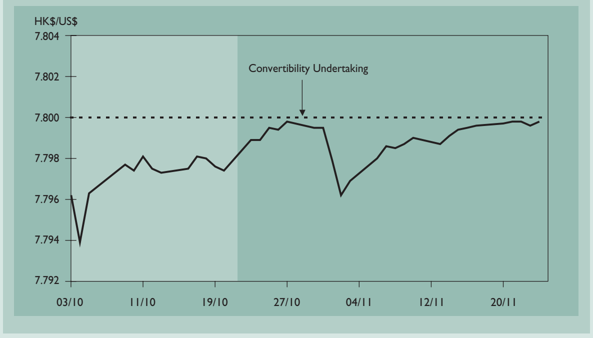


Chart 2
Effective Exchange Rate Index

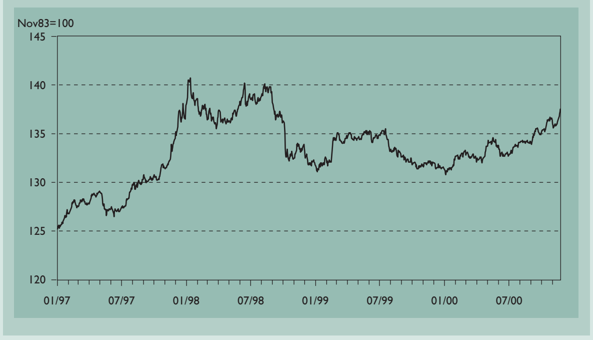
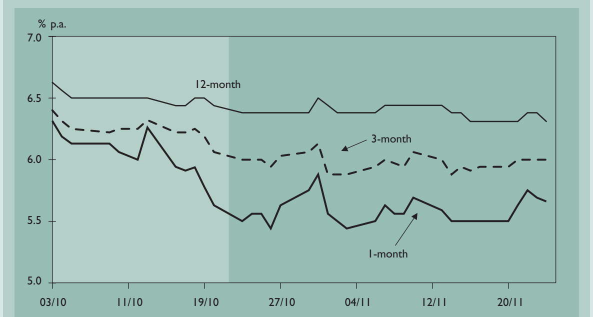


Chart 3
HIBORs



Measured in terms of the standard deviation of 1-month HIBOR, **interest rate volatility decreased** from 0.28 percentage point in October to 0.11 percentage point in November (up to 24 November) (Chart 4). Money market activity has been rather quiet in the face of increased volatility in some regional financial markets.

The negative spreads between Hong Kong dollar and US dollar interbank rates persisted during the period. Except for a brief narrowing of the spread to 75 bp on 31 October, the differential hovered within a range between 88 bp and 117 bp. **The negative spreads in terms of 3-month and 12-month were generally stable,** closing at 77 bp and 38 bp respectively at the end of the reporting period (Chart 5).

Yields on Exchange Fund paper at the shorter end were little changed during the period (Chart 6). In respect of 5-year and 10-year Exchange Fund Notes, yields increased marginally by 3 bp and 11 bp, to 6.55% and 7.12% respectively. **The yield spread between 5-year and 10-year Exchange Fund paper and US Treasuries, however, widened slightly** by 3 bp and 5 bp, to 85 bp and 138 bp respectively on 24 November (Table 1).

The **Savings Rate** and **Best Lending Rate remained unchanged.** The weighted average deposit rate offered by 44 major authorized institutions for 1-month time deposits (which are outside the Interest Rate Rules) decreased from 5.85% on 13 October to 5.51% on 24 November. The effective deposit rate[1] decreased from 4.77% in September to 4.66% in November (Chart 7).

Chart 4
Standard Deviation of 1-month HIBOR

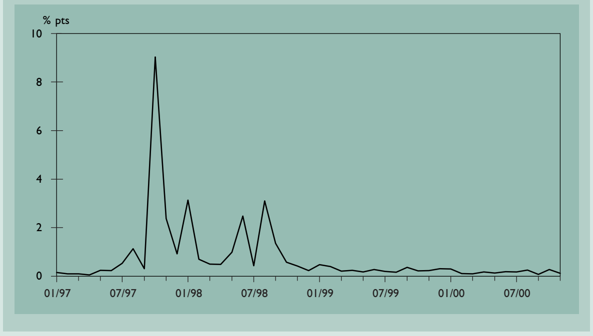


Chart 5
Hong Kong Dollar - US Dollar Interest Rate Differentials

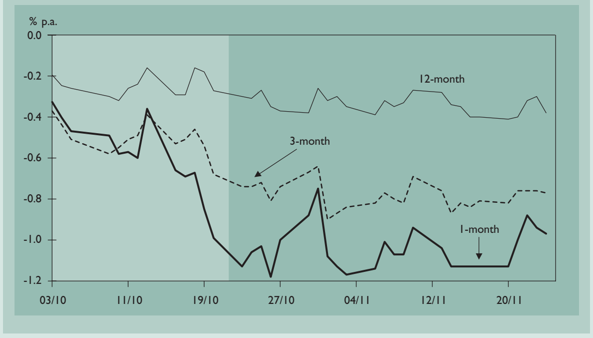


Chart 6
Exchange Fund Paper Yield Curves

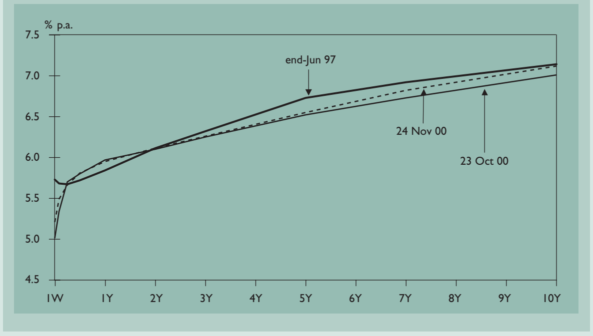


Table 1
Yield Spreads between Exchange Fund Paper and US Treasuries (basis points)

	27-Jun-97	23-Oct-00	24-Nov-00
3-month	56	-62	-80
1-year	21	-3	-33
3-year	3	41	36
5-year	27	82	85
10-year	54	133	138

1 This is the weighted average of the interest rates on demand deposits, savings and time deposits. As the banking statistics classify deposits by remaining maturities, we have used certain assumptions regarding the maturity distribution to compute the effective deposit rate.

Base Rate

The **Base Rate remained unchanged at 8.0%,** 150 basis points above the US Fed Funds Target Rate (Chart 8).

Monetary Base

The monetary base, which comprises the outstanding amount of Certificates of Indebtedness, coins in circulation, the Aggregate Balance and the outstanding amount of Exchange Fund Bills and Notes, **increased slightly from HK$207.64 bn on 23 October to HK$207.74 bn on 24 November** (Table 2). Movements in individual components are discussed below.

Certificates of Indebtedness

The three Note Issuing Banks (NIBs) submitted to the HKMA a total of US$0.21 bn in exchange for HK$1.61 bn worth of Certificates of Indebtedness (CIs) between 23 October and 6 November. They then redeemed a total of HK$2.31 bn in exchange for US$0.30 bn in the rest of the reporting period. As a result, **the outstanding amount of CIs decreased** from HK$92.95 bn at the end of the last reporting period to HK$92.25 bn on 24 November (Chart 9).

Chart 7
Effective Hong Kong Dollar Deposit Rate

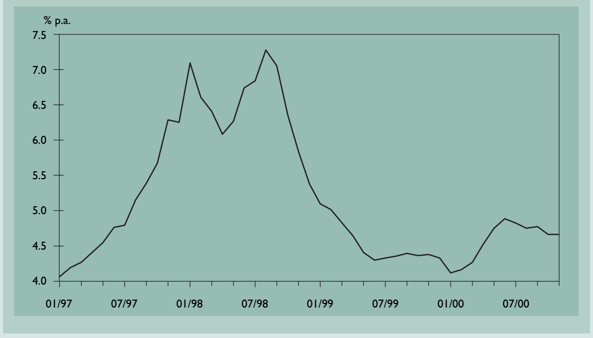


Chart 8
Base Rate and Overnight HIBOR

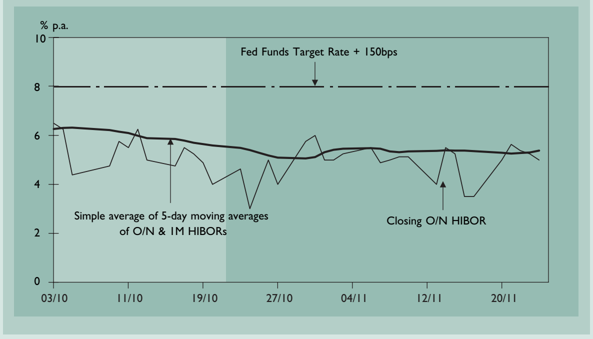
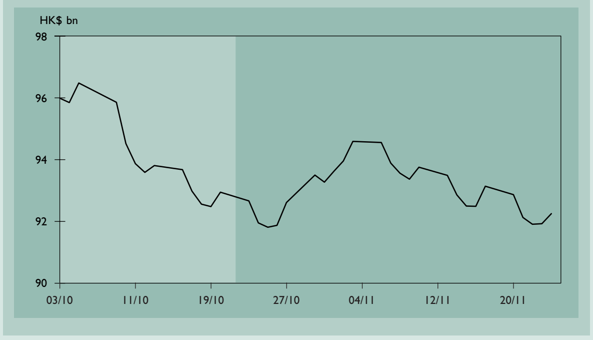


Table 2
Monetary Base

(HK$ bn)	23-Oct	24-Nov
CIs	92.66	92.25
Coins in Circulation	6.11	6.12
Aggregate Balance	0.85	0.82
Outstanding EFBNs	108.02	108.55
Monetary Base	207.64	207.74

Chart 9
Certificates of Indebtedness



Coins

The total amount of **coins in circulation increased slightly** from HK$6.11 bn to HK$6.12 bn during the period (Chart 10).

Aggregate Balance

As the HKMA did not conduct any foreign exchange operations for the currency board account during the reporting period, the **Aggregate Balance remained stable,** with small changes due to interest payments and new issues of Exchange Fund paper (Chart 11).

During the period, **a total of HK$0.67 bn of interest payments on Exchange Fund paper were made, while an additional HK$0.65 bn (market value) of Exchange Fund paper was issued to absorb these interest payments.** The remaining amount was carried forward in the Aggregate Balance.

Outstanding Exchange Fund Bills and Notes

During the reporting period, **the market value of outstanding Exchange Fund paper increased slightly from HK$108.02 bn to HK$108.55 bn.** The increase was mainly a result of additional net issues (refer to paragraph 12 above). All issues of Exchange Fund Bills and Notes were well received by the market (Table 4). **Holdings of Exchange Fund paper by the banking sector (before Discount Window activities) increased during the period**, from HK$95.69 bn (or 88.6% of total) on 23 October to HK$95.9 bn (or 88.3% of total) on 24 November (Chart 12).

Chart 10
Coins in Circulation

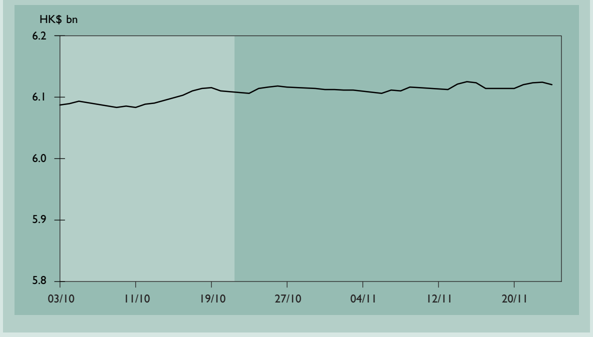


Chart 11
Aggregate Balance
(before Discount Window Activities)

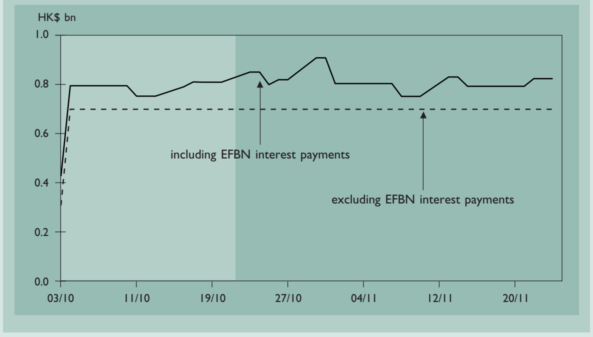
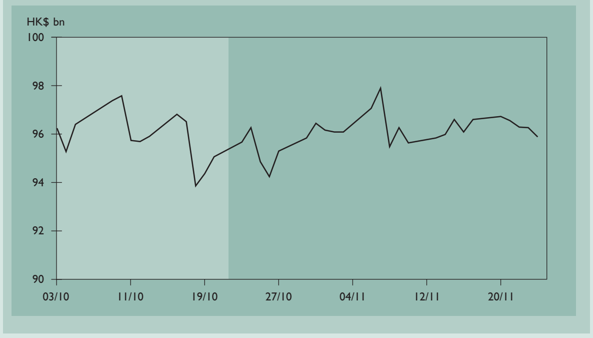


Table 4
Issuance of Exchange Fund Paper
(22 Oct – 25 Nov)

	No. of Issues Launched	Over-subscription Ratio
1-month EFB	4	3.17-8.40
3-month EFB	5	2.36-3.11
6-month EFB	2	4.07-4.54
12-month EFB	2	7.28-7.54
5-year EFN	1	9.97

Chart 12
Exchange Fund Paper Held by Licensed Banks



Discount Window Activities

On the back of stable liquidity conditions, Discount Window activity generally fell in the period. For the period as a whole, **banks in total borrowed HK$2.56 bn** from the Discount Window, compared with HK$3.05 bn in the preceding period. All except two of the borrowings used Exchange Fund paper as collateral (Chart 13).

A total of 31 banks borrowed overnight funds through the Discount Window (Table 5). Most banks used the Discount Window facility only infrequently.

Backing Portfolio

During the period, backing assets increased at a faster pace than that of the monetary base, mainly due to positive net interest income, which was boosted by the interest rate differentials in favour of the US dollar, in which the backing assets are denominated. As a result, **the backing ratio increased from 111.66% on 20 October to 111.99% on 24 November** (Chart 14). Under the linked exchange rate system, although specific Exchange Fund assets have been designated for the backing portfolio, all Exchange Fund assets are available to support the Hong Kong dollar exchange rate.

Chart 13

Discount Window Borrowing

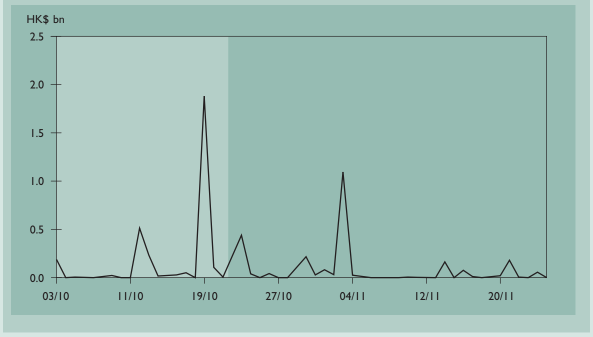


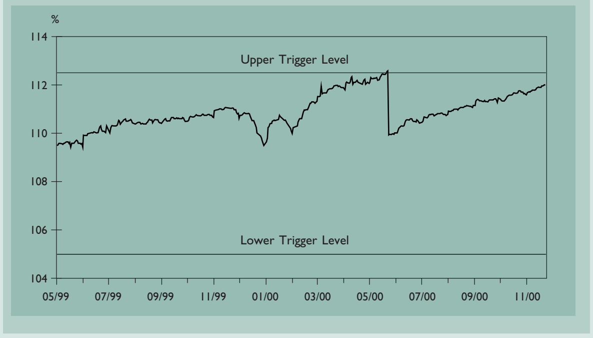
Table 5

Frequency of Individual Bank's Access to the Discount Window (22 Oct – 25 Nov)

Frequency of Using Discount Window	No. of Banks
1	25
2	3
3	3
Total	**31**

Chart 14

Daily Movement of the Backing Ratio



RECORD OF DISCUSSION OF THE EXCHANGE FUND ADVISORY COMMITTEE SUB-COMMITTEE ON CURRENCY BOARD OPERATIONS ON 5 JANUARY 2001

(Approved for Issue by the Exchange Fund Advisory Committee on 18 January 2001)

Currency Board Operations for the Period 26 November - 20 December 2000

The Sub-Committee observed that markets had been generally quiet during the period under review. The Hong Kong dollar exchange rate had stayed very close to 7.8000 for most of the period. In early December the Aggregate Balance had fallen to a negative level following a triggering of the Convertibility Undertaking on 6 December. Subsequently in response to bank offers, the HKMA had sold Hong Kong dollars to restore the Aggregate Balance to positive.

Members noted the substantial increase in the backing ratio during the period under review. At 112.35% on the last day of the period, it had come very near to the upper trigger level of 112.5%, upon which assets from the backing portfolio would be transferred to the investment portfolio sufficient to reduce the backing ratio to 110%. A large part of the increase in December was attributable to net interest income on the backing portfolio, helped by a favourable interest differential. Although the backing ratio had continued to be close to the upper trigger level in late December and early January, the experience of past years suggested that it could be substantially reduced in the weeks leading up to Chinese New Year as the number of outstanding Certificates of Indebtedness would increase to cover additional banknote issue. It was unlikely, therefore, that the upper trigger would be reached in the near future. The HKMA would continue to monitor the movements of the backing ratio and take action as necessary.

The Sub-Committee noted that, in accordance with the currency board principles, changes in the monetary base during the reporting period had been fully matched by corresponding changes in foreign reserves.

The report on Currency Board operations for the period under review is at **Annex A**.

Monitoring of Risks and Vulnerabilities

The Sub-Committee noted an information paper assessing risks and vulnerabilities in the domestic and external environment relevant to Hong Kong's financial stability. The paper examined, among other topics, the general slowdown in economic activity in the US, Europe and Japan and the continuing growth momentum in East Asia, qualified by an expected slowdown in external demand and continuing political problems in some countries. For the purpose of comparison, the paper focused in particular on the recent financial crisis in Argentina, which, like Hong Kong, operated a currency board system. The paper noted that the crisis in Argentina was induced more by public finance problems (such as extensive external debt and a weak fiscal position) than by any weakness in the monetary system. Members observed that, in contrast, Hong Kong enjoyed strong fundamentals: it had been unaffected by the crisis in Argentina partly because trade links between the two economies were limited and partly because financial market participants were increasingly able to differentiate the two currency board systems, which rested on very different fundamentals.

HKAB Rules on Deposit Charges

Members considered a paper on the Hong Kong Association of Banks (HKAB) Rules on Deposit Charges. These rules had been made by HKAB in 1988, after consultation with the Financial Secretary, to allow for the imposition of charges on large Hong Kong dollar deposit balances at a time when the Hong Kong dollar was under significant upward pressure. The rules had not been applied at that time: the mere possibility that they might be imposed was sufficient to deter speculation. They had not been needed since.

The Sub-Committee noted that the full deregulation of the Interest Rate Rules was expected to take place in July 2001. Members recommended that this would also be an appropriate time to remove the Rules on Deposit Charges. They observed that considerable improvements to the currency board system since 1988 had provided the potential for unlimited creation of Hong Kong dollars against US dollars, which would be a potent tool against speculative inflows. They also considered that, should circumstances warrant, this potential could be made more explicit by setting a convertibility undertaking on the strong side of the link. Members noted that, as a last resort, the Financial Secretary had powers under section 3A of the Exchange Fund Ordinance which would allow him to levy charges on Hong Kong dollar balances in clearing accounts maintained by banks with the HKMA. Even in the absence of the HKAB rules on deposit charges, banks could, at their discretion, pass those charges on to their customers.

Balance of Payments Statistics: Examining Some Received Wisdom

Members noted an information paper questioning the conventional view that a fall in foreign exchange reserve assets necessarily reflected a deterioration in an economy's external position. The paper argued that, in the case of Hong Kong in particular, changes in reserve assets were mainly caused by changes in the demand for banknotes, or in Exchange Fund holdings of US dollars due to, for example, fiscal transfers. The paper pointed out that the deficit in the overall BoP account in the first quarter of 2000 was largely due to a decline in the demand for banknotes, rather than to a decrease in portfolio demand for Hong Kong dollar assets, as some analysis had suggested.

REPORT ON CURRENCY BOARD OPERATIONS (26 NOVEMBER - 20 DECEMBER 2000)

The Hong Kong dollar exchange rate stayed very close to 7.8000 during most of the reporting period. In early December, the Aggregate Balance fell to a negative level upon the triggering of the Convertibility Undertaking. Short-term interest rates firmed, and the exchange rate briefly strengthened. In response to bank offers, the HKMA sold Hong Kong dollars to restore the Aggregate Balance to positive. The monetary base increased from HK$207.99 bn to HK$211.15 bn, reflecting mainly an increase in Certificates of Indebtedness. In accordance with currency board principles, changes in the monetary base were fully matched by corresponding changes in foreign reserves.

Hong Kong Dollar Exchange Rate

The Hong Kong dollar exchange rate stayed close to 7.8000 during most of the reporting period, apart from a brief strengthening in the first week of December. Partly reflecting corrections in local stock prices as well as instability in regional financial markets, the exchange rate stayed very close to the linked rate in late November and early December. The Convertibility Undertaking was triggered on 6 December, as a result of which the Aggregate Balance dipped into negative territory. In response, short-term interbank interest rates firmed and the exchange rate strengthened to around 7.7970. On 12 and 13 December, the HKMA sold some Hong Kong dollars in response to bank offers, restoring the Aggregate Balance to positive. Local interest rates then softened, and the exchange rate eased back to 7.7998-99 during the rest of the period (Charts 1 and 2).

Chart 1
Hong Kong Dollar Exchange Rate (closing rate)

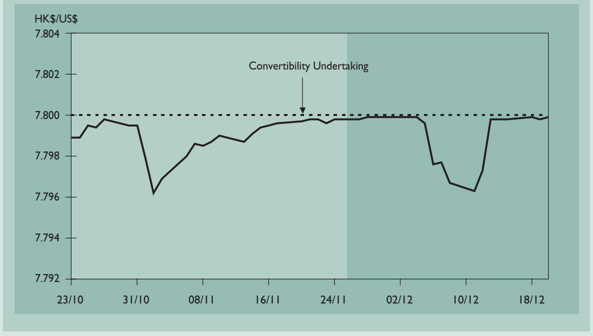
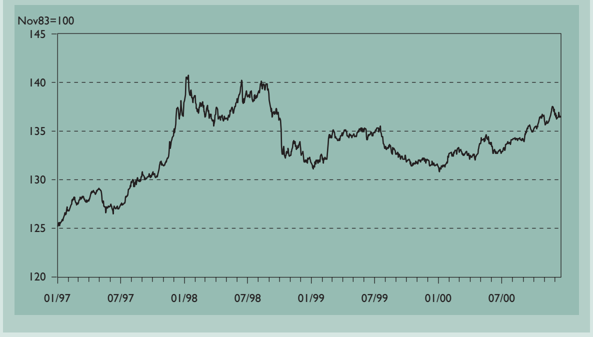


Chart 2
Effective Exchange Rate Index



Interest Rates

Interbank interest rates moved on an up-trend during the first half of the reporting period on the back of tighter interbank liquidity. Overnight HIBOR at one point surpassed the Base Rate and reached 9% when the Aggregate Balance fell to a negative level (Chart 8). 1-month HIBOR rose from 5.53% at the beginning of the period to a high of 6.69% on 8 December. It then eased to around 6.00% in mid-December, when the Aggregate Balance was restored to positive, and remained stable for the rest of the period. **3-month HIBOR followed a similar, but less pronounced pattern, moving within a range of 5.94% to 6.19%. On the other hand, 12-month HIBOR eased from 6.31% to 6.00%,** partly reflecting the movement of the corresponding US dollar interest rate (Chart 3).

Measured in terms of the standard deviation of 1-month HIBOR, **interest rate volatility increased** from 0.12 percentage points in points in November to 0.26 percentage points in December (up to 20 December) (Chart 4).

As Hong Kong dollar interbank rates firmed relative to their US dollar counterparts, **the negative spreads between Hong Kong dollar and US dollar interbank rates narrowed.** The negative spread in terms of 1-month money at one time narrowed to 2 bp. It widened again as the Aggregate Balance returned to a positive level, closing at 53 bp at the end of the period. **The negative spreads in terms of 3-month and 12-month money also narrowed**, from 83 bp and 39 bp to 51 bp and 14 bp respectively (Chart 5).

Yields on the Exchange Fund paper, except for those at the very short-end, declined (Chart 6). The yield curve was inverted at the short-end, as short-term rates firmed following a shrinkage of the Aggregate Balance. At the same time, longer-term rates declined along with the yields on US Treasuries, amid market

Chart 3
HIBORs

Chart 4
Standard Deviation of 1-month HIBOR

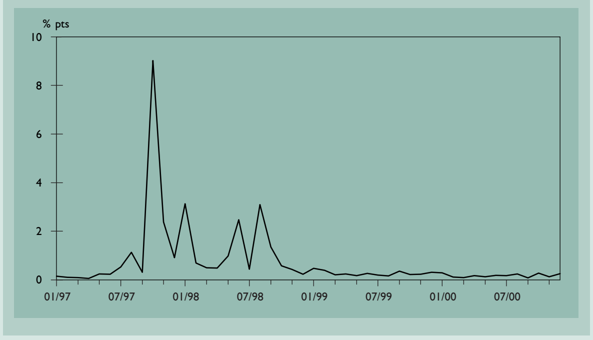


Chart 5
Hong Kong Dollar - US Dollar Interest Rate Differentials

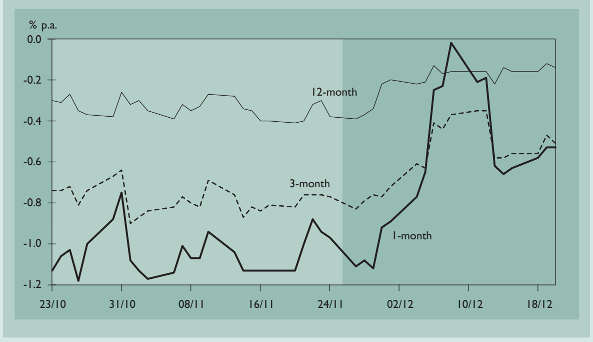
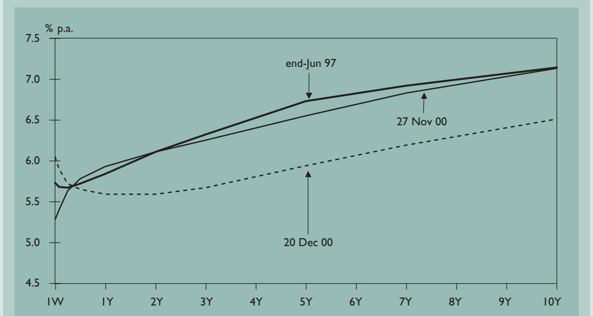


Chart 6
Exchange Fund Paper Yield Curves



expectations of an interest rate easing in the US early next year. Yields on 5-year and 10-year Exchange Fund Notes decreased by 61 bp and 62 bp during the reporting period, to 5.94% and 6.51% respectively. **The yield spread between 5-year and 10-year Exchange Fund paper and US Treasuries narrowed** by 9 bp and 13 bp, to 77 bp and 127 bp respectively on 20 December (Table 1).

The **Savings Rate** and **Best Lending Rate remained unchanged.** The weighted average deposit rate offered by 44 major authorized institutions for 1-month time deposits increased from 5.51% on 24 November to 6.00% on 15 December. The effective deposit rate remained unchanged from the previous month at 4.66% in November (Chart 7)[1].

Base Rate

The **Base Rate remained unchanged at 8.00%,** 150 basis points above the US Fed Funds Target Rate (Chart 8).

Monetary Base

The monetary base, which comprises the outstanding amount of Certificates of Indebtedness, coins in circulation, the Aggregate Balance and the outstanding amount of Exchange Fund Bills and Notes, **increased slightly from HK$207.99 bn to HK$211.15 bn during the reporting period** (Table 2). Movements in individual components are discussed below.

Table 1

Yield Spreads between Exchange Fund Paper and US Treasuries (basis points)

	27-Jun-97	27-Nov-00	20-Dec-00
3-month	56	-82	-30
1-year	21	-36	-10
3-year	3	38	31
5-year	27	86	77
10-year	54	140	127

Chart 7

Effective Hong Kong Dollar Deposit Rate

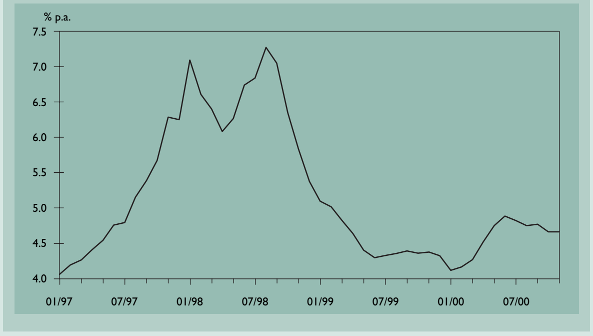


Chart 8

Base Rate and Overnight HIBOR

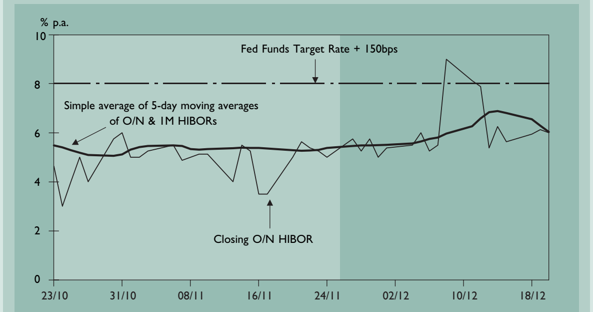


Table 2

Monetary Base

(HK$ bn)	27-Nov	20-Dec
CIs	92.44	95.07
Coins in Circulation	6.13	6.14
Aggregate Balance	0.92	0.40
Outstanding EFBNs	108.50	109.54
Monetary Base	207.99	211.15

1 This is the weighted average of the interest rates on demand deposits, savings and time deposits. As the banking statistics classify deposits by remaining maturities, we have used certain assumptions regarding the maturity distribution to compute the effective deposit rate.

Certificates of Indebtedness

During the reporting period, the three Note Issuing Banks (NIBs) submitted to the HKMA a total of US$0.34 bn in exchange for HK$2.63 bn worth of Certificates of Indebtedness (CIs). As a result, the outstanding amount of CIs increased from HK$92.44 bn to HK$95.07 bn (Chart 9). Much of this increase occurred in late November and early December, and the higher demand for cash was sustained ahead of Christmas and New Year holidays.

Coins

The total amount of **coins in circulation increased slightly** from HK$6.13 bn to HK$6.14 bn during the period (Chart 10).

Aggregate Balance

The Aggregate Balance stayed at around HK$0.80 bn during the first two weeks of the period. As the HKMA bought a total of HK$1.95 bn under the Convertibility Undertaking on 6 December, it shrank to a negative level of HK$1.18 bn on 8 December. Thereafter, following the HKMA's sale of a total of HK$1.48 bn in response to bank offers on 12 and 13 December, the Aggregate Balance rebounded to a positive level of HK$0.34 bn, and remained stable for the rest of the reporting period (Chart 11 and Table 3).

During the period, **a total of HK$1.38 bn of interest payments on Exchange Fund paper were made, while an additional HK$1.34 bn (market value) of Exchange Fund paper was issued to absorb these interest payments.** The remaining amount was carried forward in the Aggregate Balance.

Chart 9
Certificates of Indebtedness

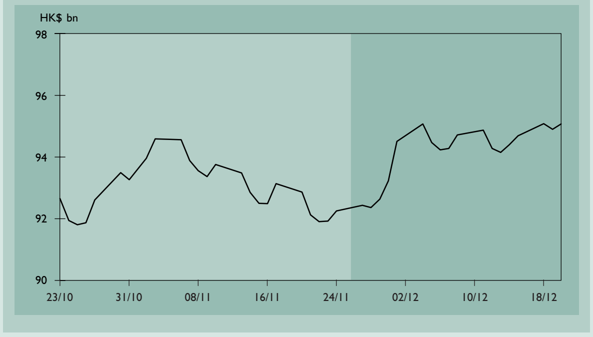


Chart 10
Coins in Circulation

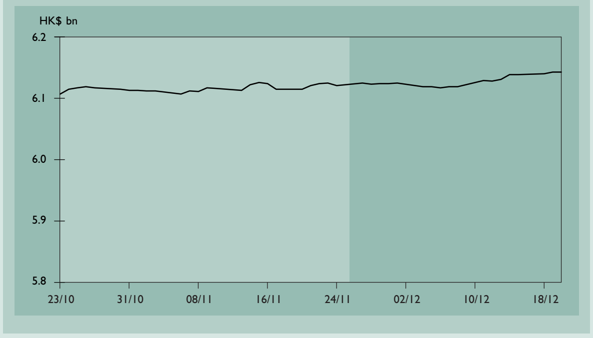


Chart 11
Aggregate Balance
(before Discount Window Activities)

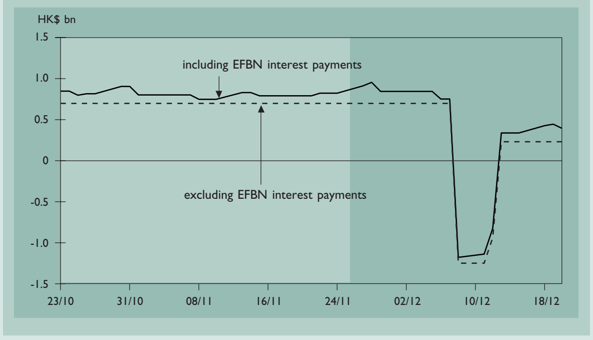


Table 3
HKMA Hong Kong Dollar/US Dollar Foreign Exchange Transactions*
(26 Nov – 20 Dec)

Trade Date	Net Hong Kong Dollar Purchase (+) / Sale (-) (HK$ mn)
6 Dec	+1,950
12 Dec	-312
13 Dec	-1,170
Total	**+468**

* *Foreign exchange transactions may be due for settlement today, on the next business day, or the day after, at which point they would affect the Aggregate Balance.*

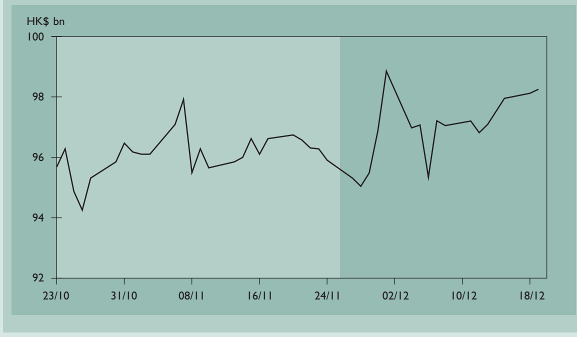
Outstanding Exchange Fund Bills and Notes

During the reporting period, **the market value of outstanding Exchange Fund paper increased slightly from HK$108.50 bn to HK$109.54 bn.** The increase was mainly a result of additional net issues (refer to paragraph 12 above). All issues of Exchange Fund Bills and Notes were well received by the market (Table 4). **Holdings of Exchange Fund paper by the banking sector (before Discount Window activities) increased** from HK$95.32 bn (or 87.9% of total) on 27 November to HK$ 97.14 bn (or 88.7% of total) on 20 December (Chart 12).

Table 4
Issuance of Exchange Fund Paper
(26 Nov – 20 Dec)

	No. of Issues Launched	Over-subscription Ratio
1-month EFB	1	3.12
3-month EFB	4	2.59-3.41
6-month EFB	2	3.40-4.79
12-month EFB	1	3.49
5-year EFN	1	6.14
10-year EFN	1	7.10

Chart 12
Exchange Fund Paper Held by Licensed Banks



Discount Window Activities

Discount Window activities increased following a shrinkage of the Aggregate Balance. For the period as a whole, **banks in total borrowed HK$8.19 bn** from the Discount Window, compared with HK$2.56 bn in the preceding period. The bulk of the borrowings occurred towards the second week of the reporting period, when the Aggregate Balance dropped below zero. All except three of the borrowings used Exchange Fund paper as collateral (Chart 13).

A total of 38 banks borrowed overnight funds through the Discount Window (Table 5). Most banks used the Discount Window facility only infrequently.

Chart 13
Discount Window Borrowing

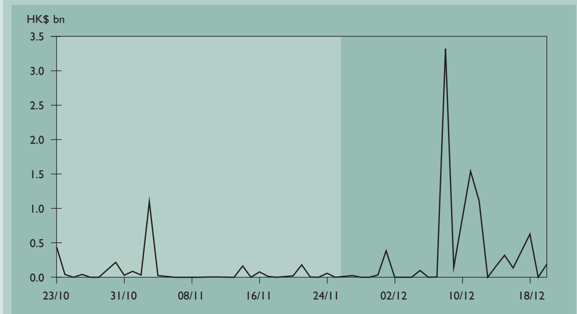


Table 5
Frequency of Individual Bank's
Access to the Discount Window
(26 Nov – 20 Dec)

Frequency of Using Discount Window	No. of Banks
1	23
2	7
3	4
4	2
>4	2
Total	**38**

Backing Portfolio

During the period, backing assets increased at a faster pace than that of the monetary base, mainly due to positive net interest income, which was boosted by the interest rate differentials in favour of the US dollar, in which the backing assets are denominated. As a result, **the backing ratio increased from 111.99% on 24 November to 112.35% on 20 December** (Chart 14). Under the linked exchange rate system, although specific Exchange Fund assets have been designated for the backing portfolio, all Exchange Fund assets are available to support the Hong Kong dollar exchange rate.

Chart 14
Daily Movement of the Backing Ratio